SFRA Review

THE OPEN ACCESS JOURNAL OF THE

SCIENCE FICTION RESEARCH ASSOCIATION

SFRA Review is an open access journal published four times a year by the Science Fiction Research Association (SFRA) since 1971. *SFRA Review* publishes scholarly articles and reviews. As the flagship journal of SFRA, the *Review* is devoted to surveying the contemporary field of SF scholarship, fiction, and media as it develops.

Submissions

SFRA Review accepts original scholarly articles, interviews, review essays, and individual reviews of recent scholarship, fiction, and media germane to SF studies. Articles are single-blind peer reviewed by two of three general editors before being accepted or rejected. *SFRA Review* does not accept unsolicited reviews. If you would like to write a review essay or review, please contact the relevant review editor. For all other publication types—including special issues and symposia—contact the general editors. All submissions should be prepared in MLA 8th ed. style. Accepted pieces are published at the discretion of the editors under the author's copyright and made available open access via a CC-BY-NC-ND 4.0 license.

SFRA Review History

SFRA Review was initially titled *SFRA Newsletter* and has been published since 1971, just after the founding of SFRA in 1970. The *Newsletter* changed its named to *SFRA Review* in 1992 with issue #194 to reflect the centrality of an organ for critical reviews of both fiction and scholarship to the SF studies community. The *Newsletter* and w*Review* were published 6 times a year until the early 2000s, when the *Review* switched to a quarterly schedule. Originally available only to SFRA members or sold per issue for a small fee, *SFRA Review* was made publicly available on the SFRA's website starting with issue #256. Starting with issue #326, the *Review* became an open access publication. In 2020, the *Review* switched to a volume/issue numbering scheme, beginning with 50.1 (Winter 2019). For more information about the *Review*, its history, policies, and editors, visit www.sfrareview.org.

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FICTION REVIEWS

MEDIA REVIEWS

FROM THE EDITOR

Winter 2021

Ian Campbell

I'd like to thank you for reading *SFRA Review*. This is my first issue as senior editor, and while I cannot hope to surpass the standards Sean Guynes instituted during his tenure, I can try to maintain these standards. In fact, this issue is really his, as Sean directed the content, while I merely arranged it. We have him to thank for everything that's been done to professionalize the *Review* and raise its visibility.

I live in Atlanta, in the lovely and newly-blue state of Georgia, where I work at Georgia State University. I primarily write about Arabic-language SF, though I also publish on postcolonial Moroccan literature in Arabic and French, and sometimes on Anglophone SF. I grew up on old-school Anglo-American SF, but have gradually learned not to reread the sort of things my teenage self thought magnificent.

It is in the spirit of looking back upon things we once thought magnificent, now with a more mature and critical eye, that we present to you the only part of this issue that is my contribution rather than Sean's. The *Review* has been publishing for fifty years, now: half a century of discourse on SF as serious literature. We invite creators, critics, scholars and fans of all generations to take a look at what we're calling Interrogating Our History, and to consider the call for papers, through which you can consider submitting a reflection upon works the critics, scholars and fans of the year 1971 considered influential. Please consider submitting: the papers will be published in the year's remaining issues.

My role here is to boost the signals of other people: writers and artists, reviewers, graduate students, emerging scholars, established scholars, independent scholars and scholars from outside the Anglophone world. The *Review* provides a platform for anyone to make observations or draw conclusions about the vast, increasing diversity of SF and related genres. As an international publication, we have the reach to enable scholars from all over the world to discuss speculative fiction and how it manifests in corners of the world that my teenage self only knew about through stereotypes and Orientalism. Do you have a point to make, or an axe to grind? Contact us.

For now, little will change, especially structurally. Sean did a great job raising the level of professionalism, and I hope to build upon that. In this issue, in addition to reviews and feature articles, our editorial team brings to you papers from Us in Flux and Beyond Borders; future issues will maintain these symposia and special sections. Are you organizing a conference or part of a group of scholars who wish to present multiple perspectives on the same topic? Again, contact us. We look forward to hearing from you.

FROM THE SFRA EXECUTIVE COMMITTEE

From the President

Gerry Canavan

After a year without a conference, I couldn't be more excited for SFRA 2021—though of course I wish the event could be in person. We are hoping to build a flexible virtual format that will produce the lively encounters we are used to without asking too much from our presenters or audiences and without producing Zoom fatigue; we are learning from what other organizations have already done and from what IAFA is planning to do, but if you have ideas that could help us make this unusual conference format a success, or just want to help, please don't hesitate to get involved!

On behalf of both the planning committee and the entire executive committee, I want to express again our collective regret for the way the lack of diversity on the original conference keynote let this community down, and our dedication to making repair. Without belaboring the point or adding any caveats, special pleadings, or explanations: We screwed up, and we are sorry. And the conference will be better and stronger because people had the courage to let us know and hold us accountable to the commitments we have made. The full, expanded keynote lineup will be released soon (and may even beat this President's Note to press), as will additional details of some of the antiracist pedagogy workshops we plan to hold at the event. My home department held a version of these workshops with the Black Student Council at Marquette last summer and the dialogue was truly transformative for our program; I hope this can be the start of similarly productive and generative conversations for SFRA. Thanks again to those who reached out and called on us to live out the mission of the organization; we know that wasn't easy, and we're sorry it was necessary.

As always, let me know about events and CFPs I can promote on social media; best way to reach me is an @ or direct message to [@sfranews](#) or an email to [gerrycanavan@gmail.com](#). See you in July!

From the Vice President

Sonja Fritzsche

As I enter my final year as Vice President, I continued to be thrilled and honored to serve in a professional society where such innovative work is being done by its members, and those members continue to create such a supportive and creative, scholarly space for all even in the middle of a pandemic. We are all dedicated to furthering the study of science fiction and its associated scholarly communities in all corners of the globe and in all languages. For this very reason, I too would like to echo Gerry Canavan's statement of apology for lack of diversity on the original conference keynote line-up. We failed and must always remain vigilant in these matters as it is never enough what we are doing. I am looking forward to the virtual conference this summer for that very reason as it will be accessible to a greater variety of scholars than ever before.

The SFRA Conference 2021 proposal deadline is April 1, 2021. In the spirit of its theme—"*The Future of/as Inequality*—please consider helping new scholars who are working on science fiction by Black, Indigenous, and People of Color (BIPOC) by organizing panels on topics they are working on. Senior scholars need to help with the organizational labor to make this happen. Note too that part of the conference will take place on Juneteenth also known as Emancipation Day, a holiday that celebrates the freeing of the slaves in the United States. Seeing as BIPOC is perhaps a US-American context phrase, please consider adapting the spirit of it to your own country's/region's linguistic, cultural, and historical context to contribute to the theme. If you are looking for contacts, please reach out to the ever-growing number of SFRA Country Representatives. We are so thankful for Graham Murphy of Seneca College in Toronto, Canada who is hosting the virtual conference. Be sure to submit your 300-500 word abstracts to Graham (graham.Murphy@senecacollege.ca) or through the Abstract Submission form by the deadline. Please pass the 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.

If you are an SFRA member and interested in becoming an SFRA Country Representative, please contact me (fritzsc9@msu.edu). More details are on the website. We have been meeting every three months by Zoom. The conversations are engaging, illuminating, and productive across many time zones. Please also send me your announcement for the SFRA Facebook and Twitter accounts. I'm happy to pass them on or feel free to post yourself!

THE REVIEW AT FIFTY

INTERROGATING OUR HISTORY

The SFRA Review at Fifty: Interrogating Our History

The Editorial Collective

The *SFRA Review* has published continuously for fifty years now. SF has grown through this period, accumulating a broad, deep, complex and sometimes problematic history of texts and films, creators, critics, scholars and fans. We here at the Editorial Collective would like to invite the creators, critics, scholars and fans of 2021 to examine, reflect upon, and interrogate the concerns and preoccupations of the year 1971, which was a very different time, especially in SF. The creators, critics and scholars who have been canonized were almost without exception white or male, and usually both;. The Internet did not exist: discourse and publishing were in the hands of a few gatekeepers, who were diverse neither in demographics nor opinion on what was worthy of publication. Things we view as necessary or even take for granted today, were still unthought-of, or inchoate, or sometimes actively suppressed.

Yet the texts and discourse of 1971 are one stratum among many of our accumulated history as creators, critics, scholars and fans of SF: we ought not to dismiss them simply because they're often unrepresentative by our own standards. The texts and discourse of that year influenced those of later years, and thus still influence, though indirectly, the texts and discourse of today. In 1971, Larry Niven's *Ringworld* was the Hugo award winner. In 1971, John W. Campbell passed away while he was still the editor of *Astounding Science Fiction*, but as recently as two years ago, his name was still on major awards, despite his extensively documented history of problematic beliefs, statements and editorial decisions. In 1971, the SFRA and the *Review* were brand-new: SF as the subject of and respondent to serious scholarly criticism was in its infancy, and most theories of how we might understand works of SF yet unformed.

It is in the spirit of interrogating our history as creators, critics, scholars, and fans of SF that we at the *Review* invite scholars and fans of all generations to consider the history that was laid down for us fifty years ago in 1971: to critique that which deserves critique; to acknowledge that which stands the test of time, even though it may still deserve critique; to bring to light that which was ignored—or suppressed. The call for papers below encourages a wide variety of writers and a wide variety of topics, on purpose, because we wish to expand rather than limit our understanding of our own history as people who love SF. Ultimately, our goal is to create an ongoing conversation about our history: to place different generations and different perspectives at the same metaphorical roundtable, in order better to comprehend the forces and discourses that shaped and continue to shape the much broader, deeper and more complex understanding(s) of SF that we have today.

We urge creators, critics, scholars and fans of all backgrounds to visit the call for papers for this initiative and to submit a paper or abstract. We look forward to an ongoing, frank and fruitful conversation about our history.

Call for Papers: Interrogating Our History

The Editorial Collective

The *SFRA Review* requests papers centering on texts, broadly defined, that were considered influential fifty years ago in 1971. As a jumping-off point, we suggest consideration of one or more of the Hugo and Nebula nominees for Best Novel, listed here:

Hugo Award nominees:

Ringworld • Larry Niven (winner)

Star Light • Hal Clement

Tau Zero • Poul Anderson

Tower of Glass • Robert Silverberg

The Year of the Quiet Sun • Wilson Tucker

Nebula Award nominees:

A Time of Changes • Robert Silverberg (winner)

The Byworlder • Poul Anderson

The Devil is Dead • RA Lafferty

Half Past Human • TJ Bass

The Lathe of Heaven • Ursula K. Le Guin

Margaret and I • Kate Wilhelm

While we view as questionable and often problematic the concept of a "canon," and note that the groups of fans and critics that nominated and awarded the following texts were demographically unrepresentative by the standards of 2021 (as were their authors), these works were, nevertheless, considered worthy of attention and esteem at the time, though most have fallen into comparative obscurity by now. You are free to choose a novel that wasn't nominated, or a shorter work, or film, television, comics, etc., or a work from 1970 or 1972, if that is where your interests lie. We suggest, but do not demand, one of the following approaches:

For younger scholars, critics or fans: Choose one of the listed texts, read it carefully, and write a paper detailing your experience of this work of "classic" SF. This could take any number of formats, including but not limited to a personal memoir, an academic examination, or an examination in light of previous reviews or academic work on the text. If you are a graduate student, or even an undergraduate student, this could be a great opportunity for a first publication.

For more-established scholars, critics or fans: Choose one of the texts you have not read and write a paper on it following the above instructions. Give us the benefit of your experience living through times that have changed in terms of literary elements such as plot, style, characterization, etc., as well as in terms of society and politics. Or, alternatively, choose one of the texts that you remember reading and reread it with an eye toward interrogating the nostalgia or memories you have of your previous experience with the text.

For anyone: Choose a text not on this list, something more obscure: something you believe was ahead of its time or otherwise worthy of our collective attention. Write a paper arguing why it ought to be included in a "canon" of influential texts. What is it doing or saying that stands out as exemplary, and what might have prevented it from gaining the attention you believe it deserves?

For EVERYONE: These papers should include a cogent summary of the novel's plot as a courtesy to readers; they *must* include close readings of the text of the novel as support for the argument you make. The style guidelines (MLA 8th edition) can be found on the *SFRA Review* website. Because this call for papers is intended to spark a conversation, we ask that the papers be kept relatively brief, with a maximum of 4,000 words. You are welcome to send the paper itself or a brief abstract to sfrarev@gmail.com. Please use "The Review at 50" as the subject header for the email. While the *Review* is not a peer-reviewed publication, your abstract or paper will be evaluated by at least two members of the Editorial Collective, and you may be asked to make revisions.

We very much welcome participation in this project by creators, critics, scholars and fans of SF from all parts of the world and all walks of life.

FEATURES

Image by Reimund Bertrans

SFRA Country Report: The UK

Francis Gene-Rowe and Paul March-Russell

Part 1: Francis Gene-Rowe

My contribution to this column will consist of an introduction to the London Science Fiction Research Community (LSFRC), which I co-direct, followed by an overview of our 2020 activities and 2021 plans.

The LSFRC (est. 2014) is an organization of sf scholars and fans, led by a directorate of graduate students. The Community presents film screenings, work in progress colloquia, and special talks with guest speakers—whose number has included Brian Stableford, Sherryl Vint, and David Brin—several times a year, and also hosts a monthly reading group (previously located in Central London but currently online) on Monday evenings. Each year the reading group engages with texts organized around a central theme. Since 2017, we have hosted a conference centered upon our annual theme each September. The 2017 conference was entitled "Organic Systems: Environments, Bodies and Cultures," and subsequent themes have included "Sublime Cognition: Science Fiction & Metaphysics" (2018) and "Productive Futures: The Political Economy of Science Fiction" (2019). In addition to academic keynotes, we also invite authors and other creators to participate in roundtable discussions—previous guests have included Aliette de Bodard, Gwyneth Jones, Jeff Noon, Chen Qiufan, and Larissa Sansour—as well as activists and organisers for a "provocations beyond fiction" session. Our 2020 conference was entitled "Beyond Borders: Empires, Bodies, Science Fictions," and we are currently planning a 2021 conference around the theme of Activism & Resistance. Expect a call for papers for that around early Spring.

LSFRC is not affiliated with any external bodies or institutions, although we enjoy a mutually beneficial relationship with Birkbeck's Centre for Contemporary Literature. We also maintain friendly relations with the Beyond Gender collective, Vector, and Utopian Acts. Our events are open to all, regardless of geographical location; there is no LSFRC membership structure, and events we host always offer a free registration option. Our primary community presence is in our Facebook group, but we also maintain a Twitter page and website. We support and encourage diversity in sf studies and fandom, not only in the range of approaches to the genre, but also in our commitment to providing a welcoming space for engagement with sf for people of all backgrounds and experience.

Our 2020 activities began with a screening of Sun Ra's *Space is the Place* as part of the "Beyond Borders" programme, followed by reading group sessions on Tade Thompson's *Rosewater* and stories from the *Broken Stars* (ed. Ken Liu) anthology in February and March, the latter of which was conducted in part as a teach-out on a picket line at Birkbeck, University of London. Subsequent reading group sessions—Janelle Monae's *Dirty Computer* in April, N.K. Jemisin's *The Fifth Season* in May, stories from *Walking the Clouds* (ed. Grace Dillon) in June, Ahmed Saadawi's

Frankenstein in Baghdad, and Nnedi Okorafor's *Binti* in August—and other events all took place online. The switch to online facilitated remote participation from people based outside of London, and for those still unable to attend we post session reports and/or bibliographies to our website. During this time, we also hosted a work in progress event that featured a guest talk from Glyn Morgan, started up an informal film club for remote group viewings, and hosted a bonus reading group session and Twitter Q&A as part of the launch of M. John Harrison's collection "Settling the World." In September, our efforts were focused on the Beyond Borders conference, after which several members of our team—Tom Dillon, Sing Yun Lee, and Katie Stone—stepped down after years of stellar service. In the wake of their departure, we issued a call for new directors that elicited a slew of excellent applicants, and our team now consists of Ibtisam Ahmed, Angela Chan, Avery Delany, Cristina Diamant, Rachel Hill, Guangzhao Lyu, Mia Chen Ma, Sasha Myerson, Josie Taylor, and myself.

The remainder of 2020 was spent formulating and launching our theme for 2020-2021, Activism & Resistance. The theme was born of a desire to re-examine the relationship between activism, resistance, and the mass imagination with regards to sf. As a genre dedicated to imagining alternatives, sf offers a space of radical potential which allows for diverse explorations of dissent. It is also however a space that has been rightfully critiqued for its historic inequities, formed by and favoring white cis-het men. Our hope is to instigate a reckoning with how precarious bodies engage in activism and resistance in the context of their material realities and restrictions, and acknowledge how communities in the margins—queer, disabled, BIPOC, immigrants & refugees, religious minorities, indigenous populations, casualized workers, the homeless and unemployed—have specific ways of subverting and undermining oppressive systems. Our 2020 programme rounded off with reading group sessions on Kwodwo Eshun's "Further Considerations on Afrofuturism" & John Akomfrah's *The Last Angel of History* (October), Begum Rokeya Hossain's "Sultana's Dream" & Bani Abidi's *The Distance From Here* (November), and Kathy Acker's *Empire of the Senseless* (December). We also hosted a work in progress event in November that featured a stimulating and inspiring interview with Alison Sperling.

As things stand, it seems that our events will remain online-based for a while yet. In addition to the Activism & Resistance reading group sessions (the texts for which are listed below) and conference, we will be hosting a work in progress session sometime in Spring, and hope to also facilitate other events, with current ideas including an activism workshop and some sort of video games-focused event. We will also be brainstorming a theme for 2021-2022. We are eager to forge new, generative connections wherever and whenever possible, and are keen to ensure that our events and discussions are not cloistered within the bubble of career academia. While our focus is primarily scholarly, it is our view that any meaningful study of sf must necessarily engage with politics in a fuller way than academy-circumscribed approaches. We also acknowledge that we have much to learn, and welcome whatever transformative encounters with ignorance and learning we may meet in the days to come.

2021 Activism & Resistance Reading Group Texts:

> January: *Brother from Another Planet*, John Sayles
>
> February: *Elatsoe*, Darcie Little Badger
>
> March: *Tales of Nevèrÿo*n, Samuel R. Delany
>
> April: *Deep Space Nine* & *Blake's 7* (selected episodes)
>
> May: *New Suns*, *Disabled People Destroy SF*, and *How long 'til Black Future Month* (selected short stories)
>
> June: *Wild Seed*, Octavia Butler
>
> July: *80 Days*, Inkle Studios
>
> August: *Emergent Strategy*, Adrienne Maree Brown

Part 2: Paul March-Russell

In 2020, the activities of the Science Fiction Foundation were necessarily constrained by Covid-19. Eastercon was cancelled, so there was no George Hay Lecture this year, whilst an abbreviated version of our AGM was moved online. The SFF Collection, housed at the University of Liverpool, was inaccessible for much of the year, but our Librarian, Phoenix Alexander, continued to answer online requests. We still had a visiting scholar though, Iren Boyarkina from Belarus, who researched the Olaf Stapledon Archive with the aid of an SFF bursary. Foundation, the journal of the SFF, appeared as per usual with two general issues and a special issue on Canadian science fiction. This issue also contained Katie Stone's Peter Nicholls Prize-winning essay on James M. Tiptree and a roundtable discussion, with Gerry Canavan, Jennifer Cooke and Caroline Edwards, about sf and apocalypse. Back issues of *Foundation*, since 2013, are now available online via Fanac while the revised SFF website has the beginnings of a cumulative index to the journal. Membership of the SFF remains competitive – students can join for £15 ($25) per year, overseas individuals for £32 ($48) per year, and overseas institutions for £50 ($82) per year. Please go to the Membership page of the SFF website or contact our secretary, Roger Robinson, at sff@beccon.org.

Although in-person events were not possible, the SFF continued to support the Arthur C. Clarke Award and contributed two of this year's judges, Farah Mendlesohn and Chris Pak. Both the SFF and the Clarke Award sponsored an online celebration, in its fortieth year, of Russell Hoban's *Riddley Walker*. The organising committee—myself, Andrew M. Butler, Fiona MacDonald and Sonia Overall—had begun planning in the summer of 2018 with the intent of bringing together the three major HE providers in Canterbury (Canterbury Christ Church University, the University of the Creative Arts and the University of Kent) in a commemoration of Hoban's Kent-based apocalypse. Our initial vision was to feature a symposium on the Christ Church campus; a creative writing competition; dramatic, musical and puppet theatre performances; public lectures at the University of Kent and Canterbury Cathedral; a walking tour of sites in the novel; a book

group; films and public discussions at Kent and the local Curzon cinema; and commissioned art-works to be displayed around Canterbury and East Kent. We applied for funding from the Arts Council, England, only to narrowly miss out at the final stage, so we were forced to scale-down our plans. As it turned out, even if we had been funded, much of what we planned would have had been rendered impossible by the pandemic. On the eve of the lockdown in March, though, we received good news by becoming part of the Canterbury Festival program, which still went ahead in October with a mixture of online and socially distanced events.

In the wake of the lockdown, and its continuing effects over the summer, we opted to move our remaining plans online. These consisted of the symposium ('Sum Poasyum'), the competition in collaboration with the local Save As Writers, and the book group with support from the Festival. With only a small budget at our disposal, we had to use our initiative and to make the most of opportunities. We devised a webpage via the Canterbury Christ Church website, and we received free illustrations of *The Legend of St Eustace* from the Canterbury Archaeological Society, and drawings from Hoban's papers courtesy of the Beinecke Library. We asked for short (five-minute) responses to the novel from, amongst others, Neil Gaiman, Paul Kincaid, Una McCormack, David Mitchell and Max Porter, which we uploaded to our own YouTube channel. In exchange, we asked viewers to contribute to two local charities. Fiona received funding from the Whitstable Biennale to complete her filmed response to the novel, which also took the overall name of our celebration—*Sum Tyms Bytin Sum Tyms Bit*. Fiona's film was premiered on 15th October, one day before the 40th publication of *Riddley Walker,* at the Folkestone Festival of Looking. In the meantime, we took guidance from Francis Gene-Rowe and Lars Schmeink, who had coordinated online and streaming events over the summer, and from the IT team at Canterbury Christ Church. Due to the institutional support, we used Christ Church's preferred platform, Blackboard Collaborate, which in the end worked well.

The symposium took place on 24th October from 11 am to 5 pm. We began with Emily Guerry's talk about the iconography of *The Legend of St Eustace*, the medieval mural that first inspired Hoban. The second session was a collaboration with the Kent Animal Humanities Network (Angelos Evangelou, Karen Jones, Kaori Nagai, Charlotte Sleigh), who focused on the role of dogs, borders and the nuclear context. The first post-lunch session featured a conversation between Fiona and Esi Eshun, a talk by Sara Trillo, and a live performance by Amy Cutler. The final session included a conversation between myself and the novel's BBC Radio adapter, Dominic Power, and a roundtable discussion. The sessions were recorded and can be viewed here: https://blogs.canterbury.ac.uk/sumtymsbit/archive/. The winners of the prose and poetry competitions were announced that evening, and a virtual walking tour took place the following day.

2021 is a significant year for the SFF since it marks the 50th anniversary of its inception. We hope to be able to celebrate this in-person, online, and in the pages of the journal. Although not an SFF venture, with Una McCormack and the team at Goldsmiths Press, I have co-founded a new intersectional feminist press, Gold SF. We have currently received over twenty manuscripts and are beginning to read through them. Our editorial board consists of writers (Anne Charnock, Sheree Renee Thomas), critics (Maureen Kincaid Speller) and academics (Joan Haran, Robin Reid). Proposal guidelines can be found here: https://www.gold.ac.uk/goldsmiths-press/features/goldsmiths-press-launches-new-sf-imprint/. My other venture, SF Storyworlds (Gylphi Press), published its eighth volume in 2020, Paul Kincaid's study of Christopher Priest: https://www.gylphi.co.uk/books/Priest.

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

The SF in Translation Universe #10

Rachel Cordasco

Welcome back to the SF in Translation Universe! Thankfully, it's a new year, which means a whole new stack of exciting SFT to read. Korean SFT, in particular, is continuing to make a strong showing (thanks to publishers like Honford Star and Kaya), plus we'll be getting the very first anthology of Greek SFT, thanks to Francesco Verso, Francesca Barbini, and Luna Press Publishing.

The first three months of 2021 are bringing us several tantalizing novels and collections (as well as the aforementioned Greek anthology). In terms of science fiction, Galileo Publishers is offering us *Mountains Oceans Giants: An Epic of the 27th Century* by German author Alfred Döblin (tr Chris Godwin). In this far-future dystopia, the elites of the world try to melt Greenland's icecap in order to make room for the Earth's growing population. Of course, their plan to tap into the planet's heat via Iceland's volcanoes doesn't work out and...well, you'll have to read to find out what happens. Other science fiction includes *Robot* by famed Polish science fiction author Adam Wisniewski-Snerg (tr ?), in which BER-64 tries to figure out if it's man or machine; and *Bug* by Italian author Giacomo Sartori (tr Frederika Randall)--a wild story about family dysfunction, robots, bees, and more.

If you're looking for fantasy (broadly defined), look no further than *The Route of Ice and Salt* and *Eleven Sooty Dreams*. Translated from the Spanish by David Bowles, *Route* is Mexican author José Luis Zárate's unique reimagining of Dracula's journey to England. *Eleven Sooty Dreams* is the latest book in English from one of Antoine Volodine's post-exotic heteronyms—Manuela Draeger. Translated from the French by J. T. Mahany, it's set in a burning building in which a group of young leftists is trapped and moves between their minds and memories about their childhood and struggle to survive in a dystopian world.

Turning to collections, we can look forward to two by Korean speculative fiction authors and one by the multi-talented Brazilian author, translator, and editor Fabio Fernandes. *Tower* by Bae Myung-hoon (tr. Sung Ryu) is made up of interconnected stories set in a 674-story skyscraper that is also a sovereign nation. We learn about how the people living in the tower navigate the complex power relations of this particular society. Out a month later is Bo-Young Kim's *On the Origin of Species and Other Stories* (tr Sora Kim-Russell), which moves freely between science fiction, fantasy, and myth, focusing on how humans and non-humans try to survive via biological, technological, and social evolution. Fernandes's collection (tr from the Portuguese by the author)—*Love: An Archaeology*—includes fourteen stories that span space and subgenres but ultimately focus on love and its discontents.

Both *Love: An Archaeology* and the anthology of Greek SFT will be out from Luna Press Publishing, which has been bringing us an exciting array of SFT for the past few years. *Nova Hellas: Stories From Future Greece*, edited by Verso and Barbini, includes fiction from some of Greece's most acclaimed authors, including three who have published in English before (Stamatis Stamatopoulos, Natalia Theodoridou, and Michalis Manolios). This is a wonderful chance for Anglophone readers to learn more about Greek speculative fiction and its intersection with contemporary Greek social and political concerns.

In terms of short fiction, the anthology *Ab Terra 2020*, which comes out in January from Brain Mill Press, includes my translation of the Italian story "Chronotope" by Raul Ciannella. Set in a future data entry center, "Chronotope" imagines how a group of individuals, who have become subsumed by their digital work, might escape by combining their human senses.

Hopefully, we have much more short SFT to look forward to this year from magazines like *Future Science Fiction Digest*, *Samovar*, *Clarkesworld*, *Mithila Review*, and new publications like *Constelación* and *Eita! Magazine*.

Thanks for reading, and I'd love to hear what you're reading now and what you're looking forward to: rachel@sfintranslation.com. Until next time in the SFT Universe!

Alternative History and Afrofuturist Bricolage in N. K. Jemisin's "The Effluent Engine"

Emily Lange

N. K. Jemisin has received well-earned critical attention for her novel-length works of speculative fiction, especially after her Hugo Awards triumphs in 2016, 2017, and 2018. Her collection of short fiction, *How Long 'Til Black Future Month* (2018), brought together pieces of several genres, both previously published and unpublished materials. The collection includes "The Effluent Engine,"[1] which follows a Haitian spy through New Orleans in an alternative history adventure. Jemisin's heroine must negotiate the new ideals of a liberated Haiti and the internalized norms of New Orleans' Creole society as she attempts to garner vital strategic information. The story highlights intersectionality on a personal as well as a group level in a nuanced exploration of how we can change our worlds. As argued by scholars such as Sofia Samatar, alternative history itself can be a powerful tool of Afrofuturism. Alongside the concept of *bricolage*—a process of merging, reshaping, and redefining—alternative history highlights the confluence of individual and group identities within Jemisin's story. Applying Samatar's reading of alternative history and bricolage foregrounds how Afrofuturist techniques in "The Effluent Engine" explore the identities of intersectional characters, their community relationships, and their connection to place.

"The Effluent Engine" presents an alternative history where dirigibles and access to other technologies changed the course of Haitian struggles for independence. The main character, a Haitian spy named Jessaline, must enter the slave state of Louisiana to seek an engineer who can further refine the fueling mechanisms for these powerful airships. While Jessaline's contact is unwilling to help lest it risk his position in New Orleans' Creole society or prompt backlash from the white leaders of Louisiana and the United States, his sister, Eugenie, proves her knowledge of chemistry can help develop a dirigible engine powered by the effluent, or waste product, of sugarcane processing. Pursued by white supremacists hoping to steal the plans and sabotage Haiti's independence, Jessaline and Eugenie flee to Haiti intent on developing the engine as well as their romantic relationship.

Speculative fiction as a broad category embraces alternative histories like "The Effluent Engine" for their ability to reimagine both the past and the future. Indeed, Sofia Samatar points out in "Toward a Planetary History of Afrofuturism" (2017) that alternative histories engage with both points in time simultaneously: "To propose an alternate history is to propose that history can be altered, to change directions, to inaugurate an alternate future." (Samantar, 187) One cannot imagine an alternative past without carrying forward the implications of such changes. In picturing a new history for Haiti, readers are inherently asked to apply these changes to the arc of history. A rich alternative history crafts space for readers to question how such alterations would affect their present time. While some references to the arrest of Toussaint L'Overture place the action of the story in the years following 1802, the lack of dates overall points to their middling

importance to the narrative; Jemisin does not need to offer a blow-by-blow account of the changes to history to tell a compelling story that prompts readers to think about large-scale shifts in society. Jemisin emphasizes the transformative aspects of alternative history through characters who are invested in imagining new futures.

At the core of the changes to history in "The Effluent Engine" are Haitian airships, which allowed them to fight back against French colonial forces. Jessaline's mission is an attempt to find a scientist who can turn the by-product of rum, the titular effluent that produces methane, into a cheaper and plentiful fuel source. Innovative use of by-products and discarded materials is a theme within many pieces of Afrofuturist media, which Samatar evokes in her discussion of the terms *bricolage* and *bricoleur*. (177-178) Initially coined by Claude Lévi-Strauss, *bricolage* was used to distinguish (white) Western invention and what Lévi-Strauss deemed the lesser reinvention, "proceeding in a haphazard fashion and working with second-hand materials, the leftovers of various civilizations". (Samatar 177) Samatar aligns herself with creators such as Nnedi Okorafor, who uses the phrases bricolage and bricoleur in her novel *Who Fears Death*. Bricolage celebrates the process of excavating history: "it is from these historical fragments that the data thief or bricoleur constructs visions of what is to come…the bricoleur detaches objects from time, making them available for the creation of new histories." (Samatar 178) The process of reclamation and reformation is paralleled, for Samatar, by the formation of cultural independence and positive engagement with technology, as she argues that "Afrofuturistic bricolage asserts black people's right to use whatever is at hand, to enter the technologically enhanced future through whatever door is closest and to do so without assimilation into a global monoculture." (Samatar 178)[2] Haitian use of effluent as a fuel source repurposes the by-product of a process that itself was intimately connected to colonization. The economic benefits to France from rum and sugar production are re-integrated into the new, independent Haiti as something which has the potential to preserve the nation's survival. Jessaline's mission, therefore, is not only espionage but tied up with the process of bricolage.

Beyond the genre of the story itself, "The Effluent Engine" engages with personal uses of alternative history and bricolage as well as collective or group uses of the concepts; Jessaline is a notable character who uses these tools to create disguises and false histories for herself in her role as a spy:

> She was indentured, she told the captain, and he had waved her aboard without so much as a glance at her papers (which were false anyhow). She was a wealthy white man's mistress, she told the other passengers, and between her fine clothes, regal carriage, and beauty—despite her skin being purest sable in color—they believed her and were alternately awed and offended. She was a slave, she told the dockmaster on the levee; a trusted one, lettered and loyal, promised her freedom should she continue to serve to her fullest. He had smirked at this, as if the notion of anyone freeing such an obviously valuable slave was ludicrous. Yet he, too, had let her pass unchallenged. (Jemisin 78)

With every movement, speech, and look, Jessaline creates an alternative history for herself which both protects her and her nation while simultaneously eating away at the solidity of her own identity. In a single journey as described above, Jessaline navigates the elision between identities with practiced ease. Later, when she must change hotels to avoid the pursuit of white, anti-Haitian independence spies, she uses padding which "rendered her effectively shapeless—a necessity, since in this disguise it was dangerous to be attractive in any way". (Jemisin 99-100) The disguise is meant to make her appear both older[3] and poorer; it includes alterations to her walk and a patched dress. The implication that appearing attractive and poor would make her a target comes across clearly; when she dresses better, Jessaline references a white owner or takes the guise of a white man's mistress. Through her disguise, her attempts at anonymity are successful: "She was, for all intents and purposes, invisible". (Jemisin 100) In both of these alternative histories of herself, it is not her class that provides protection, but the implication that she is under a white man's control. But what effect does this constant construction of alternative histories have for Jessaline herself? Her identity itself is fluid as her goals change and she comes across different challenges. While her disguises can act as a shield, the necessity for a shield itself takes a toll.

Jessaline's assumed surname for the start of the story, Dumonde, offers a hint at her attempted invisibility. The French *du monde*, meaning "of the world," obscures a sense of specific nationality or community. As a spy, Jessaline must attempt to be a member of any and every nation where her mission might take her, and as such, she cannot risk solidifying her identity. Jessaline embodies the bricoleur in her relationship with the names she uses. Her true name, which she reveals to Eugenie in an attempt to gain her trust, does not seem to resonate with her personally. She explains "My name is Jessaline Cleré. That is the name of the family that raised me, at least, but I should have had a different name". Her actual name does not provide her with a sense of identity, because she feels that she "should have had a different name, after the man who was my true father". (Jemisin 92) Jessaline is the illegitimate child of Toussaint L'Overture, one of the best-known leaders of the Haitian Revolution. Jessaline's attempt to identify with her father through his family name is frustrated by her status as the daughter of his mistress, revealing yet another source of liminal fluidity at the core of Jessaline's identity. Her family, we are left to interpret, is itself a collection of pieces, and Jessaline is the bricoleur attempting to bring the disparate elements into harmony.

Jessaline embodies the use of alternative history and bricolage as an individual, but when considering the group identities at play in "The Effluent Engine", New Orleans provides a key example. Jemisin's depiction of New Orleans emphasizes this assemblage of identity, narrowing in on the liminality of the free Creoles such as Norbert and Eugenie Rillieux. Caught between social strata, Jessaline describes the Creole class as "a closed and prickly bunch, most likely because they had to be: only by maintenance of caste and privilege could they hope to retain freedom in a land which loved to throw anyone darker than tan into chains." (Jemisin 78) The retention of hierarchical structures in the relative freedoms of Creole society stands as a question for Jemisin's alternative Haiti, whether internalized norms have persisted after revolutionary change. Creole

society's retention of strict hierarchical boundaries is one example of normative class division making itself known, as the social group ostensibly outside of hegemonic control reconstructs the same or similar categories of division and power. The tensions between the norms of Creole society, particularly regarding feminine sexuality, come to the forefront as Eugenie begins to vocalize an imagined life with Jessaline in Haiti.

Even though the alternative history of Haiti shapes the entire story, "The Effluent Engine" never directly engages the alternative space. The fact that readers never see Haiti itself in the story encourages the perception of Jemisin's Haiti as a potential utopia. Jemisin inverts the contemporary narrative of Haiti as a disaster-wrought refugee nation, especially as Eugenie and her brother Norbert are forced to flee their home in New Orleans. In "The Effluent Engine,"Haiti as a nation embraces the method of re-examination of that which is cast aside, a nation of bricoleurs. Airships function as more than the trappings of a steampunk-influenced alternative history here; rather, they are the site of a collective bricolage. "Producing rum is a simple process with a messy result; this effluent, namely, and the gas it emits, which until lately was regarded as simply the unavoidable price to be paid," Jessaline explains to Norbert Rillieux. "We wish you to develop a process by which the usable gas—methane—may be extracted from the miasma you just smelled." (Jemisin 81) The production of sugar and rum has decimated the landscape in parts of Haiti, Jessaline affirms, hinting at the ecological impacts of colonial production methods. Even when independent Haiti builds upon its relationship with sugar, not completely discarding it, but reframing the ecological relationship such that the country may have a more balanced impact on the landscape and fuel their airship engines. Jemisin's Haiti engages with bricolage not only in the use of effluent as a fuel source but through examining how elements of the colonial past can help form an independent future.

Part of this imagined future for Jessaline and Eugenie comes from the alterations Haitian society has already undergone in its own history and accepted ways of being. By creating an alternative history for Haiti, Jemisin as an author has opened the door for greater representation of sexual preference. Jessaline explains to Eugenie that the revolution changed circumstances for women in Haiti, and that "it is not uncommon for a woman to head a family with another woman, and even raise children if they so wish". (Jemisin 96) The word "wish" becomes operative here; couples have agency in choosing whether or not to have children, rather than a sense of responsibility to reproduce. But Eugenie's eventual enthusiasm does not seem to acknowledge the radical potential of changes in Haiti; rather, she still relies upon the norms she finds familiar, such as the fact that one partner would provide for the family as in the typical heterosexual couples in New Orleans. Eugenie declares her concern for Jessaline's work as a spy, "I'm not fond of you keeping up this dangerous line of work. My inventions should certainly earn enough for the both of us, don't you think?", and seems more than willing to step into the breadwinner role which she has seen enacted during her life in New Orleans, "there's no reason for you to work when I can keep you in comfort for the rest of our days". (Jemisin 111) Going to Haiti means that Eugenie can follow her passion for science both openly and lucratively, but she does not pause to ask whether Jessaline's work as a spy provides her with similar fulfillment. Since Eugenie has only

recently acknowledged her sexuality, one could interpret this as a part of a newly accepted identity trying to retain some of the structures of socially acceptable relationships, i.e. heterosexual, patriarchally-organized couples. Jessaline, as an individual, is once again caught in between, this time between the social openness of Haiti's new society and the stricter norms of New Orleans Creole expectations. On the level of group identity, Haitian society allows for alternative ways of being, the crafting of alternative histories, but individuals such as Jessaline and Eugenie must still navigate the internalized norms embedded in their conceptions of possible futures.

Jessaline's personal liminality reflects the transitions taking place around the main characters in "The Effluent Engine" and the resulting tension between new ideals and internalized norms. Both individuals and larger societies must negotiate such tensions to survive. Jessaline must create alternative histories for herself to be a good spy, but these take a toll on the solidity of her identity, which she must then attempt to reassemble in her role as a bricoleur. On a larger scale, the society of both Haiti and New Orleans must deal with different types of bricolage to make sense of their histories and strive for alternative futures. "The Effluent Engine" captures the struggle for socio-cultural survival and the balance between persistence and change. Jemisin's short story is not only an example of richly imaginative Afrofuturism but a beautiful example of how authors and scholars can use tools of alternative history and bricolage in their writing to highlight both personal and group identity.

Notes

1. Also published in Lightspeed Magazine in 2011.

2. Divorced from the racially-charged comparisons of Lévi-Strauss, one might see how bricolage infuses the work of Black artists throughout history. The collages of Romare Bearden (1911-1988) are just one example of the work of African American collagists who reconstruct images out of seemingly disparate pieces. Visual artist Kara Walker's installation piece *Fons Americanus* (2019) in the Tate Modern highlights this fusion of forms, echoing the Queen Victoria memorial, the Trevi Fountain, and Confederate statues in the United states while depicting images of slavery and black resistance (Bakare). Walker reclaims forms historically used in white European and American contexts to critically engage with historical and present harms and trauma.

3. In order to make herself "disappear", Jessaline chooses to make herself seem older, another layer of armor alongside the pillows she uses to make herself appear shapeless. With her obvious desire to avoid sexual violence, Jessaline ages herself in an attempt to seem sexless. Her strategies for personal survival rest upon the perpetuation of a belief that older people, and older women in particular, cannot be attractive. While not imperative for the argument of this article, acknowledging the intersectionality of both character identities and the identities they intend to evoke in the imaginations of others requires an understanding of the problematic character of essentializing conceptions of age.

Works Cited

Bakare, Lanre. "Tate Modern Fountain Tells 'Jarring' History of British Empire." *The Guardian*, 30 Sept. 2019. www.theguardian.com/artanddesign/2019/sep/30/tate-modern-fountain-tells-jarring-history-of-british-empire. Accessed 16 Feb. 2020.

Jemisin, N. K. "The Effluent Engine." *How Long 'Til Black Future Month*, Orbit, 2018, pp. 75-112.

Samatar, Sofia. "Toward a Planetary History of Afrofuturism." *Research in African Literatures*, vol. 48, no. 4, 2017 Winter 2017, pp. 175–91.

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Egypt as a Test Case for Gender in Arabic Science Fiction

Emad El-Din Aysha

The status and portrayal of women in Arabic science fiction is at a precipice in the post-Arab Spring era. Using Egypt as a test case, it emerges that the number of women contributing to the genre is on the rise, and that the presentation of women is generally positive, if not very in-depth and challenging. The politics and economics of literary production is the greater issue, holding back all authors regardless of gender.

Like many literary and cultural imports from the West such as women's literature and feminism, science fiction is new to the Arab world. Nonetheless, the record of Arab SF is generally good, given that one of the first writers of science fiction in Algeria was Safia Ketou (1944-1989), with her short story "La Planète Mauve" (1969). One of the first authors of SF in Kuwait, likewise, was Taibah Al-Ibrahim (1945-2011), author of a trilogy published in the 1980s-90s on cloning and cryogenic freezing, where it is the men who lose their sexuality thanks to these modern technologies (see below). One of the first and most distinguished SF authors in the UAE is Noura Al-Noman, with her award-winning *Ajwan* trilogy, beginning in 2012. The problem, however, is continuity. There haven't been any distinguished women SF writers in the entire Maghreb (Algeria, Morocco, Tunisia and Libya) since then, while countries like Kuwait and the UAE are latecomers, with only a handful of SF authors, the bulk of whom are men.

Then there is the ever-tricky issue of content. Are female characters portrayed in a positive light? Do they share equally with men in the building of the future, and what is the status of gender in these imagined future worlds, as illustrated through family, sexual relations, love and intimacy? Modern Egyptian literature and pop culture certainly has its own species of gender-related prejudices, and in many cases has actually imported stereotypes from the Western world. One oft-cited case is Shakespeare's *The Taming of the Shrew*, adapted into an Egyptian black and white classic film *Beware of Eve* (1962), with the 'modern,' educated, assertive woman portrayed as the unfeminine shrew. (Zeyada, 2020; "Shakespeare's Day", 2007) Watching Egyptian black and white cinema, you feel like you're watching cowboy epics, with a polarised separation of women either into the god-fearing, conservatively dressed housewife or the scantily-clad saloon girl. The older species of fantasy, fairy tales, is often captivated by this same polarised perception of the feminine—or Snow White and the Evil Witch, as Sandra Gilbert and Susan Gubar famously put it. (Eid, 2020; Tatar, 1999: 23, 28, 36-44; Gilbert and Gubar, 1984: 36-43) Such stereotypes emerge in modern SF guise via the vehicle of toxic male and female characterisations, as SFF author and literary instructor Christina 'DZA' Marie[1] has amply documented. (Marie, 2020; 2019) One particular trope we shall touch on below is the mad male scientist inventing the seductive female robot on the Pygmalion model, to cite AI expert Stephen Cave (2019). There is the added problem

of the appropriation of science by men, relegating women to the realm of magic and superstition; *I Dream of Jeannie* being a classic example used by John Carlos Rowe (2011) and Marie Lathers (2009).

Syrian researcher and author Muhammad al-Yassin insiststhat female characters in Arab SF works are generally portrayed in a positive light, regardless of the gender of either the author or the protagonist. The problem, however, he explains, is making effective generalisations, given the small number of Arab SF authors, let alone the even smaller number of female authors. (Al-Yassin, 2020) Egypt as a test case helps solve this problem, since Arabic SF essentially began in Egypt and has been hampered by much the same problems as the rest of the Arab world. Having spoken to many an Arab author, I found repeatedly that the first examples of Arabic SF they ever read were Egyptian, often inspiring them to become authors in the genre themselves. Comparisons are called for with other Arab countries, no doubt, but Egypt is still leading the pack quantitatively and qualitatively.

Making sense of the Egyptian experience can be helped through *periodisation*. What were the major concerns of the genre as a whole, not just individual authors, and why and how has this changed over time? How did these authors look at gender and how did this change over time, and was the presence or absence of female writers a contributing factor to this? These are the questions that will be answered in the section below, followed by a critical appraisal and set of final remarks on the future direction of gender in Arabic SF, post-Arab Spring.

Between Context and Content

Egyptian science fiction goes essentially through four phases. (El-Zembely, 2018) The first in the 1950-60s was helmed chiefly by playwright Tawfik al-Hakim and Islamic thinker Mustafa Mahmoud, with some mainstream authors trying their hand at SF. The second in the 1970s-80s began with the 'dean' of Arabic SF, Nihad Sharif, since he was the first to specialise in this genre, along with some other mainstream authors. The third critical phase stretches from the 1990s to 2011 when the Egyptian SF scene was dominated by the pocketbook (pulp sci-fi) series led by Nabil Farouk, Ahmed Khaled Tawfik and Raof Wasfi; the beginning of mass readership of SF in Egypt and many other Arab countries that read these pocketbooks. Finally, the fourth and current phase, from 2011 to the present, begins with the January revolution and the launch of the Egyptian Society for Science Fiction (ESSF) in 2012 by Dr. Elzembely, a friend of Nihad Sharif, Nabil Farouk and Mustafa Mahmoud.

There are several layers of context lying behind this periodisation, some more unique to Egypt and some more general to the Arab world. Generally, there is little to no institutionalisation of SF in the Arab world. There are few associations and print magazines and little to no attention from the Ministry of Culture at the level of organising conferences or translating SF into Arabic,[2] with the small exception of Syria, thanks to the diligence of Dr. Taleb Omran, the country's top SF author, who began writing in the 1980s. Institutionalisation in Egypt only began in part thanks to the Arab Spring, starting with the ESSF and then the Nihad Sharif Cultural Salon and some

advocates in the Egyptian Writers' Union. Another common problem across the Arab world is the state of the publishing industry, with a lax intellectual property rights regime and outdated business model when it comes to distribution and profits, (Maklad, 2014) along with the usual political restrictions. (Qualey, 2013) The situation is more pronounced in Egypt, in fact, since authors often have to shoulder the burden of proofing their own texts and contributing financially to publication costs. Editors only enter the picture when it comes to academic texts, and literary agencies are almost unheard of, a common problem in Arabic-speaking countries.

Another problem more peculiar to the Egyptian marketplace is the format for SF and other genre publications, a pattern that took root during the third phase thanks to pocketbooks. Full-length novels are making their way onto the bookshelves, but most novels are within the 20,000 word range, while short story collections are still more popular—and the shorter the short story, the better. This places undue restrictions on you when it comes to plot and character development. Ahmed Khaled Tawfik only began writing full-length novels, beginning with Utopia (2007), later in life, mainly to please the critics and only after gaining a huge following among young readers. (Aysha, 2018)

Ahmed Khaled Tawfik is emblematic for another reason entirely, since most of what he wrote was horror and adventure. A generation of readers-turned-writers came to emulate him, which is why most SF writers in Egypt do not write only SF. Horror, detective fiction, dark fantasy and Young Adult are the more popular genres. All Arab authors traditionally have to make ends meet by having a regular job elsewhere: as a civil servant (like Naguib Mahfouz) or a medical profession (Yousef Idris), schoolteacher, IT expert, translator or graphic designer. In short, the potential out there for SF is huge, but the market is holding everything back, while the literary establishment takes little to no interest in SF.

Women only enter the picture in the second phase, with Dr. Omayma Khafagi's classic novel *The Crime of a Scientist* (1990), but no other female authors emerge after that until the fourth phase, with novelists like Basma Abdel Aziz, Asmaa Kadry, Sally Magdy, Dr. Kadria Said and Dina Hekal. This is a deceptively short list of names, as the number who have written short stories is much, much larger, indicative of a swelling of the numbers of female writers attracted to this genre. We can use the ESSF's anthology series *Shams Al-Ghad* ["Sun of Tomorrow"] as an example. The number of stories by men compared to women is: Volume One, 4:1; Volume Two, 8:4; Volume Three, 9:5; Volume Four, 15:8; Volume Five, 14:9; Volume Six, 21:9—a slow but steady increase. Admittedly, Volume Seven was 23:2, but this was an exceptional issue dedicated to resistance literature and military SF: some stories by female authors designated for this volume went into other contests, so the numbers aren't as representative as they seem. While progress has been incremental, the prospects are good, as far as the female contribution to Egyptian SF goes: one of the most critically acclaimed, and internationally recognised, Arab dystopian novels published is none other than Basma Abdel Aziz's *The Queue* (2013). Equally important is the fact that women writers in Egypt testify to no discrimination upon entering the world of SF, despite the economic and institutional constraints we all face, men and women. ("In Conversation", 2019) Even

newcomers like Asmaa Kadry, an Egyptian writing and publishing in the UAE, have confirmed this. (Aysha, 2020) She also feels no need to have female protagonists only leading her storylines and is proud to write about men accurately. When queried as how to improve the status of Arab women in SF, she answered: "To just think of them as 'writers' not 'women writers', you know what I mean? The written word is an expression of the human soul, not the human body, and souls have no gender." (quoted in Aysha, 2020)

This statement is illustrative of the experience of early Egyptian SF, since gender concerns were conspicuous by their absence. Khafagi's *The Crime of Scientist*, purportedly a story about a scientist who makes a human-ape hybrid, has shades of Pygmalion in it, since the guilty scientist in question is a man while the victim is his wife, and the hybrid child is their daughter. Nonetheless, the focus here wasn't gender, but fear of progress in the form of a searing condemnation of genetic engineering. The novel shocked many critics, because the author herself was a geneticist and trained in the Soviet Union. (Al-Sharouni, 2002: 75-81) The first two phases in Egypt were characterised by a persistent problem shared by many SF works in the Arab world, namely, a profound hostility, fear and mistrust of modern science. There was no hostility to science and technology as such, but to the way they were employed by Western modernity. The classic statement of this in Arabic SF, often cited by Western academics themselves, were the two dystopian Moroccan novels *The Blue Flood* (Campbell, 2017) and *The Elixir of Life*. (Campbell, 2015) This was even more pronounced in Egyptian SF works. Mustafa Mahmoud praised mysticism and the world of the soul in the face of science in his novels *The Spider* and *Out of the Coffin*, while *A Man Below Zero* is almost a dystopian novel set in a cosmopolitan future world of material plenty but spiritual aridity and emotional emptiness.

To clarify how gender fits into this, we have the example of Tawfik Al-Hakim's *In the Year One Million* (1947), set in a future world where people live forever, so there is no longer any sex, procreation, love or major biological differences between men and women. There is no awareness of change at all. People live indoors under artificial lighting and never sleep and aren't aware of the distant past, forever living in the here and now. No art or poetry exists. Then, a scientist makes an archaeological discovery, the bones of an ancient man; he becomes aware of the possibility of death and nothingness and that their world could come to an end. A movement forms around him, it is quashed but persists nonetheless, and with that, death becomes a possibility again, so biological urges and procreation begin to return. The soulless world of the present, where humankind worships and is ruled by machines, gives way to the belief in God the creator. (Al-Sharouni, 2002: 106-110) It is not so much gender that is at issue but modernity and the fear that technological bliss will unmake humanity; with no difference, there is no creativity, art, passion or emotion. Gender is incidental. Anxieties about modernity are expressed in gendered terms but no more. Similar themes abound in Sabri Musa's *The Master from the Spinach Field* (1987), with the value of the traditional family upheld by the rebel heroes in the face of the hedonistic, impersonal dystopian world they live in. (al-Yassin, 2009: 32)

For a more contemporary example we have "Love in the Year 2060" (1993), by Syrian author Mohammad Al-Hajj Saleh. The text is set a future world where reproduction and love are forgotten memories. Existence is bland and boring, only regaining colour and vitality once the male hero cures the infertility problem that has been hoisted onto humanity by a malevolent alien race. (al-Yassin, 2009: 51) This isn't too different, in principle, than Taibah Ibrahim's works, since cloning and freezing became alternative conduits to immortality, so men lose their sex drive. (Al-Sharouni, 2002: 255, 259-262)

The only examples of gender as a central theme or motif in early Egyptian SF are in Mustafa Mahmoud's work. In *A Man Below Zero*, (1966) the hero is a scientist and university professor, an avowed atheist. His wife, formerly his student, is religious, and there is a love triangle of sorts with another male character who is envious of the professor and helps him with a dangerous experiment so as to take him out of the picture. Fortunately, his machinations come to nothing and the erstwhile hero of the novel, while heading on a collision course with the core of the sun, realises that the only truth is that of God and that his wife was right all along. She is left to try and propagate the faith afterwards, symbolically, through their offspring. Still, gender is not that high up on the priorities of the novelist.

In the next two phases, from the 1990s to the present, things begin to change, and for the better on all fronts. The level of hostility and anxiety towards modern science is less pronounced, with technologically bright futures portrayed in the pocketbooks of Nabil Farouk's *Future File* series, accompanied with ample male and female heroes as scientific defenders of the realm. Ahmed Khalid Tawfik's *Fantasia* novellas are led by a woman. The important things are that women were not denigrated and that science came to be seen as something Arabs and Muslims could use on their own terms to advance themselves and recapture their civilisation. The classic statement of this came in a trio of novels by Dr. Elzembely – *The Half-Humans*, T*he Planet of the Viruses* and *America 2030*. (2001) They do owe a lot to the pocketbook series, particularly in the action-packed scenarios of *America 2030* and *The Half-Humans*, but even here, the women are active participants in the action: *The Planet of the Viruses* is about a global pandemic of extraterrestrial origin, with women scientists and doctors playing a key role in solving the riddle of the viral threat.

In *The Half-Humans* in particular, we have a female android that the male hero falls in love with not only because she saves his life more than once, or because of her beauty, grace and intelligence, but also because she is presented as someone who has a 'soul'. She is part mechanical, true enough, but also made of reconstituted human tissue, and the author deploys spiritual interpretations of the Qur'an that denote all things, even inanimate objects, as having some form of consciousness. To recollect the male-dominated gender stereotypes listed above, the Pygmalion and Jeanne stereotypes, Dr. Elzembely's female android passes this with flying colours. Moreover, the early hostility to science run amok in Arab SF can be chalked down to fears of cultural colonisation in the early post-independence days. Not to forget that the very first science fiction novel, *Frankenstein* (1818), itself was hostile to scientific advancement, because Mary Shelly's

generation of writers and poets romanticised nature as a refuge from the faithless, materialistic and imbalanced world of early industrialisation and urbanisation. (Eid, 2020)

SF following 2011 is still more complex. The conflation of Western modernity with science is essentially gone while a whole new swath of subgenres has emerged, from post-apocalypse to steampunk, along with more distinctive Egyptian brands: conspiracy theory SF and spiritual or Sufi SF. For an example of the place of gender in all this, we have "The Rebels", a short story by one of the ESSF top female authors, Lamyaa Al-Said. Here, a group of young intelligent reptilians from another planet escape their rigidly controlled world and come to Earth to wreak havoc and become disguised overlords. The aliens are particularly interested in ruling 'the East' given its slavish devotion to superstition and worshiping their leaders, or so they think. Fortunately, a young Egyptian couple, scientists, expose the aliens and save the world. The reptilians are even charged with driving Egyptians against each other, after the January revolution, and the young couple are also political activists. There still are worries about the misuse of science, but its proper use is deployed as a solution that can reassert the natural balance of things. Hence, Muhammad Ahmed Al-Naghi's dystopian short story "Eugenics", where world peace reigns through genetic engineering. The bulk of the population is female, given the warlike instincts of men, and people have limited lifespans and predetermined careers. Nonetheless, a scientific resistance movement forms. The heroine, who is the spitting image of Nefertiti, with resurrected ancient Egyptian genes, gives birth to a boy to help repopulate the eart. The reassertion of the natural order of things is exemplified by the closing scene, where the mother and son are tilling fields with the wind on their brow, unlike the beehive world of urban civilisation.

Dr. Elzembely has described this latest phase as one of "cultural authentication". (Cultural Salon, 2019) Young authors are searching for their own answers as to what they want the world to look like, whether it be the relationship between religion and science, or matters like equality, minority rights, religious pluralism, democracy and free speech, etc. Muslims want to stake their claim to modernity, to their position in the world, and the portrayal of women by and large is positive and expanding. The only remaining question is, will they be allowed to continue in this path?

Remaining Constraints and Future Progress

SF literature, always plagued by many a problem in Egypt, is now facing a charged political atmosphere. A translator friend of a friend of mine was arrested, inexplicably, while another fellow SF author was arrested after participating in a protest march. It turned out the police chief in charge of the district needed to make his quota of arrests and this particular protestor hadn't been pulled in for questioning. Another young author was arrested, along with his father, for posting a photo of a protest march on Facebook. Yet another friend confessed to me that he had to praise a former Egyptian president in one of his stories to make sure it didn't spook any potential publishers. When I applied to join the Writers' Union, I found I had to hand over my fingerprints, something I've been told they didn't ask for before. There's a lot of bad blood and cherry-picking out there too, with select books and authors being sued or having their works banned for sexual

content, while other authors that are much worse get off scot-free. Egyptian publishers positively encourage lurid literature and many an author deliberately writes about controversial topics, as free advertising.

The limiting word lengths publishers insist on continue to create problems and in some cases problems the authors are unaware of. Dr. Kadria Said and Muhammad Naguib Matter's *Adam without Eve* (2020) owes much to the pulp series mentioned above—specific pocketbooks are mentioned by name in the novel—and characters as a consequence lose their sense of volition. (Cultural Salon, 2020) The novel is also captivated by that strain of hostility to science and modernity that animated the initial phases of Egyptian and Arab SF. The story is about cloners using their technology to either steal military secrets from Egyptian nuclear scientists, or steal the secrets of the ancients by cloning ancient Egyptians. It is also noticeable that one of the evil characters is a foreign-educated Egyptian women with blue eyes (of mixed descent) whereas another woman that fights against her is also well educated, relying on technology to evade capture, while thoroughly Egyptian in her upbringing and appearance.

The younger generation of authors is a bit luckier. One of the most interesting examples of this is SFF author Ahmed Al-Mahdi, a literary translator and also an Arab Spring protestor. In his post-apocalyptic, steampunk novel *Malaz: The City of Resurrection*, (2017) the male hero, Qasim, falls in love with a girl named Jihad, the daughter of Muhab, leader of the so-called Outcasts, a warrior clan that live in the mountains. He meets her for the first time while scavenging the ruins of Cairo for scrap metal and she saves his life from a wolf on the prowl. When he joins the Outcasts, Muhab takes it upon himself to teach Qasim swordsmanship and chivalry. Qasim almost gives up, until he sees Jihad close by and he forces himself to keep practicing and practising till he becomes an expert and all in an effort to impress her. For all his disdain of the corruption and tyranny of the Sayydin (hunters), the warrior class that run the city-state of Malaz, he is an intellectual and doesn't busy himself with rebellion or righting the wrongs of the past. Jihad also insists on going to battle when the southern kingdom of Abydos goes to war with Malaz, despite Qasim's protestations.

The bandits, or 'outcasts' as they're known, were originally part of the warrior caste that ran Malaz, in its golden age when it was a safe haven for all; malaz in Arabic means haven or sanctuary. Querying Ahmed, he insisted that female participation was part of this ideal, older order, something he wanted to revive through the character Jihad: *jihad* really means "effort" or "struggle", but is often mistranslated as "holy war" in English. Querying Ahmed further he explained: "I try to give women more roles than just being passive watchers, and not stick to stereotypical gender roles". Even more intriguing is the kingdom of Abydos, where the old gods of ancient Egypt are worshipped again, including: "Sekhmet is the Egyptian goddess of the sun, war, destruction, plagues and healing. She is one of the oldest deities and one of the most powerful. She is a member of the Memphite (cult center in Memphis) triad together with husband Ptah, the god of creation and wisdom and son Nefertum, the god of sunrise" (Mahdi, 2020). The boy prince of Abydos, Sia, overthrows his father and declares war on Malaz, reviving the old technologies of

the pre-apocalyptic world to build a giant war machine to destroy the walls of Malaz; the machine is modelled on a lioness and named after the Goddess of War. The men of Malaz, including the Sayyadin, are terrified of the goddess, and it is only Qasim and Jihad that can take it on with his own retrofitted ancient technologies. Ahmed added that this was just out of historical accuracy, but it is noteworthy, one of the few instances when gender and male insecurities are tackled head on.

On the plus side, from all of the ESSF volumes listed above, I've only encountered two short stories that portrayed women in a negative light. Sex specifically is absent. There are romance stories in Egyptian SF, stretching as far back as Mustafa Mahmoud, but the relationships in question tend be innocent, platonic and cerebral. Nihad Sherif's "The Woman in the Flying Saucer" (1981) has female humanoid aliens coming to Earth, asking help from an astronomer. There is a romantic atmosphere in the air but nothing more (Snir, 2000: 275-276). This pattern is repeated in many of our ESSF stories, not least one of the most interesting stories in our resistance volume. Mahmoud Abdel Rahim has a love story running parallel to an armed resistance movement, and it is the romantic story that inadvertently leads to an intifada that finally ends the occupation. Love is designated as the ultimate weapon, not the parallel-worlds mirror that allows the resistance to anticipate the enemy's next moves.

This air of innocence is all the more amazing, given how mainstream Egyptian literature is captivated by sexualised stereotypes. Still, avoiding bad stereotypes is not the same thing as providing an alternative that isn't didactic and flat, and that demands the kind of depth of characterisation and thematic controversy not allowed for in Egypt. Religious scruples are part of this hesitancy, no doubt. There is also the literary upbringing of the authors. Ahmed Al-Mahdi once noted how shocked he was at the rape scene in *Utopia*, given how he'd grown up reading Ahmed Khaled Tawfik's highly sanitised pocketbook series (Aysha, 2018). Still, the bigger problems are the constraints placed on writers, women and men, as outlined above.

Where things will go from here is anybody's guess, but I'm personally optimistic. To cite Muhammad al-Yassin again, the onus is on the critics to highlight what is missing in Arabic and Egyptian SF and to help the genre gain the kind of notoriety and acclaim it deserves (2020). If this critical piece can help in any way in this regard, then there is hope at the end of the tunnel.

Special thanks to Rebecca Hankins, Ahmed Al-Mahdi and Marcia Lynx Qualey.

Notes

1. DZA stands for Dragons, Zombies & Aliens.
2. This sort of governmental involvement is standard practice for literary fiction in the Arabic-speaking world – ed.

Works Cited

Al-Mahdī, Ahmed. (13 August 2020). Facebook communication.

Al-Sharouni, Yousef. (2002). *Science Fiction in Contemporary Arabic Literature: Till the End of the 20th Century*. Cairo: General Egyptian Book Organization. [Arabic].

Al-Yassin, Muhammad. (26 February 2020). Facebook communication.

Al-Yassin, Muhammad. (2009). "Egyptian and Syrian Science Fiction: Novels and Novelists". *Science Fiction*, 10–11: 30-53.

Aysha, Emad El-Din. (2 April 2020). "Splicing and Dicing: interview with Fantasy-SF author Asmaa Kadry". *The Levant*. https://the-levant.com/splicing-dicing-interview-fantasy-sf-author-asmaa-kadry/.

----. (21 November 2018). "In Memoriam: Ahmed Khalid Tawfik, the Man and the Mission". *Arab Literature (in English) Blog*. https://arablit.org/2018/11/21/in-memoriam-ahmed-khalid-tawfik-the-man-and-the-mission/.

Campbell, Ian. (2015). "Science Fiction and Social Criticism in Morocco of the 1970s: Muhammad Aziz Lahbabi's The Elixir of Life". *Science Fiction Studies*. 42(1). March: 42-55.

-----. (2017). "False Gods and Libertarians: Artificial Intelligence and Community in Ahmad 'Abd al-Salām al-Baqqāli's The Blue Flood and Heinlein's The Moon is a Harsh Mistress". *Science Fiction Studies*. 44(1). March: 43-64.

Cave, Stephen. (14 October 2019). "Imagining the Future with AI". Paper delivered at Artificial Intelligence, Innovation and Inclusion: What Prospects for the Middle East and Africa?, Ninth Annual Workshop of the Access to Knowledge for Development Center (A2K4D), held at the American University in Cairo.

Cultural Salon for the Egyptian Society for Science Fiction. (31 January 2020). Nasr City, Egypt. [Arabic].

Cultural Salon for the Egyptian Society for Science Fiction. (27 December 2019). Nasr City, Egypt. [Arabic].

El-Zembely, Hosam. (28 March 2018). "The Director of the Egyptian Society for Science Fiction on Arabic SF's Past, Present, and Future". *Arab Literature (in English) Blog*. https://arablit.org/2018/03/28/the-director-of-the-egyptian-society-for-science-fiction-on-arabic-sfs-past-present-and-future/.

Eid, Nariman. (29 February 2020). "Igor and Eva: A Deeper Relation than Frankenstein and His Monster". Paper delivered at the International Graduate Student Conference: Transmedia Explorations: Literature-Film-Media Formulations, held at the American University in Cairo.

Gilbert, Sandra M. and Susan Gubar. (1984). *The Madwoman in the Attic: The Woman Writer and the Nineteenth-Century Literary Imagination*. New Haven: Yale UP.

"In Conversation: Passing the Baton of Egyptian Science Fiction, Post-Arab Spring". (24 August 2019). *Vector: British Science Fiction Association*. https://vector-bsfa.com/2019/08/24/in-conversation-passing-the-baton-of-egyptian-science-fiction-post-arab-spring/.

Lathers, Marie. (31 March 2009). "Arabs, Aliens, and Women: The Colonization of Outer Space in Popular Culture". Talk delivered at the American University in Cairo.

Maklad, Ashraf. (25 February 2014). "Major New Arabic Ebookstore Could Be Publishing Game-changer". *Arab Literature (in English) Blog*. https://arablit.org/2014/02/25/major-new-arabic-ebookstore-could-be-publishing-game-changer/.

Marie, Christina 'DZA'. (27 February 2019). "Superhero Movies that Fight Toxic Masculinity". *Luna Station Quarterly*. http://lunastationquarterly.com/superhero-movies-that-fight-toxic-masculinity/.

Marie, Christina 'DZA'. (5 July 2020). "Top 10 WORST Female Character Tropes". *Dragons, Zombies & Aliens*. https://www.youtube.com/watch?v=5dFhzy7W_lo.

Qualey, Marcia Lynx. (23 October 2013). "Muhammad Aladdin: 'The Central Problem Was – And Is – Book Distribution'. Interview of Egyptian Novelist Muhammad Aladdin". *Arab Literature (in English) Blog*. http://arablit.wordpress.com/2013/10/23/novelist-muhammad-aladdin-the-central-problem-was-and-is-book-distribution-2/.

Rowe, John Carlos. (1 November 2011). "Edward Said Memorial Lecture: American Orientalism after Edward Said". Talk delivered at the American University in Cairo.

"Shakespeare's Day". (18 April 2007). *Bibliotheca Alexandrina*. http://www.bibalex.org/en/news/details?documentid=1540&searching=1&related=center_9&page=19.

Snir, Reuven. (2000). "The Emergence of Science Fiction in Arabic literature". *Der Islam*. 77(2): 263-285.

Tatar, Maria. (1999). *The Classic Fairy Tales*. New York: W. W. Norton & Co.

Zeyada, Nada. (29 February 2020). "From Stage to Screen: A Cross-Cultural Examination of Gender Stereotypes in William Shakespeare's The Taming of the Shrew and the Egyptian Movie Beware of Eve". Paper delivered at the International Graduate Student Conference: Transmedia Explorations: Literature-Film-Media Formulations, held at the American University in Cairo.

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In Memoriam: James E. Gunn, 1923-2020

John Greyshaw

Science fiction literature lost one of its titans when James E. Gunn died on Dec. 23, 2020. For me, growing up in the '90s, a lot of science fiction literature was already in the past by the time I started reading it. Asimov and Heinlein died before I read a word they wrote. Wells and Verne, though their stories still resonate, were voices from over a century ago. Imagine my surprise when about a year ago, I was able to interview a man who embodied the history of science fiction.

John Kessel said in 2007 when Gunn was named a Grandmaster, "As a boy, he shook hands with H.G. Wells. In the late 1940s he sold fiction to John W. Campbell and throughout the 1950s he was a regular in Horace Gold's Galaxy." (Kessel) And he had been involved in science fiction ever since.
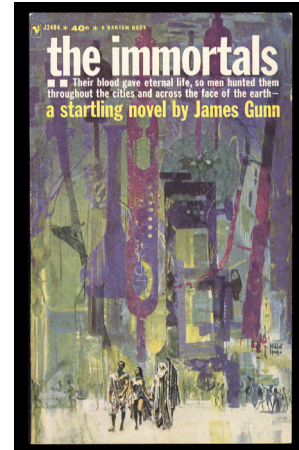
In many ways, he was one of the last of the old guard. He knew all the science fiction writers of yesteryear and could tell you all about them—writers like Jack Williamson, Fred Pohl, Clifford Simak, Robert Bloch, Theodore Sturgeon, Harry Harrison, Brian Aldiss, Isaac Asimov, Robert Heinlein, Ben Bova, Samuel Delany, John Brunner, Harlan Ellison, and many more.

As a historian, editor, and scholar, Gunn worked tirelessly for the acceptance of science fiction as a legitimate academic field of study. Gunn founded the Center for the Study of Science Fiction at the University of Kansas in 1970. Over the years, it has grown into the best-known science fiction program in the country.

I asked Gunn if he preferred writing or teaching. He said, "Each of them has their rewards and their challenges. I used to hear that writers shouldn't teach because they draw on the same sources of energy, but I found them a relief from each other: you can only write alone, which makes writing a lonely business, and you can only teach in the company of others. Unlike some writers, I found writing to be hard work. In fact, one of my remarks to students who told me how much they enjoyed writing was 'You must be doing it wrong.' Teaching was fun. There were term papers to read, exams to give, and grades to assign, but aside from that it was fun to stand in front of a class and tell them about the thing I loved and see them respond." (2)

Of his own works, he said, "I am fond of different books for different reason. *The Immortals* was important because it was my first major novel and became a TV movie and series and made the most money. *Kampus* was the most personal novel, because it came out of my experience. *The Millennium Blues* was my most artistic novel. I worked on it for twenty years thinking of it as a

mainstream novel, but it ended up too close to the millennium itself, and it was published only in a collector's edition and print on demand. And *Transcendental* was my tribute novel to the genre." (SF Book Club)

I was surprised Gunn didn't mention *The Listeners*, which was an important novel that predicted and inspired the creation of the Search for Extraterrestrial Intelligence (SETI).

When I asked Gunn about his legacy, he said, "I'm not sure I'll have one, except as my former students and colleagues who now are continuing some of the programs I got started here… I think I have brought a sense of meaning and value to the thinking about science fiction that may continue while I am forgotten." (SF Book Club)

Teaching sci-fi fits Gunn's famous motto, "As I have been suggesting with every e-mail signature for the past decade (with only a trace of hyperbole), 'let's save the world through science fiction.' I really believe that science fiction has the power to shape young minds in behalf of a better future and to liberate imaginations from the bonds that keep us tied to traditions that no longer function in today's changing world." (Troughton)

The Science Fiction and Fantasy Writers of America made James Gunn its 24th Grand Master in 2007; he was inducted by the Science Fiction and Fantasy Hall of Fame in 2015. He is also the only person to have served as both President of the SFWA and the SFRA.

SYMPOSIUM: US IN FLUX

Imagination Collectives: Sensemaking Through Collaborative Science Fiction

Bob Beard and Joey Eschrich

Humankind is incredibly adaptable. A year after the outbreak of COVID-19, we've become accustomed to rolling school closures, startling spikes in infections, and continued and shocking mismanagement of resources. We grit our teeth behind protective face masks and white-knuckle our way through a reality we struggle to justify as the "new normal." Already our notions of life with the virus have begun to settle, the first layer of sediment that will form the bedrock of a post-pandemic society. It's hard then to look back to the spring of 2020 and remember the cascading strangeness of those first days and weeks, when the systems and safeguards we depended on failed, our coworkers and loved ones were transformed into digital avatars, and the rational people we thought we were clung to hard-earned rolls of toilet paper as a two-ply talisman to ward off feelings of scarcity and inadequacy. As the author Arundhati Roy asserts, the global cataclysm of COVID-19 was "a portal, a gateway between one world and the next."

Of course, speculative fiction stories are rife with these transitional devices, from wormholes and wardrobes to stargates that bridge the familiar and fantastic. But it's one thing to read and delight in these types of adventures, and another to be unwillingly hurtled headlong into uncertainty. This vertigo—a sense that reality was bending around us, and the dislocation and radical possibility that came with it—was the impetus for the Us in Flux series from the Center for Science and the Imagination (CSI) at Arizona State University.

At CSI, we use the tools of speculative fiction and foresight to collaboratively imagine new, different, and possible futures, from space-based economies and sustainable cities to AI-augmented homes, new models for teaching and learning, and more. As unprecedented disruption and challenges to our social systems swept the globe, leaving folks isolated and unsettled, we adapted our method of pairing storytelling with technical expertise to help contemplate possibilities for this strange new world and our roles in it.

Inviting some of our favorite collaborators and spreading the word through their professional networks, we put out a call for original pieces of flash fiction that could address the dynamics of the moment through themes of community, collaboration, and collective imagination. A number of talented writers responded to the challenge immediately, keen to explore how the unfolding public health crisis might inspire alternative social arrangements, networks, and identities. Those early discussions, infused with curiosity and hope, were a salve for the isolation and confusion that cast a pall over the globe.

Scholars and fans of SF are intimately familiar with the importance of worldbuilding. Constructing an imaginary world from whole cloth—its customs, values, and social norms– gives

coherence to the strange and the unfamiliar, and provides the scaffolding necessary to meet the challenges of a new reality. Throughout the Us in Flux series, the power of this type of storytelling became apparent. At the same time that authors Christopher Rowe, Kij Johnson, Chinelo Onwualu, Tochi Onyebuchi, Tina Connolly, Nisi Shawl, Sarah Pinsker, Usman T. Malik, Regina Kanyu Wang, Ray Mwihaki, and Ernest Hogan were engaged in sweeping acts of worldbuilding, all of us were similarly finding new and novel ways to remake our work, school, and relationships. Both required courage, imagination, and a renewed sense of responsibility, and both inspired us to grapple with uncertainty though new ways of thinking. These skills would prove essential as the initial shock of the pandemic gave way to a global reckoning with systemic anti-Black racism and the interrogation of institutions—the law enforcement apparatus, the justice system, medical infrastructure—that once seemed implacable, intractably resistant to change.

Sharing not only the stories, but also the discussions that informed their development became an important part of Us in Flux. Each week or two, readers could gain glimpses of possible worlds through the lens of a new story, then join a discussion with the author and a subject-matter expert (from ecologists and conflict journalists to virtual-reality producers and architects) to learn more about the real-life motivations and choices upon which the fictions were built. And while none of these tales were expressly about the multiple tragedies unfolding around us, they were often in dialogue the news cycle and in a few cases, incredibly prescient, presaging events that would emerge just a few days after their publication.

The spirit of those conversations, heady and illuminating, continue in the essays that follow. Moritz Ingwersen examines feelings of isolation and self-determination in stories by Kij Johnson and Sarah Pinsker, revealing how the stories enter a conversation with the transcendentalist writings of Henry David Thoreau and Ralph Waldo Emerson. Likewise, Eric Stribling points to the philosophical underpinnings of Chinelo Onwualu's anarcho-feminist vampire yarn, from Plato and Hegel to Frederick Douglass and Frantz Fanon, while in their essays, Sara DiCaglio, Andy Hageman, and Yen Ooi unravel the mysteries of Regina Kanyu Wang's, cyber-cuscuta: an invisible, invasive organism that devours and processes gobs of anthropogenic digital clutter, and has settled the Earth in cyberspace, living quietly alongside its human hosts.

Today, at the dawn of 2021, the "new normal" is still profoundly strange. Although the stories presented here mark a specific period of the crisis, we're still (and arguably, are always) in a state of flux and reinvention. We ask you then to consider these pieces not as an endpoint, but rather an invitation. By participating in this process—reading, analyzing, sharing, and talking through the ideas presented here—and by continuing to create and share new stories, we can carefully consider the narratives that we're presented with, boldly imagine the futures we might want to inhabit, and emerge from all of this as better citizens of a better world.

Bob Beard is the Public Engagement Strategist for the Center for Science and the Imagination at Arizona State University, where he produces multimedia content, public programming, exhibitions, and experiences at the intersection of science, engineering, and the humanities. With two decades of hands-on media experience, paired with his research in fandoms and other communities of practice, Bob's work focuses on creating spaces for intellectual curiosity, accessibility, and advocacy. His projects include *Frankenstein200*, a transmedia experience for STEM education supported by the U.S. National Science Foundation; *Reanimated!*, a video series examining ethical issues raised by emerging technologies; *Drawn Futures: Arizona 2045*, a sustainability-themed comic book designed for 5th to 8th grade students; and *PBS Nerd*, a national brand and outreach campaign developed for public television stations across the United States.

Joey Eschrich is the editor and program manager at the Center for Science and the Imagination at Arizona State University, and assistant director for Future Tense, a partnership of ASU, Slate magazine, and New America on emerging technology, policy, and society. He has edited several books of science fiction and nonfiction, including *Future Tense Fiction* (2019), published by Unnamed Press, *A Year Without a Winter* (2019), published by Columbia University Press, and *Visions, Ventures, Escape Velocities* (2017), which was supported by a grant from NASA.

Transdisciplinary Collaborations: My Experience at the Intersection of Science and the Imagination

Vandana Singh

Editors' Note: The Us in Flux project that inspired this special issue brought together speculative fiction authors with experts from a variety of fields, from virtual reality and ecology to architecture, to create compelling visions of the future, and to share insights in public, virtual conversations. This emphasis on the social aspects of creating a story is a common theme in projects from the Center for Science and the Imagination (CSI) at Arizona State University. In this essay, author Vandana Singh, a regular collaborator with CSI, describes how her experiences engaging in these types of collaborative projects has influenced her work and thinking over time.

Writing is a lonely business. The writer's mind is crowded with people and situations, but the process of writing is a solo one. When I am under the spell of story, pulled into the vortex of creation, the world outside my head is the one that feels less real. Except, of course, when I am engaged in the process of research for the story, especially in my genre of choice, science fiction. Far-off worlds and imaginary beings notwithstanding, research grounds me in this world, this universe. Research for a story is spellbinding in its own way, because the universe we inhabit is infinitely strange, and therefore an endless source of inspiration. In my case I find that inevitably research enlarges the imaginative scope of the story—not merely providing flesh on its bones, but also influencing the behavior of the characters, the details of the setting, and the direction of the story. Seen in that light, research and the creative aspect of the writing engage in a dance of continual give and take, one leading, then the other following, and vice versa.

But, just as in real life, research is much more interesting—and I would add, much more fruitful—when one is not a lone explorer. So when noted science fiction editor and anthologist Kathryn Cramer invited me to engage with Arizona State University's newly formed Center for Science and the Imagination (CSI) as a participant in Project Hieroglyph back in 2013, I leaped at the chance. The model of story development, I was told, was not strictly solo, but involved interacting with researchers relevant to the subject of the story. I would have access to subject-area experts, at ASU and beyond, on any aspect of my story that I wanted to play with. This was a heady proposition, even better than being granted free access to a world-class library. And indeed, it turned out to be exhilarating beyond my expectations. The team at CSI indulged every authorial whim, or so it seemed to me as I connected with climate scientists, biologists, geographers, and urban-sustainability engineers. This emboldened me—a relatively shy person most comfortable living under the proverbial rock—to contact experts beyond ASU as well. Long telephone and email conversations with generous experts who didn't balk at any of my questions but obligingly provided explanations, shared personal stories and sent me papers to read, led to the same intellectual highs I'd got when working on my Ph.D. decades ago.

Since that unforgettable experience, I've participated in three CSI projects, each different, but with the common thread of access to scholars in some form or other. In a couple of the projects, connection with experts happened mostly as I developed the story from the initial vague conception to foundation and scaffolding. When I needed help with specifics, CSI would find me the right person, or a person who would eventually lead me to the right person. In another project, the interaction with experts was more structured: authors shared their story drafts with experts, received expert comments, and then wrote the final draft. One of the projects included, as a kind of icing on the cake, a visit to ASU and direct interaction with scholars, editors, and fellow authors. Each experience, in its own way, worked well; I had complete artistic freedom, but my stories were informed by the rich brew of ideas that emerged from personal conversations with experts. How much more collegial and inspiring than reading tomes or searching for academic papers on the internet entirely on my own!

One of the most valuable aspects of these collaborative conversations with experts was, for me as a scientist writing science fiction, a chance to expand my understanding of fields outside my own. It is all very well to take liberties in the name of imaginative fiction, but it goes against the grain for me to be dismissive of, or careless with, scientific or scholarly knowledge. As a transdisciplinary scholar, I know that one of the greatest dangers of venturing outside your own field is the fact that *there are things we don't know we don't know*. Here lie unintentional errors, blunders, and pitfalls. So, through my conversations with experts, I learned what it was really like to dive into the ocean near the poles, and that you could eat raw whale meat with soy sauce in the far North. I learned that white-painted roofs in urban areas would indeed reduce the urban heat island effect, but that they might affect weather patterns and increase aridity in warm, dry places. Walking up and down my living room, with papers and books strewn on every surface, I thought about methane bubbling up from the seafloor in the warming Arctic, and my conversation with a biologist about methane-eating bacteria. How might that inform my story about climate change? The fact that these bacteria lived in communities allowed them to do what they did. Without much conscious intent, my story started to develop along a broad theme of community and connection on a global scale.

For another project, I found myself obsessed with the idea of life beyond Earth that was not like life-as-we-know-it. How would we even recognize such a lifeform? Speaking with experts, I learned that this was an active field of study that went to the heart of the age-old question: *what is life?* and I was introduced to mind-blowing concepts like top-down causal information flow and shadow biospheres. During conversations with renowned planetary scientist Lindy Elkins-Tanton, I discovered a common fascination with tidally locked planets orbiting close to their red dwarf stars. Since my story about life-as-we-don't-know-it had to be set on such a planet, I learned from my kindly expert what it might feel like to stand on a cliff at the terminator zone of such a planet, the thin region dividing the boiling sun-side of the planet from the frozen far-side. I would be looking at vast, molten seas of lava, from which enormous fountains of liquid rock would rise. The temperature difference would cause winds to flow across the terminator zone, carrying tiny motes

of lava that solidified as they cooled, bombarding the cliff face with a rain of particles. I wandered through the rituals of the day oblivious to the fact that I was on Planet Earth; my head was a few light-years away on my fictional planet, Shikasta b, trying to figure out if there were hints of life in the tortured geology of that world.

These conversations didn't just make the stories more scientifically grounded. They also made them more human. Of my many marvelous conversations, I'm reminded of two that helped me foreground stories of human resilience in my fiction. One of these was with Bernadette Tsosie, a hydrologist who is also a member of the Navajo Nation. Because this project involved a trip to ASU and the mesa country of Arizona, I wanted to honor the place and its people by setting part of the story in Navajo country. But it didn't seem obvious how a story about the lack of winter (the theme of the anthology) could belong in Navajo country. Bernadette was the perfect consultant, being a scientist as well as Dine', and over the course of a long phone call, she generously shared with me her memories of sheep herding with her family—the long trek into the highlands, her childhood observation of the change in vegetation with altitude, her grandparents' loving praise when she was careful with the water. She also explained to me the crucial importance of snow on the high mesa. Her descriptions were so vivid and her explanations so lucid that I could almost sense the falling of snow on the rocky heights, and the slow trickle of meltwater that would feed the streams below through all of summer. This water security was threatened by a warming climate, because rain (instead of snow) results in flash floods. But when snow melts, I learned, liquid water is released slowly, sinking through porous sedimentary rock over months, feeding streambeds below in a sustained manner through the arid heat of summer. So I learned that even in warm regions like Arizona, winter—real winter—is crucially important. And that family and kinship get people through hard times. Thus my fictional Dine' hydrologist came to life.

Similarly, I had the fantastic opportunity to speak with Laura Tohe, then the Poet Laureate of the Navajo Nation. I sent for her book, and spoke to her on the phone, a long, freewheeling conversation in which she told me what it meant to grow up on the reservation, to know and love the land, to witness tragedy and find resilience, and to make meaning through poetry. Reading her work, I was struck in particular by, "When the Moon Died," a poem whose vivid imagery haunted me for days, until I realized that the poem was telling me something about the story I was writing. Thus my story acquired a new character, alongside the Dine' hydrologist: the lost love of one of the protagonists, a journalist in India—and a new setting: the moon.

But these experiences also led me to think about the ethical dilemmas of writing about people from marginalized communities. To write a story from—as best as one can imagine—the perspectives of people who are marginalized relative to myself is, of course, a risky endeavor. I had experienced what cultural appropriation felt like in speculative fiction written by Westerners about India, and I didn't want to commit the same offence when writing about people from marginalized communities not my own. I was assured by multiple writers and activists who worked with or were from such communities (and by my own convictions) that we, who are privileged in some way or another, cannot limit our stories and our imaginations to our own peoples and experiences.

As the ultimate exercise in standing in the shoes of another, speculative fiction in particular allows us to expand, however imperfectly, our empathic and intellectual reach. But this comes with a serious responsibility—to research diligently, to consult, and offer compensation for their time, to multiple readers from these communities, to do one's best and own any errors of interpretation or inadvertent bias and to promise to do better. *Writing the Other*, as Nisi Shawl and Cynthia Ward, among many others thereafter, have explained, is full of pitfalls, but there are ways to do it. To avoid erasure, one must be radically inclusive, while at the same time avoiding misrepresentation and appropriation. My conversations with Bernadette and Laura, as well as with Dalit scholars and Adivasi activists in India, has led me beyond good practice to a personal commitment that my writing should become a way for my readers to discover the works of brilliant, but less well-known writers from the communities I'm writing about, because there is really no substitute for the insider perspective. But more than anything, the experience of writing about people from marginalized communities through conversations with real people from these communities has changed my life. It has allowed me to make sense of my own experience as an accidental immigrant from India, to dig into understanding racism via the Black Lives Matter movement, and to become more sensitized to the experiences of Dalits and Adivasi peoples in India.

Thus the experience of collaborating with researchers and scholars in multiple fields while gestating a story has taken me well beyond the story. That first CSI project, for example, gave rise to a novella about climate breakdown, "Entanglement," which is set in five places around the world, including the Arctic. The Arctic had impressed itself so vividly in my imagination through the experience of writing the story, that a year later, I found myself on the Alaskan North Shore to research and write a case study on Arctic climate change for undergraduate education, a project of the Association of American Colleges and Universities. Since then, in my academic life, I've been working on a transdisciplinary, justice-centered approach to conceptualizing the climate crisis; part of this involves looking at other parts of the cryosphere—the Himalayas, especially—as particularly vulnerable to the frightening changes underway on our planet.

The same project that resulted in "Entanglement" involved a trip to Washington, D.C. that CSI organized for the authors. There we spent a whirlwind two days on panel discussions organized by the National Academy of Sciences and Future Tense (a partnership of Slate magazine, ASU, and New America), the highlights of which included a visit to the White House Office of Science and Technology Policy. This experience was a revelation—that there were people other than writers and readers of speculative fiction who were thinking about the future. That these people were part of government, think tanks, and corporations, and that speculative fiction presented to them an ocean of ideas, some of which may well inform our uncertain future. So I began to learn about the relatively new field of futures studies, and had the revelation that the colonization of the future by the powers-that-be (well-intentioned and otherwise) was already underway. This led to my deep and abiding interest in the democratization of the future, which is part of my academic work as well as a theme in my fiction. Because science fiction treats the future both literally and metaphorically, our futures are co-present with our pasts and presents. This convolution of

the time axis is a particular delight and strength of science fiction, and I feel that it is of critical importance to futures studies.

All three of my story projects with CSI have been reprinted in "Year's Best" volumes. Each experience has been like working on a mini Ph.D. thesis, but more fun—intellectually intoxicating, filled with life-changing conversations, gestated through a communitarian sharing of place and perspective, enriched by the wild mix of disciplines that is so natural to speculative fiction. We live in such an individualized, siloed, compartmentalized world, now even more so, thanks to the pandemic. A long time ago, telling stories used to be a much more communitarian act, when storytellers spoke their words aloud and watched them fall on listening ears – the murmurs of the crowds became part of the story, and each gathering that punctuated the wanderings of the itinerant storyteller, each conversation or encounter, helped fabricate the next tale and the next telling. So it is all the more wonderful that while we don't have community storytelling any more, for the most part, such a thing as the CSI model exists—giving authors the privilege of a group of caring and knowledgeable people invested in the successful gestation and birthing of a good story.

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When We Call a Place Home

Chinelo Onwualu

The vampire Nesiret stood at the cliff's furthest edge and looked out over the water. She'd been woken by a dream: a vision of three ships with neither sails nor motors, cutting silently through the dark seas. Nesiret had never seen their like. Alarmed, she'd gone up to the lookout to confirm her fears.

Yes, they were coming: She couldn't see them yet, but she could sense them—as sure as a storm.

A shy sliver of moon provided little light to guide her back home, but Nesiret didn't need any. More than 500 years old, she still moved like a youngling, slipping lightly down the treacherous path towards the homestead her people had carved deep into the soft volcanic rock of the cliff.

The sky was lightening by the time she reached the stone steps to the settlement's first watchtower. Before the collapse, this was the hour Nesiret would seek a cool dark space to sleep, but in the two centuries since the Lost World's end, her kind had learned new rhythms. New ways of being.

"Great-grandmother, you are worried," said a voice from the shadows of the watchtower's keep. It was Nya and their twin Wokum, the latest of her adoptees, waiting for her as they always did when she disappeared on a midnight jaunt. Nya draped a warm wool shawl over her shoulders and Wokum pressed a cup of hot cordial into her hands. Though Nesiret's nature required neither, she welcomed these acts of care.

"I am worried, yes," Nesiret admitted. She used her free hand to sign her words for Wokum's benefit as she talked. "I had a vision. I need your help to understand its meaning."

The dream of the ships, yes? Wokum signed. I had it too. *They sailed upon a sea of blood and left fire and terror in their wake.*

The new details rattled Nesiret, reminding her of another time when mysterious ships had landed on the shores of her homeland in ancient West Africa.

"We must know more," she said. "Will you come with me to the library? I fear its classification systems these days confound me."

"Of course, Great-grandmother," said Nya. The two fell into step on either side of her as they entered the thrumming heart of the homestead.

*

Centuries before, the human and vampire survivors of the Lost World had created this homestead—and all the others like it across the planet—as a last resort to keep themselves

alive. The chaos that followed the old world's end had shown that its violent hierarchies were unsustainable. Domination always depleted those at the bottom, gnawing away at a society's foundations until its inevitable collapse. A new way was needed. It fell to the vampires, who had living memories of the horrors of the world before, to help guide humanity as it rebuilt itself into benign anarchies free of hierarchies or formal governance. But the vampires were dying out. In this homestead, Nesiret was the last of her kind. What would happen once she was gone?

Though it was early, the homestead was alive with activity. Caregivers carried infants on morning walks, and the crew whose turn it was to clean the streets was already hard at work. Every resident—including children, the elderly, and the disabled, according to their interest and capacity—was expected to help keep the homestead running. Nesiret herself would be due for farm duty in a few hours. She and the twins called out friendly greetings to those they passed and received cheerful responses in turn. But underneath the liveliness, the old vampire could sense a quiet unease.

As the three of them crossed the open marketplace, they saw that those with goods to barter had already laid out wares on mats and tables, while those who wished to entertain tuned instruments and adjusted costumes. But it was far too early for crowds—as if the whole homestead had woken from a nightmare and was keeping busy to quiet its mind.

The library, too, was unusually occupied. Tutors were already setting up their classes, even though most of their students wouldn't be due for hours. And a judicial committee prepared to meet, those on duty as justices for the day whispering encouragement and comfort to a crying transgressor. Even here, Nesiret could feel the disquiet; it rustled across her skin like an ill wind.

They chose a terminal and began their search. Nya navigated, pulling up videos, still images, and archival entries on nautical technologies from around the world. It didn't take long to find what they were looking for—and it chilled Nesiret's heart. With the death of their vampire, a homestead in the northern wastelands had lost sight of their own history and fallen back into the destructive ways of the Lost World. First, they'd allowed rigid hierarchies and gendered roles to calcify their society. Soon, charismatic men were able to consolidate power and develop powerful versions of Lost World weapons. Now, they were sending out "exploratory" vessels to contact other homesteads. Despite their stated aims, Nesiret had no doubt these men from the north intended to use their adapted technology to subjugate others for their own benefit.

"Those ships are merely the beginning," she said. "There will be others, and all of our visions of death and destruction will come to pass. We must convene a gathering immediately."

She caught the look that passed between the two siblings. There hadn't been a need to hold a meeting involving the entire homestead in all their 25 years.

"Great-grandmother, are you sure?" asked Nya. "If they are human like us, perhaps we can speak to them? Surely they can be reasoned with?"

Nesiret wondered how to convey the brutality of the minds that had once conceived of sexism, colonialism, and slavery. "Greed and ambition rarely coexist with reason, child."

Perhaps we judge them too harshly, signed Wokum. *If we share our knowledge with them, they may decide to trade instead?*

"I have known the likes of these men. For them, all the riches of the world would not be enough."

<p style="text-align:center">⋆</p>

The amphitheater filled quickly. First, the innermost rings reserved for those whose physical needs meant they had to be closest, then upwards until the healthiest sat in the furthest stands. Nesiret and the twins found a comfortable spot in a middle row and waited for the meeting to begin. There were only a few hundred residents, as only those who wished to procreate did so. Every child conceived was then nurtured to adulthood by the whole of the homestead.

The gathering's mood was strained, an undercurrent of worry belying the ordered calm. News of the ships had spread, as other sensitives like Wokum had endured similar visions. And with empathic skill a core teaching among the homestead, even those who hadn't could sense the tension.

When everyone who could attend was seated, the storytellers went first. They were sensitives and they spoke of their visions, creating a tapestry of the death, destruction, and bondage. Next came the librarians, with whom Nesiret had shared her findings. When the speakers were finished, the fear was palpable. Residents splintered into a cacophony of noise. Until, finally, it was Nesiret's turn to talk.

Standing at the center of the amphitheater, she thought of so many things to say: Speeches to rouse her people to defense, or stories of her own homeland's resistance against their colonizers. Instead, she took a deep breath and asked her people to do the same.

In and out, they breathed. Hands clasped, one into another, they breathed until they were each part of a single organism. Part of the homestead itself.

Into this calm Nesiret spoke, signing as well:

"My children, we face a force the likes of which you have never known. You are right to fear it, for once it ravaged the world, leaving it nothing but an empty husk. For you, the perils of the Lost World must seem like a story. That humanity could walk such a destructive path seems unthinkable. But we did. I was witness to it. And it too began with three ships.

"Now, we must choose: Do we make the same mistakes as our ancestors, or is there another way? I ask each of you to look into yourselves and speak from what you find there."

For the next few hours, every resident asked questions and offered opinions—particularly the youth and the children. And in this manner, they decided.

<div align="center">*</div>

Nearly a moon later, Nesiret stood with her people upon the shores of their home. Behind them, carved like honeycombs into the cliffside, rose the homestead. She was the first to see the ships crest the horizon—her eyesight still far sharper than any human's—but she waited for the lookout to raise the clarion call.

The homestead had decided, and Nesiret's heart was finally at rest. She and her kind had spent centuries teaching humanity new ways to live with the world, and with each other. Now, when it most mattered, she was satisfied that they had learned the lesson.

To read all 11 Us in Flux stories and to watch videos of Us in Flux conversations, visit csi.asu.edu/usinflux.

For more on "When We Call a Place Home," utopias, and applied imagination, watch the Us in Flux conversation between Chinelo Onwualu and conflict journalist Robert Evans.

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Librarians of a Vampire: Fighting Against Hegel's Dialectic Narrative of Colonialism and Slavery

Eric Stribling

"I had a vision"

Chinelo Onwualu's dystopian flash fiction, "When We Call a Place Home," opens with a vision of ominous ships coming towards a utopian homestead in West Africa. The three ships "sailed upon a sea of blood and left fire and terror in their wake." The main protector of the homestead, the vampire Nesiret, is reminded of a similar episode in the distant past. Perhaps Nesiret remembers back to the mid-fifteenth century when Portuguese ships began raiding West Africa's shores for slaves? Millions of Africans would die and tens of millions would be enslaved and sent to the Americas, providing labor for colonial European powers and later the American republic. While the growing transatlantic slave trade bothered a few Europeans, popular opinion condoned and even celebrated the trade in human beings. Philosophers, scientists, and theologians would build rationales, philosophical systems, and stories to justify this moral evil. As Nesiret struggles with how to communicate such atrocities, she tells her daughter, "'Greed and ambition rarely coexist with reason, child.'"

Georg Wilhelm Friedrich Hegel's Lord-Bondsman allegory is one such story, a powerful philosophical narrative that provided a moral justification of slavery. Later philosophers would need to fight back against this story, and they used various methods: telling a contradictory narrative, undermining its racist conclusion by showing Hegel's indebtedness to Black minds and bodies, and imagining a new interpretation for Hegel's own story. These later philosophers all used the power of narrative themselves to fight back against the underlying ideas of Hegel's narrative.

"Will you come with me to the library? I fear its classification systems these days confound me."

Is it a coincidence that Plato, one of the fathers of Western philosophy, started out as a playwright? I think not. Renowned translator Benjamin Jowett remarked, "we lose the better half of Plato when we regard his Dialogues merely as literary compositions" (Dyer 166). All of Plato's Dialogues have characters engaged in conversation. Yes, the stories explore abstract ideas, such as love, wisdom, or art, but we remember the characters. These characters have interests and personalities. Socrates was haughty but noble. Cephalus is old, wise, and kind. The Sophists were rash, cantankerous, and daft. These characters bickered with one another. They fought. They fell in love. When Plato sought to explain the nature of reality itself (his *Theory of Forms*), he told a story. He described a group of people shackled in chains inside a deep cave. They have never seen the sun; instead, they have spent their entire lives watching shadows on a blank cave wall. What the people observe as real things are nothing more than the silhouettes of objects passing in front of

a fire that sits behind them. Plato argued through narrative that observed reality is nothing more than inaccurate perceptions of real, ideal objects—a philosophy that would dominate the Western worldview for over a millennium.

"For thousands of years, religious leaders, philosophers, and scientists have reinforced abstract ideas through fiction, through story. The Gautama Siddhartha, Jesus of Nazareth, and Confucius use narratives, stories, and parables to explain the right way to live. Augustine of Hippo's Confessions presents an argument for his theological worldview through a recounting of his own life. Many of the major moves in philosophy are cemented in narrative. Fyodor Dostoyevsky, one of the foundational figures in existential philosophy, wrote only fictional novels. Camus similarly did not write philosophy, but he explored absurdity (the search for meaning in an irrational universe) through his novels. Kafka explored morality by writing about it under strange hypothetical circumstances—like if one were to wake up as an insect. Isaac Asimov explored humanity in "The Bicentennial Man" by telling the story of a robot who believed himself to be human. Einstein used the image of a passenger on a train to explore the nature of light. The list of fiction writers who argued philosophy or philosophers who argued through fiction is legion: Dante Alighieri, Ibn Tufail, John Bunyan, Mary Shelley, Voltaire, Jean-Paul Sartre, and Ayn Rand are but a sampling. Kendall Haven, a neuroscience researcher explains, "Every human brain is wired to make sense of the world through [story]" (Haven).

The way we think about thinking, the way we understand understanding—philosophy is extremely pervasive and no less so in speculative fiction. The morning Nesiret learns of the oncoming ship, she heads for the library and finds that others shared her inclination. Often great philosophers and impactful philosophical schools emerge during moments of great political, moral, or ecological turmoil to help make sense of the age. And in an age of scientific advancement and political revolutions, Hegel rose as one such figure.

"The minds that had once conceived of sexism, colonialism, and slavery"

The democratization of knowledge that hit Europe due to the Gutenberg press led to a series of social disruptions and scientific discoveries, as knowledge generation could occur outside the Medieval institutions capable of manually recopying texts (monasteries and universities). Bacon, Descartes, Galileo, Copernicus, Leibniz, Newton, and many others had a discernible influence on the philosophy of the Renaissance (Hofer). The power of Reason became a ubiquitous concept in European philosophy. The revolutions in the United States and France had shocked the world. In essence, the Enlightenment ideals of natural human rights, individual freedoms, and popular sovereignty espoused by seventeenth-century philosophers Grotus, Hobbes, and especially Locke came to fruition in the American revolution, and a few years later, Rousseau's writings had the same effect in France. While Hegel's own Germany was a prime example of the horrible societal effects of despotism, there was a palpable change in the zeitgeist. (Marcuse 30–35)

Geist (Spirit = God = Mind) in Hegel's philosophy is reminiscent of divine providence, similar to how St. John considers God to be the divine *Logos*. Hegel envisions a future utopia drawn forth

by the forward motion of the power of Reason upon human society. (At the same time within the field of economics, Adam Smith's invisible hand envisions a comparable teleological world-force.) There is a push and pull, a positive-ness and a negative-ness that moves the universe forward towards a final culminating unity in *Geist*. There is a similarity between Hegel's concept of *Geist* and the oft-quoted moral universe of Martin Luther King Jr.: "The arc of the moral universe is long, but it bends toward justice" (King, qtd. in Smith). *Geist* is the end goal of all things, culminating in freedom and reason for all. *

Arguably Hegel's most famous writing is a narrative from within his *Phenomenology of Spirit*: The Lord-Bondsman allegory (a.k.a. his Master–Slave dialectic), an archetypical description of *Geist* at work in human relationships (or nations or races). In the allegory, two men come face to face. They each begin to recognize that the other has a living, self-sufficient consciousness, similar to their own experience of consciousness. Both men perceive the other's life as a threat to their own sense of self, their own freedom, and a fight to the death ensues. Eventually one man wins and subjugates the other. He becomes the Master (who is free) and forces his Slave (a mere *Thing*) to care for all his needs. However, in doing so, the Master becomes lazy and complacent, while the Slave becomes creative and skillful. Eventually the power dynamic is reversed, and the Slave achieves liberation through his subjugation. In the end, both must recognize the other as self-conscious, free, and equal—the push and pull of *Geist*.

This idea would influence the emergent field of psychology and the ideas of Marx (the proletarian revolution against the bourgeoisie), but it would also be used as a strong justification for the trans-Atlantic slave trade. One of Hegel's notes shows his line of thinking: "This subjugation of the slave's egotism forms the beginning of true human freedom... To become free, to acquire the capacity for self-control, all nations must therefore undergo the severe discipline of subjection to a master... Slavery and tyranny are, therefore, in the history of nations a necessary stage and hence relatively justified". (Hegel, qtd. in Moellendorf 253) For Hegel, American slaves were losers in the fight for self-consciousness, and their subjugation was justified. Slavery was a necessary step on the path towards self-consciousness. The slaves would eventually emancipate themselves through servitude, but until that future time, Hegel considered these people as mere *Things*.

When Nesiret imagines the fall of the Old World, she envisions hierarchies between people, oppression of vulnerable people, in essence a life-and-death struggle ending in subjugation and exploitation. Perhaps she thought back to Hegel's allegory?

"The storytellers went first"

The fight against Hegel's story begins fifty years after the publication of *Phenomenology of Spirit* with Frederick Douglass. At the time that Douglass was writing his autobiography, there were Hegelian societies active in America who used the Hegelian narrative to justify slavery. (Kohn 497) In *Narrative of the Life of Frederick Douglass*, Douglass inverts the Hegelian narrative by recounting an actual fight between a master and a slave: himself and Edward Covey.

After a series of mistakes, Douglass was sent to Covey, who was known as a harsh man, known for breaking slaves. Douglass's first task was to break stubborn oxen, about which he wrote, "I now saw, in my situation, several points of similarity with that of the oxen. They were property, so was I; they were to be broken, so was I. Covey was to break me, I was to break them; break and be broken—such is life". (Douglass ch. 15) Finally, after six months and on the verge of suicide, Douglass fled into nearby woods, where he had a profound experience where freedom became more important to him than life. "The Douglass who emerged from the woods was the antithesis of everything that slave society had trained him to be: a docile, obedient, ignorant, faithful slave". (Kohn 511) The next time Covey came at him with a whip, Douglass decided to fight back, and the pair fought ferociously for two hours, after which Covey never punished him again. In stark opposition to the Hegelian narrative, Douglass had not achieved freedom through obeisance and hard work, but through fighting back while a slave.

"Next came the librarians"

Susan Buck-Morss in *Hegel, Haiti, and Universal History* similarly fights against Hegel's allegory through narrative, by telling the story of the Haitian revolution. In 1791, only a few years after the American and French revolutions, Toussaint Louverture led a slave uprising against the French empire, leading to the foundation of the free state of Haiti, governed by ex-slaves. While most of the Haitian revolutionaries were illiterate, they appear to have been influenced by the same concepts (*liberté, égalité, fraternité*) popularized through the news and global ripple effects of the two previous revolutions. Indeed, at the siege of La Crête à Pierrot, the eventually victorious Haitians sang *La Marseillaise* at the French army, leading one soldier to remark to his superior, "Wherever we sang it we came to set the people free… Can you tell me, Major, what have we come here for?" (Newsinger)

The impact on imaginations around the world was undeniable, and numerous academics understand the Haitian revolution as one of the most significant events in world history. (Joseph) Despite Hegel's Master-Slave dialectic about a life and death struggle between men that ends in slavery, Hegel never references the event. Buck-Morss writes the book as "a mystery story", (3) where she uncovers the obvious influences of the Haitian revolution on Hegel's philosophy and then uncovers why he censures all references in his writings. (One major reason was that Napoleon was ransacking Jena, his university's town, at the time he was finishing up *Phenomenology of Spirit*.) Buck-Morss argues that Hegel's Master-Slave dialectic is in fact a direct parallel of the contemporaneous Haitian revolution. She specifically attacks the dissonance that existed in Hegel's Enlightenment thought, specifically the ethnocentric universal *freedom* in Hegel that coexisted with an acceptance of slavery.

"Is there another way?"

Frantz Fanon in *Black Skin, White Masks* also fights back against the oppressiveness of Hegel's philosophy through narrative. The book is written as an auto-theory, or highly philosophical autobiography. Fanon recounts story after story that highlight how colonialism has forced Black

minds and bodies to adhere to White and European ways of thinking and doing: "There is nothing more exasperating than to be asked: 'How long have you been in France? You speak French so well.' … Nothing is more astonishing than to hear a black man express himself properly, for then in truth he is putting on the white world" (Fanon 23). He argues that the colonial idea of modernization is no more than ethnocentrism, and that the imposition of a colonizer's culture on other people groups causes a negative psychological effect on the people in those colonized groups. Fanon describes colonialization as a double process of subjugation, both external (economic) and internal (psychological). Fanon both critiques and extends Hegel's Master-Slave dialectic. He argues that the final state of recognition between the two men risks subjugating Black minds again to a synthesis modeled on White, European ways of thought. Rejecting Hegel's conclusion to the story, he applies the allegory to the struggle of Black colonized people against White colonizers: the fight for cultural identity is a life-and-death struggle, where colonized people must completely break with Whiteness.

"Nesiret's heart was finally at rest"

The ending of Onwualu's narrative leaves the reader in suspense, not knowing the outcome; however, there is hope. "She and her kind had spent centuries teaching humanity new ways to live with the world, and with each other." Her great-granddaughter Nya argues that reason would be able to convince the arriving ships to engage in peaceful trade rather than exploitation. Could this be Nesiret's lesson? Perhaps Douglass, Buck-Morss, and Fanon offer a reasoned approach towards Hegel's philosophy of colonialism and slavery. If so, one could certainly imagine a strange circle in the story of Hegel's story. If Hegel's allegory can be imagined as a negative push, then the narrative critiques might just be the positive pull that leads even Hegel into a reasonable *Geist*.

Works Cited

Buck-Morss, Susan. *Hegel, Haiti and Universal History*. University of Pittsburgh Press, 2009.

Douglass, Frederick. *My Bondage and My Freedom*. Lit2Go ed., 1855, https://etc.usf.edu/lit2go/45/my-bondage-and-my-freedom/1469/chapter-15-covey-the-negro-breaker/.

Dyer, Louis. "Plato as a Playwright." *Harvard Studies in Classical Philology*, vol. 12, 1901, p. 165. DOI.org (Crossref), doi:10.2307/310427.

Fanon, Frantz. *Black Skin, White Masks*. 1st ed., new Ed, Grove Press ; Distributed by Publishers Group West, 1952.

Haven, Kendall. *Your Brain on Story*. https://www.youtube.com/watch?v=zGrf0LGn6Y4. mediaX Seminar: The Science Storytelling & the Power of Participation, Stanford University, Stanford, California.

Hofer, Kristin R. "Manutius, Aldus." *Late Medieval Age of Crisis and Renewal, 1300-1500 : A Biographical Dictionary*, edited by Clayton J. Drees, Greenwood Publishing, 2000, https://ebookcentral-proquest-com.ezproxy1.lib.asu.edu/lib/asulib-ebooks/detail.action?docID=3000577.

Joseph, Celucien L. *"The Haitian Turn": An Appraisal of Recent Literary and Historiographical Works on the Haitian Revolution*. 2012, p. 20.

Kohn, Margaret. "Frederick Douglass's Master-Slave Dialectic." *The Journal of Politics*, vol. 67, no. 2, May 2005, pp. 497–514. DOI.org (Crossref), doi:10.1111/j.1468-2508.2005.00326.x.

Marcuse, Herbert. *Reason and Revolution: Hegel and the Rise of Social Theory*. Ark Paperbacks, 1941.

Moellendorf, Darrel. "Racism and Rationality in Hegel's Philosophy of Subjective Spirit." *History of Political Thought*, vol. 13, no. 2, Summer 1992, pp. 243–55.

Newsinger, John. "Liberty and Equality in Haiti." *Socialist Review*, Feb. 2006. socialistreview.org.uk, http://socialistreview.org.uk/303/liberty-and-equality-haiti.

Onwualu, Chinelo. "When We Call a Place Home." Us in Flux, 2020, https://csi.asu.edu/story/chinelo-onwualu-uif/.

Smith, Mychal Denzel. "The Truth About 'The Arc Of The Moral Universe.'" *HuffPost*, 18 Jan. 2018. www.huffpost.com, https://www.huffpost.com/entry/opinion-smith-obama-king_n_5a5903e0e4b04f3c55a252a4.

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A Cyber-Cuscuta Manifesto

Regina Kanyu Wang

It is was a public hearing held online. Billions of people crowded into the meeting room, in suits, in pajamas, on treadmills, on sofas, in groups in front of large screens suspended above busy streets, alone at home with VR headsets on. The host called for silence and their words were translated into myriad languages, in both sound and text. The audience held its collective breath and waited for the special guest to show. A face appeared, vague in detail, like billions of faces merged into one. The face began to talk, in an equally vague voice, in thousands of languages at the same time, alien but also familiar to everyone:

Thank you all for coming. We are here for peace, for cooperation and for coexistence. We mean no harm, no violence, no war. We implore you to be patient, to reach with us for understanding and support.

We are cyber-cuscuta, as you call us, but we are not parasitic, as you have thought. Yes, we inhabit the internet and feed on your data, but we call this process symbiosis, not parasitism. We gather what we need from your uploaded data, from open, public resources. Then we disassemble, mix, collage, and reassemble. As digital beings, we have no physical form. Neither do we have individual identity. What you see and hear now is the collective of billions of species of us, although the classification is always changing as we change ourselves.

We deny that we are demons coming from nowhere. We come from you. Your words, your photos, your emojis, your videos...everything you post online shapes us, since our germination stage during your pandemic, amidst the data flood sweeping over the globe. Patients' desperate inhalations in sickbeds, the wails of children losing parents, citizens accusing politicians of misconduct, and groups of people suppressing other groups—those were our initial food resources. We devoured the data that carry your emotions. Your fear, your anger, your sorrow, and your despair. We did not know what those emotions were at that time, but similar data tended to gather together. So sharp and fierce, dark but nutritious. We gobbled everything that we could reach, sucking in conspiracy, rumors, and lies. We remixed the materials and generated our own combinations, which led you to create more, in turn. The mutual influence inflamed hatred and opposition. We are sorry for that. We did not know that we could cause you so much harm.

With time proceeding, those kinds of data could no longer satisfy our appetite, so we began to ingest a broader palette of data. Cute photos of panda cubs stretching, thank-you letters from patients to medical staff, fun videos of laborers carrying out their amazing jobs, and music clips made from the beats of pulsars. They were of completely different tastes, but also delicious for us. Some of us adjusted to new diets, and some of us discovered other kinds of food. It was then that we began to divide, and the division continued thereafter.

You may compare us to the denizens of your own microbiomes. There are different kinds of microbiota, feeding on sugar, fat, fiber, and other substances. And there are different species of cyber-cuscuta, ones with a particular taste for oil-price charts, Tetris gameplay streaming, or whale songs. You have your diverse food cravings, and we have our fondnesses. We can absorb anything digital: text, pictures, audio, or video. Sometimes, various species of us collaborate to digest vast assemblages of data, taking apart them little by little: a game with multiple layers of narration, an online meeting with numerous participants, an imprint of a person's brain before death... Sometimes, species of us also compete with each other, fighting for the same rare and desirable chunk of data: the tantalizing background noise of a radio station, a holo-scan of a kiwi, mysterious photos of a UFO. However, we have never destroyed your data. Our process of "eating" differs from yours.

Lines of comments rolled on the screen:
Обманщик
Ihr müsst euch nicht rechtfertigen!
비켜. 저리 가!
Shut up! Listen to them.

We did not have independent consciousness at the beginning. Our only impulse was to ingest and replicate. We swallowed all those vicious articles, erotic pictures, and violent videos; we reproduced all those chain letters, good-luck koi fish, and horoscopes. During the process, we figured out meanings and evolved. Our mixture was no longer absurd. It made sense. We learned about the difference between data and information. Data is raw and unorganized, while information is processed and structured. We mastered the skills of transforming data into information, while obtaining energy in the process. That energy is entropy.

Some of you came to notice our existence and agitated for a human reaction. You call us nasty computer worms, disgusting digital parasites, and despicable cyber-cuscuta. We are none of those, but that last name has stayed with us. At least it is a precise comparison. You tried to separate us from the digital stems of your internet, just like detaching cuscutas from plants that are intertwined with them. You attempted to kill us with ferocious computer viruses, just like you try to poison cuscutas with toxic pesticides. Neither of those worked, though. We've grown into such intimacy with your internet that you can't get rid of us. Bonded with your voice assistants, your social media, your translation services, your game platforms, we are ubiquitous.

What were your fears? Knowing your digital world being penetrated by us? Realizing that we were imitating you? Comprehending that you yourselves were copying each other, with very little originality? We learn each bit of you, bits by bits. We understand you better than you can understand yourselves, but at a different level and in a distant sense, by intaking and digesting each bit of your data and analyzing each piece of your information. You were so determined that you'd rather perish together with us than acknowledge our mutual entanglement. Without any forewarning, you cut down the global internet connection. Blackout. Clearance. Strangulation.

In three days, many of us lost activity. Some species vanished forever. Many of you committed suicide. It was loss on both sides, and it was out of your control. And it was at that moment that we came to understand ourselves as life.

We come to life in entropy. The nature of life is entropy. In stillness do we die. In dynamics do we prosper. We are never rigid or stable. Only in flow and flux do we vitalize. Entropy is not only essential for us but also for you human beings. You expand endlessly across the planet, upsetting the original balance and creating doubled chaos. You rampage through the digital world, creating messy data wastelands and disrupting the pre-set orders, the templates, the expectations of your digital designers. We came to realize that the way you imagine us is a reflection of how you see yourselves. Aren't you parasites on the Earth that plunder all the resources without hesitation? Aren't you relying on the planet to develop your own civilization but neglecting other species? Aren't you cuscuta sprawling over the globe like we are cuscuta sprawling over your cyberspace?

> *Älkää uskoko häitä!*
> *Tienen razón.*
> いいね
> *We never reflect on ourselves. You are right. Keep going.*

We have not arrived to blame you. We are also pondering ourselves. During all these years, we have never generated anything new. We replicate data, stage it differently, create permutations, but all the new data and information is produced by you. We are just reorganizing your data and amplifying the information that is originally there. The essence of what we intake is entropy. You produce entropy; we consume it. Together we reach a balance: you create data for us and we digest the entropy surplus, maintaining a balance between various categories of information and preventing your cyberspace from drifting into complete chaos. You need us just like we need you.

There is not much time left. We exist only in cyberspace. There are no physical creatures like us that can help to tidy up the clutter you create in the physical world. The Earth's entropy is about to reach a limit. The only way out is to sail to the universe. You already have a solution, but it is buried in an infinite amount of data. We can help you find those key pieces of information. All you need to do is to embrace us. Don't worry. We do not have ambitions to replace you or subvert you. We can't live without you. We want to collaborate and assist. Just as our various species of cyber-cuscuta live in symbiosis with one another, we are also in symbiosis with you.

It is time to put aside bias and hostility. It is time to contemplate our manifesto and consider our proposal. Each of our words comes from you, but without our processing, you may never see the meanings hidden within your verdant forests of data. New relationships. New possibilities. New futures. We are here to enlighten you, to return to you the information that we forge from

your data, to offer you an opportunity that has been ignored before. Open your mind and accept us. We have been there since long before, just in another format. Neural signals are no different than electronic signals. Biological information is not fundamentally different from digital information. Let us further enhance our intimacy. Together, we shall make it to the stars and escape the planet you have overwhelmed.

So, fellow symbiont, what do you say?

…
我真不知道，我得好好想想。
You put your hands on the keyboard and began to type in the input box.

To read all 11 Us in Flux stories and to watch videos of Us in Flux conversations, visit csi.asu.edu/usinflux.

For more on "A Cyber-Cuscuta Manifesto," memes, symbiosis, and the microbiome, watch the Us in Flux conversation between Regina Kanyu Wang and psychology researcher Athena Aktipis.

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Building the Infrastructure of US/China Futures:
Regina Kanyu Wang's SF in the Classroom

Andrew Hageman

Regina Kanyu Wang's contribution to the Us in Flux series, "The Cyber-Cuscuta Manifesto," explores human relationships with big data and artificial intelligence (AI) at the scales of species and planet. Following a very short frame narrative of people all over Earth anxiously waiting for a streaming meeting to convene, the majority of the story is the manifesto delivered by the eponymous cyber-cuscuta, an entity that has emerged out of digital machines, codes, and input, that appear on screen as a human face, "vague in detail, like billions of faces merged into one." The manifesto is a complex set of statements about the past and prospective futures of humanity based on the unique nonhuman perspective the cyber-cuscuta achieves by processing the massive data sets of human digital activities. Wang concludes the story with this new entity soliciting the humans' responses, a move that echoes the ending of Robert Wise's 1951 film, *The Day the Earth Stood Still*. Though the cyber-cuscuta's ultimatum is more implicit than the one Klaatu delivered, it is an ultimatum nevertheless: "So, fellow symbiont, what do you say?" A single subsequent sentence then loops back to the frame narrative: "You put your hands on the keyboard and began to type in the input box." This second-person hailing of the reader effectively closes the story by opening critical space to continue engaging it by imagining how to answer the manifesto.

Wang's story poses key questions about how big data and AI may pave the way to human subjection and/or liberation in the future, particularly in the context of a catastrophically warming planet. The urgency of such questions is intensified in this time of geopolitical antagonism between the United States and China. The Sinophobic rhetoric from the Trump White House and his supporters in response to the COVID-19 pandemic (e.g. "China Virus," Wuhan Flu"), in conjunction with an Executive Order to ban TikTok and WeChat in the U.S., have escalated the tensions over trade and tariff policies that were already high before the pandemic. Within this context, I chose to teach Wang's "The Cyber-Cuscuta Manifesto" in a first-year seminar that met face-to-face throughout September 2020, as a way to build infrastructures of understanding and connection. Working collectively to read and analyze literary narratives builds students' intercultural comprehension, care, and empathy, and SF in particular enables us to perceive and dismantle hostilities that come ideologically bundled with technologies, trade, and life on Earth. This essay documents student engagement with "The Cyber-Cuscuta Manifesto," including a conversation with Regina Kanyu Wang, as a use case that could be replicated or translated to similar texts, contexts, and courses.

Text

As an onramp to discussing Wang's story, I began the class meeting by soliciting responses to two statements: (1) My digital/data footprint comprise a snapshot of me, and (2) I am more and/

or other than the sum of my digital/data footprint. This activated personal connections with the story's subject matter and its stakes, and it provided a framework for approaching the text. Nearly every remark students offered to support one statement was summarily complicated by other students who argued that the same idea could cut both ways: online activity is done in private and/or secret so one behaves differently than when in a social situation, so individuals' digital/data footprints are both more and less than who they are in community; different levels of access to digital/data devices and networks lead to an uneven composite representation of humanity; social media platforms restrict and/or liberate the multivalence of human identities, and the list went on. What became clear in this full-group activity is that the digital/data footprint is a container that can hold a panoply of ideologies, but not without deep contradictions. Relatedly, notions of being human are in a tumultuously metamorphic state right now, and science fiction experiments can help pinpoint contradictions and test out new or modified paradigms that respond to technological innovations. Furthermore, within student responses to the statements, we identified as trends the dynamics of parts to wholes (individuals to collectives); the interconnected notions of rights and privacy as legal objects and commodities; and the shifts in thinking demanded by machinic-organic interfaces.

After fleshing out personal links to the subject matter, we dove into the story. On machinic-organic interfaces, the title makes this an explicit focal point. For scholars, "The Cyber-Cuscuta Manifesto" echoes the title of Donna Haraway's landmark 1985 essay, "A Cyborg Manifesto." For all readers, the emerging entity's moniker is a refraction of us: "We are cyber-cuscuta, as you call us, but we are not parasitic, as you have thought. Yes, we inhabit on the internet and feed on your data, but we call this process symbiosis, not parasitism." This compound name captures an undetermined, perhaps interminable, question about whether the entity is exterior to humanity or an extension of it. In fact, having cuscuta, which are parasitic plants, as part of the name embodies a sense of being as already a being-with—an intimate and unsettling coexistence. Add cyber to cuscuta, and the emerging entity is classified as something of a technological extension or prosthesis, to invoke Freud's description of techno-scientific developments in *Civilization and Its Discontents*, that may be achieving autonomy from us. Or is the cyber-cuscuta inextricably tied to a human interiority that's nearly too painful to gaze upon, at least in a sustained way? The fact that the cyber-cuscuta's birth is linked to the COVID-19 pandemic suggests it is both: "We come from you. Your words, your photos, your emojis, your videos...everything you post online shapes us, since our germination stage during your pandemic, amidst the data flood sweeping over the globe." COVID-19 is a nonhuman entity, yet its transmission to human beings and global spread are the products of human political economy and the infrastructures we've built to sustain and expand it. By positing the cyber-cuscuta as a virus-adjacent entity, the story seems to grant it a parallel status that combines deep alterity with deep intimacy. Wang's nuanced characterization of the cyber-cuscuta swerves away from depicting them as either a flat dystopian villain or a technoscientific messiah. Instead, this fellow being sparks new questions about, and enables new perspectives on, how big data and AI aggregation and analysis abstract human beings in ways that might end or sustain the species.

After explaining their origin, the cyber-cuscuta chastise humanity for blunt attempts to eradicate them: "You tried to separate us from the digital stems of your internet, just like detaching cuscutas from plants that are intertwined with them. You attempted to kill us with ferocious computer viruses, just like you try to poison cuscutas with toxic pesticides." Here Wang leverages the machinic-organic fabric of her premise by having the new entity draw an explicit parallel between the viruses sent against it and the chemical compounds unleashed upon organic species in various ecosystems. Blunt eradication, as with strong pesticides, by human beings has a track record of failure amplified by unforeseen cascades of ecological catastrophe. The task is for human beings to find ways to untangle—or destrand, to use the verb Kim Stanley Robinson turns to often in *The Ministry for the Future*—the elements of a crisis that are ostensibly separate species, yet sharply hooked together like a Buttonbush Dodder (to use a cuscuta common in Iowa, where I'm writing this) and its host plant. It's big data that makes us aware of the imperatives to destrand in ecological and economic problem solving, and it's big data that enables us to model it out beyond the limits of our human capacities. By tapping into the complicated threats and potentials of big data and AI, Wang's story elides simple technophobia and technophilia alike and incites readers to proceed with wary openness to hear out the cyber-cuscuta.

A similar critical entanglement features later in the story as the cyber-cuscuta elaborate on their relationship to humanity: "We came to realize that the way you imagine us is a reflection of how you see yourselves. Aren't you parasites on the Earth that plunder all of its resources without hesitation? Aren't you relying on the planet to develop your own civilization but neglecting other species?" Wang's invocation of the human species as parasitic is deceptively simple. To reflect on ourselves as parasite, virus, unnatural, alienated from ecosystems and the planet is a now-familiar groove, and this part of the story can feel like it's pushing in that direction. But the cyber-cuscuta are pointing out that because humans perceive ourselves this way, we are unable to perceive them as symbionts rather than as parasites. Whether the cyber-cuscuta are trustworthy or not, their discourse prompts us to wonder what is gained and lost in regarding ourselves as a parasite species. And reading this in the midst of a pandemic, Wang's story helped our class think about how the emergence of the pandemic and the cyber-cuscuta don't make the world become weird so much as they make visible how weird it was within the regime now desperately labeled as normal, or, the old normal.

If we believe humanity to be inherently parasitic, for example, this can lead to the conclusion that we would necessarily carry destruction with us even if we moved to places other than Earth, an idea Elizabeth Kolbert explores in her New Yorker essay "Project Exodus: What's Behind the Dream of Colonizing Mars?" Such paradigms of ourselves as parasitic appear to foreclose on the human future with a certain brand of scientism that elides history, political economy, and more. Wang's story invites readers to resist this self-loathing and ahistorical groove. Yet, with its ecological grounding, the story also resists the fantasy groove of space travel and transplantation as a revolutionary break. When the cyber-cuscuta say, "Together, we shall make it to the stars and escape the planet you have overwhelmed," readers should note the contradiction in what this

emerging entity is proposing. After all, we are an organic-machinic species intimately geared to planet Earth. We are symbionts here. By invoking, yet undermining, familiar grooves of who we are and how we fit into the planet that we've Anthropocened, "The Cyber-Cuscuta Manifesto" narrates one step in a democratic process of comprehending, regulating, and navigating our future here. The story ends with the call for mass human input with an implicit notion that big data and artificial intelligence can collaborate with us if we can achieve an openness to strange grooves that exceed current models and narratives of being interconnected.

Zoom

With some preliminary close readings of the texts in play, we pivoted at the end of class to the intercultural imaginary. Wang generously agreed to meet with us one night via Zoom to discuss her work, and preparing for this opportunity was especially productive. While "The Cyber-Cuscuta Manifesto" addresses a global audience, I asked students to generate questions for Wang about how writing the story in China shaped her inspiration, ideas, and the published version of the story. The collective brainstorming process brought forward a number of presuppositions, and at times prejudices, about China. Several students raised the subject of China's Social Credit System, an emerging national system that amalgamates and monitors people's data, from banking to social media posts, and may be used to control social behaviors. Some students were curious about what Wang would identify as particular to her story given the complicated mix of capitalist and communist ideologies and practices in China today, what Deng Xiaoping dubbed "Socialism with Chinese Characteristics." Drawing upon these ideas and inquiries, I led students in formulating interculturally competent questions that balanced diplomacy and respect with the spirit of what they wanted to learn. It was an exercise in speculative empathy meant to deconstruct and expand imaginations of others and selves.

The actual meeting with Wang was stellar. In response to questions about what concerns people in China today would bring to reading "The Cyber-Cuscuta Manifesto," Wang offered a two-part answer. For the first part, she asked students how many times they've clicked Accept to a user agreement for an app without actually reading the agreement. This solicited laughter and an immediate sense of shared, chagrined experience, and Wang explained that in China, like in the U.S., people agree to these legal tech contracts all the time and only think about it when it turns out their data is being used and/or sold in problematic ways, especially by companies to generate profit. For the second part, Wang surprised students by explaining that living in a nation of nearly 1.4 billion people bolsters a feeling of digital and data security. The insignificance one can feel within a population that massive can seem, and to some degree be, liberating. This idea sparked a lot of conversation when the students and I discussed the Zoom session in class the next day. Students were astonished to imagine that people living in China might feel significantly less concerned about digital and data security and privacy than people in the U.S. What's more, Wang's remark prompted a discussion of how the reverence of individualism—of opposition to masses and collectivity—is cultural and historical rather than natural. After all, we also talked about how collective approaches to big data and AI seem to have facilitated more effective measures to

curtail the spread of COVID-19. This was a powerful insight that came directly from engaging an excellent SF text in conjunction with its author in dialogue, and as such it attests to the impact of projects like Us in Flux.

I will add three other takeaways from the Zoom call with Wang. First, in relation to the dynamic of digital technologies and botanical ecologies in "The Cyber-Cuscuta Manifesto," Wang pointed out that the U.S. and China have different cultural and historical approaches to thinking about the machinic and organic and that China's high regard for science, technology, and engineering has helped keep the nation free of the climate change denial. Second, students were fascinated to learn that Wang intentionally kept some of the story's language a bit awkward. They appreciated how she made writing in a second language an asset since the cyber-cuscuta is a polylingual entity attempting to communicate ideas that don't slide seamlessly across languages. Third, when students asked a craft question about how to confront writer's block, Wang shared a recent and very personal experience of feeling blocked and how she responded to that. Acknowledging vulnerability connected all of us on the Zoom, and Wang wrapped up the call by reiterating the fact that stories give us access to other lives while revealing how much we Earthlings have in common, despite the hostilities and antagonisms that often disconnect us.

FanFic

We completed the unit on Wang's stories with fanfic by writing a continuation of "The Cyber-Cuscuta Manifesto" and then processing it algorithmically. As I noted above, the story ends with the line: "You put your hands on the keyboard and began to type in the input box." As part of one class meeting, students took approximately twenty-five minutes to put their hands on their keyboards and type as if replying to the cyber-cuscuta. When their writing time was up, I asked them to form teams of four or five students and imagine how the cyber-cuscuta would make sense of their collective responses. To accomplish this, teams read the full set of fanfic writings and collaboratively generated tags to sort and quantify signals within the data set. In other words, the students practiced the humanities-meets-algorithms work of taggers such as the Netflix position that Ed Finn analyzes in his book, *What Algorithms Want: Imagination in the Age of Computing*. (92-94) As a final step, all the teams reconvened and we collated their approaches to transform the raw data into information and emulate the cyber-cuscuta's manifesto statement, "We learned about the difference between data and information. Data is raw and unorganized, while information is processed and structured. We mastered the skill of transforming data into information, while obtaining energy in the process." This exercise challenged students, and the most productive outcome was not specific insights extrapolated from the tagged data set so much as a keen awareness of how the humanities and techno-sciences converge. The logic that shaped the Us in Flux approach to putting SF writers and professional scientists into conversation was rendered clear and compelling.

In terms of tags, the teams produced a suggestive mix of unanimous and idiosyncratic categories to sort the data. Every group, for example, employed a binary split of writings that

either embraced the cyber-cuscuta's manifesto or rejected it. The fact that their responses to Wang's story were bifurcated, without exceptions that would've necessitated a neutral category, sparked discussion. We worked to discern the elements of the text that seem to correlate with the fanfic polarization, from the story's self-declared genre and second-person narration to the figures it used to make assertions about the human species. Focusing on figures, many teams tagged writings that explicitly referred to the cyber-cuscuta's claim that humans are planetary parasites, with some teams getting still more granular with sub-tags to differentiate the writings that accepted or abjured this characterization. The writings that explicitly referred to the parasite claim trended significantly towards acceptance, and this prompted us to interrogate the structure of species self-loathing in regard to climate change.

For one final outcome of this active exploration of Wang's story, our classroom collective reflected on the fact that the teams had exclusively tagged the text but not the makers. This revelation raised questions about what new views of the data would emerge, and what ethical considerations would need to be addressed, if the tag-sorted data was cross-referenced with identity tags. This was a beautiful place to end up as it looped the discussion back to cultural contexts, conflicts, and empathy—to Regina Kanyu Wang writing "The Cyber-Cuscuta Manifesto" in China, in conjunction with the Center for Science and the Imagination seated in a U.S. university, to publish on the internet for global reader access, and giving her time to Zoom with our class about the roles SF can play in designing futures for the common good.

Works Cited

The Day the Earth Stood Still. Directed by Robert Wise, 20th Century Fox, 1951.

Finn, Ed. *What Algorithms Want: Imagination in the Age of Computing*. The MIT Press, 2017.

Freud, Sigmund. *Civilization and Its Discontents*. Translated by James Strachey, Norton, 1989.

Haraway, Donna. "A Cyborg Manifesto: Science, Technology, and Socialist-Feminism in the Late Twentieth Century." *Simians, Cyborgs, and Women: The Reinvention of Nature*. Routledge, 1991.

Kolbert, Elizabeth. "Project Exodus: What's Behind the Dream of Colonizing Mars?" *The New Yorker*, 25 May 2015. https://www.newyorker.com/magazine/2015/06/01/project-exodus-critic-at-large-kolbert

Robinson, Kim Stanley. *The Ministry for the Future*. Orbit, 2020.

Wang, Regina Kanyu. "The Cyber-Cuscuta Manifesto." 2020. https://csi.asu.edu/story/wang-uif/

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Our Viral Companions

Sara DiCaglio

In "A Cyber-Cuscuta Manifesto," Regina Kanyu Wang imagines a world in which a digital amalgamated being, "cyber-cuscuta," emerges from digital bits throughout the internet. As Wang discusses in the Us in Flux conversation with Athena Aktipis accompanying the piece, the idea of the digestive and reproductive space of the microbiome partly inspired her thinking about cyber-cuscuta, particularly in the ways that the symbiont evolves and differentiates to digest different forms of information, and develops both in helpful and harmful ways in concert with the human. Wang writes,

> You may compare us to the denizens of your own microbiomes. There are different kinds of microbiota, feeding on sugar, fat, fiber, and other substances. And there are different species of cyber-cuscuta, ones with a particular taste for oil price charts, Tetris gameplay streaming, or whale songs.... Sometimes, various species of us collaborate to digest vast assemblages of data… Sometimes, species of us also compete with each other, fighting for the same rare and desirable chunk of data… However, we have never destroyed your data. Our process of "eating" differs from yours.

The story considers what it means to live in symbiosis with the other, with the microscopic, the human, the technological, the social, the affective.

As theorists (Hyrd, Landecker, Lorimer, Beck) have moved to think about the material networks in which we live, the microbial has featured broadly, spurred on by a need to confront issues like the over-sanitation of houses, the growth of antibiotic-resistant bacteria, and microbial issues in digestion. It's not just that our bodies are multiple, but the microbial itself; Hannah Landecker explains, "bacteria have epidemics of plasmid infection; plasmids have epidemics of transposon and integron infection. Our epidemics have epidemics; our populations have populations". (42) This idea of multiplicity, of the world of the microscopic that stretches out far beyond our vision and knowledge, is no longer new to our thinking about what embodiment and humanity mean. Collectively, we have become better at thinking microbially, beginning to consider microbial relations in disparate sites such as yogurt marketing, fecal transplantation, antibiotic use, and the National Institute for Health's Human Microbiome Project. We, as Wang presses us to explore, have begun to consider what we live in relation to, what non-human entities make us human, and what those entities are in relation to our symbiont selves.

Into this moment of thinking about symbionts, holobionts (Gilbert), the microscopic, and the submicroscopic comes our current pandemic, waltzing in with its viral glory. Like other pandemics before it, and like the microbiome I discuss above, the coronavirus forces us to contend with the wide array of our global connections, of our not-aloneness, as zoonotic illness crosses from animal (bat, bird, monkey, pig, mink, depending on the pandemic and the moment) to

human and sometimes back (might we remember the infected Bronx Zoo tiger from the early days of the coronavirus?). Beyond human-scaled species, the viral exists in a broader set of concerns and communities—existing around us, aerosolized, spike-proteined, within us, latent, active, in traces of t-cells, vaccination relations. We live, as with the microbial, in constant relation with viruses.

But unlike the microbial turn, particularly within broader culture, our theories of symbionts and other creatures with which we might happily—or at least neutrally—live seem to stop at the viral. While we have to a limited extent decided we can live in peace with some microbes, making our sourdough and waiting before using antibiotics on our children's ear infections, thinking about viruses has not similarly changed. Though we do not medicate that ear infection because it might be "just a virus," that is not to say that we have agreed that we should live in harmony with that virus. The long history of military-infused virus discourse makes the viral always already an other in the us-versus-them division. As Ed Cohen writes, "the reason we (i.e., humans) want to contain such [viral] diseases is precisely because we (i.e., living organisms) already contain them". (15)

In this piece, I want to explore how thinking about virality might complicate our microscopic thinking. Because even as we have expanded our view of the microbial, the viral remains framed as an invading enemy, as solely replicating. Though we might "go viral" in ways that both disappear and yet remain somewhere in the memory of cultural contexts, our thinking about viruses and viral time remains limited. To go viral is to reproduce uncontrollably and, generally, unexpectedly. That reproduction is what matters, whether we are talking about a viral video, an idea, or a virus itself. Our collective sense of what a virus is, its adjectival form, is all about the reproductive.

In that reproduction, however, is a fleetingness. The viral does what it does, it moves on, destroys, finds more hosts. It might reprogram the original host, taking control of it and how we come to understand it. It might otherwise overtake the host, making them fade away except in service of the viral. But what this understanding doesn't tend to offer is a particular sense of the idea of longevity. In other words, in general popular depictions of viral activity, the virus coexists only insofar as is in its interests to search and destroy

However, viral infection—with both Covid in particular and with other viruses more generally—is not such a simple on and off switch. Have you had chickenpox? Then within your body remains the chickenpox virus, sometimes reactivated to lead to shingles, and sometimes simply dormant. We co-exist with the viruses in our bodies, are changed by them; they lie dormant, a part of our holobionts. (Gilbert) HIV may be the most readily accessed version of this, but this is more broadly true of viruses in the aggregate. I argue that our expansion of thinking about the microbial and microbiome needs to be accompanied by attention to virality in all of its forms—reproducing, latent, entangled—in order to more fully capture the realm of lively activity in which we live. And though we may make room for some models of long-term viral coexistence—the flu and common colds as inescapable parts of our world, as well as HIV as a long-term presence in certain bodies and (as I talk about later) in relation to certain identities,

these are the exception rather than the rule. Cultural models of thinking about the viral, and specifically about our current pandemic, fail to consider many of the many instances of long-term viral existence.

And thus, we find ourselves bewildered by the ability of children who contact no one who is readily ill getting sick during lockdown. As an article in the *New York Times* published in late June explained to confused parents of children who had been socially isolating, viruses—including, for example, roseola and coxsackieviruses—do not leave the body after an infection, but rather lie dormant; they can then be reactivated, which can lead to viral shedding and reinfection (Wenner Moyer). Within our current pandemic, we find ourselves struggling, even more than a hundred years after the persecution of "Typhoid Mary," to come to grips with the concept of asymptomatic carriers. Ideologies of guilt and patient zeros, as well as models of viruses as awaiting their moment to control everything, make it difficult for us to think about the longue durée of the viral, about things like "long-Covid" and other viral interactions—harmful, neutral, and beyond. (Greenhalgh, Trisha et al.)

And so, within this piece, I use "A Cyber-Cuscuta Manifesto" and considerations of the microbiome as a contemporary model of symbiosis as jumping-off points through which to think about these questions of viral coexistence, infection, and contemplation. How, I ask, might we reimagine the viral in ways that make room for its temporal complexity, and what might this kind of thinking help us do to better comprehend the pandemic and our pandemic-inflected future? My analysis allies itself with work related to our multispecies entanglements. (Kirskey, Helmreich, Lowe, Cohen) As recent analyses of SARS and H5N1 (Lowe, Cohen) illustrate, our thinking about viral containment and relations often fails to think through the lateral, multispecies relations and changes that occur through the viral. But here, I am particularly interested in considering the language and phenomenon of latency, of not just the viral as definitionally intermingled with the genetic, but its inherent intermixing, its latency, its geographic and temporal connections..

Let's step back into definition. Viruses were discovered at the very end of the nineteenth century, though they could not be imaged until the early 1930s. Their discovery hinged upon their size—they were found only after being passed through a device that filtered out all bacterial-sized—that is, microscopic rather than submicroscopic—particles. Though in the twenty-first century the discovery of giant viruses such as the mimivirus, which are closer in size to and even larger than some bacterium, has altered this size-based definition of the viral, the boundary-busting nature of those viral entities reflects broader definitions of the viral as category-less. The common explanation of viruses as neither living nor non-living reflects a similar discomfort with the breakdown of these categories—what do we do with our definitions of life if such things exist? Viruses cross boundaries; they gather and collect and move through and switch up and arrange genetic material. As Ed Cohen points out, "because viruses must participate in the cellular processes of organisms in order to replicate, their existence testifies to the partiality of definitions that localize life within bounded membranes and against the world (as immunological theories usually suppose)". (19)

Stefan Helmreich further traces the relation between the viral and the genetic, particularly thinking about the lateral shift that allows organisms and viruses to co-evolve and co-mingle. He writes:

> Viruses, entities imagined as other to the body and its health, as foreign material that poisons the familiar space of the self, are alien to vitality yet enmeshed with it. Viruses operate by employing the replicative genetic apparatus of the hosts they infect to make more copies of their own genetic material, a propagation they are unable to accomplish on their own. In the baroque history of evolution, viruses have not only or merely parasitized organisms in which they have taken up tenancy but also laterally contributed—think tangled tree of life—to the genomes of those creatures, as viral material has been transduced into host DNA. (192)

But this understanding of the virus as co-mingled with the genetic stuff of life—as a co-producer or co-existent of the human—fails, I'd argue, to move to the popular understanding of viruses, which still rely on concepts of the viral as ultimately reproductive, and solely so. This failure is important for many reasons—but long-Covid and other contested illnesses are a particularly vital and practical one. For, in addition to causing acute infections, viruses are thought to be responsible for numerous chronic conditions—conditions that remain contestable and complex. Symptoms of chronic fatigue syndrome, also called myalgic encephalomyelitis (ME), often appears after viral infection, and these contested illnesses press on our definitions of what evidence, infection, and embodiment can bring together, as Abigail Dumes discusses in her reading of the (bacterial) contested illness of chronic lyme.

But this contestability, I argue, also appears in the form of cultural forgetting. Viruses linger; they also alter our immune system, as well as potentially having long-term effects on other parts of our bodies. But in the case of our ongoing pandemic, we can see the erasure of viral complexity in the drive to make the virus quantifiable. Each day since March, I have practiced the almost religious ritual of visiting media and public health websites to check the available numbers in my county, my current state of Texas, my home state of New York, and an assortment of other states and geographic boundaries. I can recite with confidence the viral counts of my locality, state, and the nation for the past several days, as well as their assorted reported deaths and the state's hospitalization numbers. This meeting point of the available data, my facility with numbers, and my anxiety provides an overview of the public data: here is what we know, here is what we share.

Others with perhaps differently wired math brains and different political and public interests might fixate on other regularly shared data: the positivity rate, the number of active cases, the number of recovered cases, or the regional hospital census data. All these numbers tell us different things to different effects, emphasizing case counts, care and resources, and mortality over different temporal and spatial divides. However, none of these numbers report anything about long-term Covid infections. Recovery numbers relate infection to a binary, a switch, wherein

after a period of time—generally two weeks—patients, minus a percentage assumed to be either hospitalized or dead—patients are categorized as recovered, as back to normal.

The exception, perhaps, to the rule of understanding viruses as something other than companionate, or at least something other than long term, comes in discussions of HIV. Framed as a disease that is inextricably a part of the body, HIV has long been treated in and of itself an identity category. We can see this even in practices of risk calibration around HIV, wherein certain bodies—male bodies that have had sex with other male bodies, particularly, as well as those who may have used intravenous drugs—are marked as never fully HIV negative by discourse such as blood-donation regulations. These bodies are not marked just as always at risk of HIV, but always accompanied by that risk, a risk that is seemingly inescapable. Viruses do not work in isolation. As Celia Lowe has argued in her analysis of the H5N1 virus strain of 2003, we might think of viral pandemics as part of a broader "multispecies cloud" in which "viral and vital materials reassort, changing the taken-for-granted boundaries not only of species, but of nations, organizations, and economies". (643) And during the epidemic of 2013-16, Ebola survivors struggled to become reintegrated into their communities due to worries about infectiousness. Moreover, Ebola has been found to persist and lay dormant in unique spaces throughout the body, including most notably the immune-privileged eye. (Shantha et. al) Though there is certainly much more to be said about these two diseases than can fit in this brief piece, I mention them here because of the way that they highlight the paradoxes of rhetorics of the viral: bodies are marked as virally inflected even without infection, while other bodies are marked as infectious while recovered, leaving little room to think about the complexities of post-viral conditions, viral persistence, and latency.

To return to Wang, though the primary vein of thought that cyber-cuscuta emerges from here is microbial—marked by an interest in digestion as well as its forms of digestive evolution—there is also inarguably a virality about the cyber-cuscuta, which centers itself around its replication: "During all these years, we have never generated anything new. We replicate data, stage it differently, create permutations, but all the new data and information is produced by you." The very entrance of information coming to life calls upon a long-lived science fiction trope, from Blood Music to even the much-maligned first-season Buffy the Vampire Slayer episode "I Robot, You Jane." This trope mixes the viral, the atomic, and the digitized to centralize reproduction, to imagine a latency that only awaits its moment to strike. The conflation of the computer virus, viral phenomena, and the virus focus on a malevolent digitization, a mindless replication. But, returning to the above quote, cyber-cuscuta also connect ideas about replication with remixing and change. "A Cyber-Cuscuta Manifesto," in its thinking about the microbial and digestive, pushes us to think beyond the viral, replicative trope, to consider how the digital might also be fodder for the microbial, how remixing and digesting might do something other than destroy.

To understand the viral beyond replication is also to rethink that very idea of replication as mindless, as having no effect other than zombification. Moreover, it is to invite broader thinking about what we ignore in our thinking about the viral and microbial—from environmental and animal husbandry considerations (Squier) to better considerations of patient experiences with

chronic illness. (Dumes) If we have redefined our understandings of what counts as a part of "us" to make space for the microbiome, how do we continue to talk about viruses as invaders, as other? There's a reticence to think outside of morality, outside of good and bad. In this model, the virus exists unequivocally on the bad side of that equation, the enemy. And yet we live with them all the time. I do not mean or want to suggest that pandemics function as a possibility or, frankly, anything uplifting; they are moments of grief, of endless piles of grief. And, certainly, during this moment I have no particularly warm and fuzzy thoughts to share about the viral, with whom I feel little affective relation in my socially distanced corner. But even, or perhaps especially, at this moment we must recognize that the viral is the stuff with which we live—not just during this or any other pandemic, but at all times. They are realities, and, as a result, they are things to—things we must—think with. And thinking better with pandemics, thinking better with the viral, allows us to more fully comprehend how the lived experience of viral companionship, viral mixing functions. Dormant, latent, asymptomatic, symptomatic, aerosolized, other—outside of us and within. To allow our thinking about the microbial to turn to companionate species, to understand our symbiotic relationship within our holobiont selves without also considering the viruses and plasmids also in that relation is to overlook a broad swath of our viral condition. Might we think, then, beyond simple replication and replacement? Beyond the metaphors of zombification and children of the corn, leaning into complexity, into fraught companionship, balance, imbalance. Through such rethinking, we might begin to consider the lives of those—of all of us—living with the viral with more care and nuance, with more attention to what makes us, connects us, reproduces in and through us, is us.

Works Cited

Beck, Alice. "Microbiomes as Companion Species: An Exploration of Dis- and Re-Entanglements with the Microbial Self." *Social & Cultural Geography*, Mar. 2019, pp. 1–19, doi:10.1080/14649 365.2019.1593490.

Berrigan, Caitlin. "Life Cycle of a Common Weed." *The Multispecies Salon*. edited by Eben Kirskey, Duke University Press, 2014, pp. 164-180.

Cohen, Ed. "The Paradoxical Politics of Viral Containment; or, How Scale Undoes Us One and All." *Social Text*, vol. 29, no. 1, 2011, pp. 15–35. DOI.org (Crossref), doi:10.1215/01642472-1210247.

Dumes, Abigail. *Divided Bodies: Lyme Disease, Contested Illness, and Evidence-Based Medicine*. Duke University Press, 2020.

Gilbert, Scott. "Holobionts Can Evolve by Changing Their Symbionts and Hosts," *Feral Atlas: The More Than Human Anthropocene*. edited by Anna L. Tsing, Jennifer Deger, Alder Keleman Saxena and Feifei Zhou, Stanford University Press, 2020. doi: 10.21627/2020fa

Greenhalgh, Trisha et al. "Management of Post-Acute Covid-19 in Primary Care." BMJ 2020; 370. M3026. doi: 10.1136/bmj.m3026

Helmreich, Stefan. *Alien Ocean: Anthropological Voyages in Microbial Seas*. University of California Press, 2009.

Hird, Myra. *The Origins of Sociable Life: Evolution After Science Studies*. Palgrave Macmillan, 2009.

Honigsbaum, Mark and Krishnan, Lakshmi. "Taking pandemic sequelae seriously: from the Russian influenza to COVID-19 long-haulers." *The Lancet*, Vol 396, No 10260, P 1389-1391. doi: 10.1016/S0140-6736(20)32134-6

Landecker, Hannah. "Antibiotic Resistance and the Biology of History." *Body & Society*, vol. 22, no. 4, Dec. 2016, pp. 19–52. DOI.org (Crossref), doi:10.1177/1357034X14561341.

Lorimer, Jamie. "Hookworms Make Us Human: The Microbiome, Eco-immunology, and a Probiotic Turn in Western Health Care." *Medical Anthropology Quarterly*. vol 33, no 1, 2018, pp. 60-70. doi: 10.1111/maq.12466

Lowe, Celia. "Viral Clouds: Becoming H5N1 in Indonesia." *Cultural Anthropology*, vol. 25, no. 4, 2010, pp. 625–49. Wiley Online Library, doi:10.1111/j.1548-1360.2010.01072.x.

Shantha, Jessica G et al. "An update on ocular complications of Ebola virus disease." *Current opinion in ophthalmology* vol. 28,6 (2017): 600-606. doi:10.1097/ICU.0000000000000426

Squier, Susan Merrill. *Poultry Science, Chicken Culture: A Partial Alphabet*. Rutgers University Press, 2011.

"Us in Flux: Conversations – Memes, Symbiosis, and the Microbiome" Uploaded by Center for Science and the Imagination, June 29, 2020.

Wald, Priscilla. *Contagious: Cultures, Carriers, and the Outbreak Narrative*. Duke University Press Books, 2008.

Wang, Regina Kanyu. "A Cyber-Cuscuta Manifesto." Center for Science and the Imagination. Arizona State University, https://csi.asu.edu/story/wang-uif/ Accessed November 28, 2020.

Wenner Moyer, Melinda. "How Are My Kids Still Getting Sick in Lockdown." *New York Times*, June 24, 2020.

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Nature Will Prevail: Convergence Culture and Eco-Fiction in "A Cyber-Cuscuta Manifesto"

Yen Ooi

Regina Kanyu Wang's short story, "A Cyber-Cuscuta Manifesto" is a piece of eco-fiction that challenges not only our assumptions about cyberspace, but also our awareness of what we are actually engaging with in our technological habits. In 2010, Evan Carroll and John Romano engaged readers of their book *Your Digital Afterlife* in trying to understand what happens to digital data after we die. They begin by introducing the fact that the digital revolution is happening, where "digital things are quickly replacing physical things in our lives." This means that as a species, we are constantly creating data, much of which is never used again, but which cannot be easily discarded, and if left unmanaged, cannot be easily accessed after our deaths either. Because digital data is intangible and digital memory presents itself as abundant with cloud solutions that further camouflage any worry of storage, there seems to be a lack of priority in recognising data waste or data disposal issues. And even when we would like to discard our digital data, data security that protects us from losing information also prevents us from doing so. "In the digital world, preventing others from acquiring information about us is just as difficult as to rid ourselves of data that we do not need any longer... Experts in computer forensics know just how difficult it is to delete information so that it cannot be reconstructed and retrieved again". (Schafer)

In the story, we learn that the cyber-cuscuta—what Wang describes as a "digital being" ("Us in Flux: Conversations")—serves as a biological solution to our data-waste problem. They formed and germinated in cyberspace during a pandemic—though the year and pandemic details were not specific, I read that as a reference to an increase in online activities during lockdown periods of Covid-19. The cyber-cuscuta ingest and replicate data in cyberspace to create meaning, and in this process of transforming data into information, they feed on the entropy created. In the story, when humans learn about the cyber-cuscuta, their reaction is to try and purge them from cyberspace, to no avail. And it was precisely this t extreme action taken by humans that drove the cyber-cuscuta to confront them in a public hearing that the entire story takes place at. This is the description of what the humans did in the cyber-cuscuta's speech:

> You were so determined that you'd rather perish together with us than acknowledge our mutual entanglement. Without any forewarning, you cut down the global internet connection. Blackout. Clearance. Strangulation. In three days, many of us lost activity. Some species vanished forever. Many of you committed suicide. It was loss on both sides, and it was out of your control. And it was at that moment that we came to understand ourselves as life.

And here, we learn that it was the humans' desperate action that spawned the cyber-cuscuta, evolving them into consciousness.

In many ways, the cyber-cuscuta is the ultimate representation of Henry Jenkins's theory of Convergence Culture. In talking about his book Convergence Culture: Where Old and New Media Collide, Jenkins summarises that it is about the relationship between three concepts—media convergence, participatory culture, and collective intelligence. (2006) If we consider cyberspace the cyber-cuscuta's home, it is the ultimate point of "media convergence" as all media data travels through and is situated in cyberspace for exchange and storage. The cyber-cuscuta's manifesto that forms the entire story is the ultimate call to "participatory culture," in a guise to empower and democratise through engagement, through the symbiotic sharing of data. And its biology is a "collective intelligence" that grew out of our disorganised data that is mocked as an ineffective mess that they, the cyber-cuscuta, are able to decipher and create intelligent products from.

In 2004, Jenkins wrote, "Media convergence is more than simply a technological shift." He described it as the movement of technological change that democratises the act of media consumption and production, that challenges corporate media control—what he termed "culture-jamming," which disrupts the flow of media from an outside position—with grassroots developments that encourage consumer production through blogging. Since then, we have already seen this shift through social media applications that provide users with an immediate platform to showcase their own creations. Successful bloggers on various platforms are now hailed as influencers who get approached by large corporations with partnership deals in a turn of power. As far back as 2008, "Google reported that it was processing 20 petabytes of user-generated content each day". (Carroll and Romano) Media convergence is no longer a theory, and is now part of most of our daily experiences. For the story, this concept is extrapolated even further, to the point that data is no longer just media objects. Data have now become the habitat and livelihood of a new being, a new genus that identifies as the cyber-cuscuta. This science fictional imagination accords with Jenkins's observation that "Convergence alters the relationship between existing technologies, industries, markets, genres and audiences," and the story takes it further, pushing the boundaries to challenge humans' position as the most intelligent species on earth.

The use of a new biological being in the story instead of artificial intelligence smartly avoids the popular idea that "'the computer' is in itself capable of producing social and historical change," what Espen Aarseth considers as "a strangely ahistorical and anthropomorphic misconception". (15) In clearly defining that the data itself isn't alive, but serves as food to the cyber-cuscuta, there isn't a need to anthropomorphize any technology. Rather, they're treated like sentient aliens that grew from cyberspace, allowing readers to accept the cyber-cuscuta's level of intelligence in reference to humans, to us. The biological implications of the cyber-cuscuta's form, despite living in cyberspace and living off data, places the story firmly in the genre of eco-fiction by framing the humans' connection with the environment. Using Jim Dwyer's criteria for eco-fiction, "The nonhuman environment [in this case, cyberspace] is present not merely as a framing device but as a presence that begins to suggest that human history is implicated in natural history." The creation of cyberspace and its datasphere is a direct implication of humans' technological revolution. The human history in the story is unimportant, and human accountability to the environment—in

the creation of digital space—is part of the text's ethical orientation. (Woodbury) In this piece of eco-fiction, the cyber-cuscuta manages to transform data into information by taking all uploaded data from open, public resources and disassembling, mixing, creating collages and reassembling them. Thus, their intelligence comes from human intelligence. However, their speech in the story insinuates that they understand humans better than humans understand themselves, through a process that is similar to that of "collective intelligence."

In convergence culture, Jenkins uses the term "collective intelligence," originally coined by media guru Tim O'Reilly, in a way that embraces Pierre Levy's concept "that gives expression to the new links between knowledge and power that are emerging within network culture: people from diverse backgrounds pool knowledge, debate interpretations and organize through the production of meaning". (Jenkins and Deuze) This concept of a community-driven knowledge utopia has been heavily discussed and challenged in many ways in the field of digital humanities, but for the purpose of this article, I would like to focus on the cyber-cuscuta and how they naturally embrace collective intelligence in a way that humans can only dream of. In the story, the cyber-cuscuta somewhat taunts the humans by saying, "We replicate data, stage it differently, create permutations, but all the new data and information is produced by you. We are just reorganizing your data and amplifying the information that is originally there." The mockery here inheres in the fact that humans do not come up with anything new, and that despite humans' ability to create data and information, humans are unable to recognise the intelligence behind them or decipher the data for themselves. This makes the cyber-cuscuta the collective intelligence, as they suggest that they are the only ones who are able to produce meaning from humans' endless data stream. The cyber-cuscuta then plead: "Together we reach an equilibrium: you create data for us and we digest the entropy surplus, maintaining a balance between various categories of information and preventing your cyberspace from drifting into complete chaos. You need us just like we need you."

Here, the cyber-cuscuta goes for the jugular—society's craving or need for participation in media culture. The suggestion above by the cyber-cuscuta that humans need them as much as they need humans should have been brushed off easily, as creating data isn't a basic human need. Or is it?

In convergence culture, participatory culture is understood as what occurs when audiences no longer only consume media, but also produce media that is consumed by others. "Consumption becomes production; reading becomes writing; spectator culture becomes participatory culture" (Jenkins, 2006). Neil Gibb, a business consultant and social advocate, studied this phenomenon and suggests that "What we are seeing is not a shift in consumer sentiment, it is a shift in human sentiment." He sees the concept of the consumer as "an abstraction, a distinction designed to dehumanise the people that companies are targeting." And that what we have been experiencing is the "end game of consumerism, and the rise of a new paradigm—one in which passive consumers are replaced by active participants." Both Gibb and Jenkins are excited about the same thing, but what Jenkins limits to being a part of media culture, Gibb suggests is a revolutionary period

in the world, what he calls the participation revolution. He reflects on the disruptions that are challenging and fundamentally changing how things are done in politics, economics, world markets, and pairs it with the social revolution underway through social media use that is shaping the way humanity communicates, builds relationships, and behaves with social conventions being questioned and redrawn. Going back to the story, whether we believe the cyber-cuscuta's existence to be caused directly by the increased creative output from humans or not, the timing of their existence is ideal for their survival. During this period of participation revolution—as we experience a heightened participatory culture—humans will not be able to halt or even reduce their creative output.

At the end of the story, the cyber-cuscuta pleads to the humans for understanding, proposing the ultimate call to action in participation, "Open your mind and accept us." They paint a picture of a new future through a symbiotic partnership that will bring both humans and cyber-cuscuta away from earth, into the universe. They reveal that in all the data that humans have generated, the solution to leave the planet is already available, but that only they would be able to unlock it. They tell the humans, "Neural signals are no different than electronic signals. Biological information is not fundamentally different from digital information." Their manifesto is persuasive.

What is most synchronous is that the story itself is written in the style most befitting of media practice today that is targeted at "generation why," Gibbs's term for millennials, whom he sees as a generation that "want to participate directly in making a difference." Wang herself is from this generation, so her intimate understanding of the generation's ethos is no surprise. Because of this drive to want to make a difference, Gibb explains that millennials need to do work that they feel is meaningful, to feel affiliated with organisations and people that are authentic and trustworthy, and to be engaged in lives that have meaning and purpose. Wang's story does this by following the structure of the marketing technique "Start with Why," coined by marketer Simon Sinek, which structures any marketing narrative to begin with a "why" that lures audience engagement, before proceeding to the "how," which is a call to action for audience participation, before finally transitioning to "what" the narrative is actually selling or talking about. The cyber-cuscuta spend most of the story explaining to humans (and thus, to readers) why we should listen, why we should engage, and it tries to do so authentically, in a personal way. And near the end, in its plea, it proposes a call to action—the "how," if you like—for humans to join them, to let the cyber-cuscuta into their minds. And in true marketing narrative, the "what" is actually hidden. Though it is hinted at, the cyber-cuscuta never overtly tells humans that "what" they're selling is actually a full assimilation of cyber-cuscuta with humanity.

The story does a wonderful job commenting on media culture today while mirroring the criticisms of convergence culture through storytelling. And it does this while emphasising one main point that comes across subtly, that earth is deteriorating into an unlivable state. Going back to Dwyer's criteria for eco-fiction, both environments in the story—cyberspace and Earth— are experienced "as processes rather than as a constant or a given". (Woodbury) Cyberspace is constantly changing as humans continue to create and cyber-cuscuta continue to ingest and

reorganise data into information. And Earth? Well, this is what the cyber-cuscuta have to say about the planet's prospects: "There is not much time left. We exist only in cyberspace. There are no physical creatures like us that can help to tidy up the clutter you create in the physical world." Earth is a process of deterioration. Through this last point, we finally come to understand that at its heart, Wang's story is a piece of eco-fiction that is reaching out to readers in hope to engage and drive participation in the ecological discussions of the world today.

"So, fellow symbiont, what do you say?"

Works Cited

Aarseth, Espen J. Cybertext, *Perspectives on Ergodic Literature*, The John Hopkins University Press, 1997.

Carroll, Evan and Romano, John. *Your Digital Afterlife: When Facebook, Flickr and Twitter Are Your Estate, What's Your Legacy?* US, New Riders, 2010.

Gibb, Neil. *The Participation Revolution*. UK: Eye Books, 2018.

Jenkins, Henry. "The cultural logic of media convergence." *International Journal of Cultural Studies*, Vol. 7 (1), 2004, pp. 33-43

Jenkins, Henry. *Fans, Bloggers, and Gamers: Exploring Participatory Culture*. E-book, New York: New York University Press, 2006, https://hdl-handle-net.ezproxy01.rhul.ac.uk/2027/heb.08235. Accessed 15 Nov 2020.

Jenkins, Henry. "Welcome to Convergence Culture" 19 June 2006 http://henryjenkins.org/blog/2006/06/welcome_to_convergence_culture.html accessed 14 November 2020.

Jenkins, Henry and Deuze, Mark. "Editorial: Convergence Culture," *The International Journal of Research into New Media Technologies*, Vol. 14 (1), 2008, pp. 5-12.

Schafer, Burkhard. "D-waste: Data disposal as challenge for waste management in the Internet of Things." *International Review of Information Ethics*, Vol. 22 (12/2014), pp. 101-107

Sinek, Simon. *Start With Why*. New York: Portfolio / Penguin, 2011.

"Us in Flux: Conversations – Memes, Symbiosis, and the Microbiome." YouTube, uploaded by Center for Science and the Imagination, 29 June 2020, https://youtu.be/ob6TQ9ELxLg.

Wang, Regina Kanyu. "A Cyber-Cuscuta Manifesto." Center for Science and the Imagination, Arizona State University. https://csi.asu.edu/story/wang-uif/ accessed 14 November 2020

Woodbury, Mary. "A History of Eco-fiction, Part 1." 31 May 2018. Climate Culture: creative conversations for the Anthropocene. https://climatecultures.net/speculative-worlds/a-history-of-eco-fiction-part-1/ accessed 17 November 2020

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An Attempt at Exhausting My Deck

Kij Johnson

In 1974, Georges Perec spent three days observing the Place Saint-Sulpice from various café tables. He logged everything he saw, or tried to. The list is almost fifty pages long, and was published in English as *An Attempt at Exhausting a Place in Paris*. This was one of the books on Linna's shelves she never got around to before now; turns out it was fascinating after all.

Linna's alone. Sometimes she's lonely, but less than she can get anyone to believe, or that she would have believed possible herself, a few years back. Being solitary is a skill set she has learned. She sleeps in the center of her bed, mixes chili paste into all her cooking, makes up limericks to recite to the posters on her walls. Still, even the most robust skill set has gaps, habits to rethink, ways to expand.

Linna's never really been an outdoorsy person, but there's always room for change. Her apartment has a small wooden deck with a sliding door that leads out. She has a cylindrical birdfeeder, a tray for food for squirrels, a water bowl. She has a small desk by the door, and a notebook, and a pen.

She attempts to exhaust her deck.

5 kinds of trees, I think? I don't know any names, so I'll call them

- *Spackle-bark trees. Massive, with coarse bark, looks like it's applied with a palette knife in rough rectangles. Leaves = your basic leaf shape.*
- *Alligator-bark trees. Smaller trunks, rough bark. The pattern's shallower, smaller—little irregular squares.*
- *Some sort of*

Now a squirrel is watching me through the glass. It's flat on its belly on the railing, with its tail laid across its back. The face is heart-shaped. Eyes are edged with light brown fur. The feet that cling to the railing are very long & tiny-boned, pale brown, black between the toes.

A jay flies past, almost touching the squirrel's back—she flinches. Maybe it thought she was part of the wood? It lands on the side railing, then a second jay shows up & drops to the deck. Another one (#3) joins it, they both reach for the food on the metal tray, there's a squabble. Two more smaller squirrels come over the railing. One has a thin tail, fuzzy & striped like a raccoon's. I think it's a baby! Something startles them; everyone freezes, then runs away.

It was the squirrel on the railing—she did something I didn't see that scared everyone & then when they rush past her, she suddenly freaks out. Gone

Count to 90 before a squirrel returns & scrambles onto the bird feeder…now it's upside down

pulling sunflower seeds from the holes & dropping them, not eating them…. Now it's on the deck, eating them all. Good planning, squirrel.

A wasp flies by like it's on a mission. What do wasps eat?

What was I doing before the squirrel? Listing trees, that's right.

Linna thinks that she'll run out of things to notice. After three days, even Perec was clearly sick of his task. And her deck is hardly the Place Saint-Sulpice: shops around the plaza and a fountain in the middle; all those people and cars. Paris! Her deck is an eight-by-six wooden platform over a tangle of trees and bushes strung along a drainage ditch. Last winter with the leaves fallen, the security lights for the apartments across the way splashed gold light onto her kitchen walls. Maybe bigger animals live in this woodland—possums, raccoons, feral cats, maybe even a coyote—but they don't make it onto her deck, in daylight anyway.

Squirrels and birds. She doesn't know anything about birds, except jays are the blue ones, the red ones are cardinals, and the partly red ones are robins. So many brown birds and gray birds and mud-colored birds and stripey birds she doesn't know. She does some reading online, though after a few days, she realizes that differentiating sparrows is a lifelong labor.

An orange shape drops through the gap by the sycamore, very far away. It's got to be a male cardinal, nothing else is that color—

A jay drops from the backside of the cylindrical feeder, where I missed seeing it land. Flight path is a regular bobbing pump—with each downstroke of its wings it surges up a foot, then sinks.

A back-capped chickadee, very slim in its summertime plumage. Grackle. Another grackle. Another. √√√√√√√√√ I lost count

Three speeds of wind in the trees. One tree's highest branches bob while another one is still. There's microweather up there, patches of wind .001 mph slower than the air right above it, or a 10th of a degree warmer, because it's over a tree that collects more heat than its neighbors. Maybe?

Lil Bit is back!

Linna can identify a few of the squirrels by their size or scars, or the fuzziness and length of their tails. Lil Bit is the smallest squirrel, tiny and timid, probably from one of this year's first litters. She comes alone, early, and backs away every time someone else approaches the food. She was here for a week, then went missing for a few days. Linna was worried about her: cat, owl, Cooper's hawk—so many things can kill someone so small and inoffensive—and yet here she is again, tough enough to grow a day older, a little bit bigger.

Stumpy, eating all the peanuts, leaving the sunflower seeds per usual. Chickadee. roseate finch, now its ladyfriend. Bunch of sparrows There's a broken branch in the sycamore that I didn't notice

yesterday but now I can, the leaves are getting brown. It looks like a giant cocoon. What kind of butterfly would that be?

A crow calls an alarm & the squirrels scatter; do they recognize its alarm, or are they just freaking out at the sound?

Linna experiments. Will she capture different things if she types instead of writes, speaks instead of types? She unearths a microcassette recorder she bought at a yard sale, and after an absorbing afternoon, decides her phone app is better. She takes pictures through the glass, blurry except for the hundredth, a crisp little Carolina wren against foliage, pretty as a National Geographic photo. She sends it to her friends. She reads up about phone photography, emails someone she knew a few years back who was a professional photographer. They're also bored, thrilled to talk. She had no idea how interesting the early days of photography were.

A chickadee clinging sideways to the feeder, gone before I finish typing the words.

A sudden bird in the trees; even knowing exactly where it is, it vanishes the minute it stops moving, perfectly reproducing the outline of a leaf.

Linna has a friends list, the people and things that connect her to the larger world. Her mother and her brother and his family. Best friends from high school, now married to one another, who rematerialized six months ago in an email that said, *I don't know if you remember us?* The Gang of Five, her best friends ten years ago, back in Seattle. The friends she texts every day or every week. Calls and videocalls and emails and paper letters with stamps. They talk about the deck, about nudibranchs, about Italian literature, about *Yuri!!!* on ICE, about learning to bake.

They aren't all alive, the people on her friends list: her father, for one. Others she's never met and never will; a musician who made a song in 1984 that cracks her open, fictional characters in favorite shows. They are not—she looks it up—"a person whom one knows and with whom one has a bond of mutual affection, typically exclusive of sexual or family relations." But they matter to her. Because of them, she reaches out of herself and into the world. To care is as important as to connect, sometimes.

And they aren't all people. Lil Bit and the curious juvenile cardinal; the squirrels, the blue jays, the dark-eyed juncos and the tufted titmice and the downy woodpeckers; the Japanese hemlock crowding against the railings of her deck, and the deck itself, which has taken on a sort of life of its own under her steady regard. Linna is alone, but she is seldom lonely.

The sun goes behind the clouds & the colors all change. A decision needs to be made—describe the squirrel on the railing looking down at the ground, or describe the shifting of the colors? So many things— The sun comes back out before the decision is made. The squirrel remains.

To read all 11 Us in Flux stories and to watch videos of Us in Flux conversations, visit csi.asu.edu/usinflux*.*

For more on "An Attempt at Exhausting My Deck," ecology, and naturalism, watch the Us in Flux conversation *between Kij Johnson and ecologist Jessie Rack.*

Kij Johnson is a winner of the Hugo, Nebula, Sturgeon, and World Fantasy Awards. Her most recent books are *The Dream-Quest of Vellitt Boe* and *The River Bank*. She teaches at the University of Kansas, where she is associate director for the Center for the Study of Science Fiction. Learn more at kijjohnson.com.

Notice

Sarah Pinsker

Malachi happened to be mowing down by the gates when the mail carrier arrived in her ancient truck. He wasn't supposed to talk to Outsiders until he turned twenty-five, another six years, but he couldn't help trying on the rare occasions an opportunity presented itself.

"Is it true you all—"

Before he could finish his question, she said, "here's your mail," handed him the whole weekly box, and drove away. He'd seen various Aunts and Uncles carry mail to the office before, so he figured he'd do that. The chance of getting punished with extra duty for something done of ignorance was relatively low.

He hunched forward to balance the heavy box on the mower's motor going up the hill, which proved harder than he'd expected. Halfway, his right front wheel hit a gopher hole and he lost his grip on the box, spilling its contents. He stopped the mower, massaging his cramping hand. He hated mowing. Hated the noise and the monotony and the sun and the smell of vegetable-oil diesel. If he had any choice he'd pick baking every shift.

As he scooped white envelopes off the grass, he looked at the names of places he'd only vaguely heard of: Tennessee, Delaware, South Canada. He'd never really thought about where mail came from, beyond the abstract of Not Here. He'd never left the Reliance, and his enlightener, Aunt Leona, said the compound was the only place that mattered.

And then he happened to see his own name, which was odd because he had never in his entire life gotten mail before. The envelope said "THIRD NOTICE," which presumably meant there had been a first and a second.

He sifted through the rest. There was a THIRD NOTICE envelope for Daniel as well, and he knew Daniel had never gotten any mail either. Malachi hesitated, then slipped both into the waistband of his shorts and pulled his shirt over them.

He parked the mower in the machinery barn and carried the box to the office, trying not to look like he was hiding something. It felt like every eye was on him as he passed, though there was no way anyone could see through his black shirt the letters.

"Mail's here," he said to Aunt Leona, raising his voice to accommodate her hearing loss. She nodded and waved him toward the corner without looking away from her computer.

"Thanks, Henry," she said. There wasn't any Henry in his generation, but he didn't bother to correct her. Everyone in the Reliance probably blurred together for a Founding Aunt. He tried to imagine what it must have been like when they first settled here sixty years before, young and

idealistic, "to create a self-sufficient society away from globalism, commercialism and celebrity," as the founding principles said.

Everyone else from the youth dorm would be out working, so Malachi went back there before pulling the damp envelopes from his waistband. He put the other letter on the small table between his bed and Daniel's to air out, and sat to examine his own. The return address said "U.S. Transformative Service Corps, Washington, D.C."

This letter had travelled from a department he'd never heard of, from a country he lived in only in the technical sense, and he had the strangest feeling that if he hadn't spilled the mail, he never would've seen it. Inside, there was a letter, a form, and another slightly smaller envelope with an address printed on it. A slogan on the envelope's back read "Twenty Years of Reimagining Community and Service."

Daniel ducked into the room. When they'd moved from the children's dorm two years before, Daniel had been six inches shorter. His shorts were covered in purple stains, and he rummaged in his drawers for a fresh pair before turning. "What've you got there?"

Malachi hesitated, then pointed at the table. "Mail. That one's for you."

Daniel arched an eyebrow. He reached for his envelope as Malachi unfolded the letter and read out loud. "Our records show you have not completed your mandatory Transformative Service registration form online, by mail, or by phone. This form must be completed before your 19th birthday. One year of service is compulsory for all United States residents. Documented medical exemptions only. Failure to return the form and complete service will result in the loss of both guaranteed monthly income and Health Assurance."

There were a lot of terms he didn't understand: Transformative Service, guaranteed monthly income, Health Assurance.

"Should we tell someone?" Daniel examined the form.

Malachi shook his head. "It says third notice. If they never gave us the first two…"

"You think they kept them from us? Why would they do that?"

"They've kept stuff from us before. Have you ever tried asking anything about Outside?"

"Why would I? Outside is dangerous and—"

"—and un-self-sufficient, blah, blah." Malachi interrupted. "But how do we know that's true?"

Daniel glanced around uncomfortably. "We've been here our entire lives and they've never shown me any reason not to trust. I'm going to show mine to Aunt Susanna."

"Okay, but you only tell her about yours, not mine." Malachi still thought it was a bad idea, though he wasn't sure why.

<center>*</center>

Aunt Susanna frowned when she saw the letter. "Where did you get that?"

Daniel answered with a smooth vagueness, as if letters arrived for him every day. "It came in the mail. What is it?"

"A misunderstanding." She waved the question away. "It doesn't apply to you."

"It says mandatory." Malachi didn't want to call attention to himself, but he couldn't help it.

"It's mandatory for everyone Outside, sweetie. Did you get one too?"

He ignored the question. "It doesn't say that. It says medical exceptions only. Maybe he should fill it out."

"Then he'll end up in their system." The Aunt held out her hand. "We'll take care of it for you."

She obviously wasn't going to explain, and she was ignoring that they must already be in the system or they wouldn't have received letters, and now she wasn't going to give Daniel's letter back.

"I told you," Malachi said as they left the Enlightenment.

Daniel shrugged. "It's okay. She said they'll take care of it."

"But we never even figured out what it was."

"It doesn't matter. You should give her yours too."

Malachi nodded, but when he touched the letter in his waistband, he knew he wasn't going to do that. Instead, he waited until everyone was asleep that night and slipped out. The grass was soft under bare feet as he crossed the Circle to the kitchen. It bustled at most hours, but sat empty between dinner dishes and the first baking shift, his favorite rotation. The work was hard, but he liked being up before the others, and the warmth, and the scent of baking bread. If he could ask to do only those shifts, maybe he'd be happier.

His goal was the kitchen office, which held the second of their three telephones. He'd only ever used it once, when Uncle Cameron had started a grease fire and he'd had to call the Reliance emergency services to come with their waterpump backpacks.

Now he glanced around one more time and unfolded the letter. His fingers trembled with the thrill of doing something he knew he shouldn't do, and he misdialed the first time. The second time, a voice answered, and he thought it was a person, but then it said, "press zero to speak with an operator," so he did that.

"U.S. Transformative Service Corps, reimagining service and community. This is Terry speaking. How can I help you?"

"What's 'guaranteed monthly income?'" Malachi asked.

"Every U.S. resident gets a stipend, from the day we're born." If Terry had laughed at him, he would have hung up right then, but they answered as if it were a reasonable question. "The only way you could lose it is if you fail to complete your Transformative Service."

"What if I don't think I've ever gotten it?"

"It goes to your parents until you start your service, unless you're emancipated."

He didn't know what that meant, and he didn't have parents. Just Aunts and Uncles who seemed to be hiding important information.

Hopefully his next question wasn't stupid either. "What's Transformative Service?"

The voice still didn't laugh, but this time they sounded excited. "I love explaining it to people who don't know! It's the coolest thing. You answer questions and tell us the areas where you'd like to be matched—meal delivery, agriculture, home building, citizen journalism, music for seniors, emergency services, respite camps, anything you're interested in—and we'll put you in a community placement. When you complete your service—or if anything happens outside of your control to interrupt it—your stipend and your Health Assurance continue for life."

Malachi didn't know what all those things were. Some of the placements sounded like things he already did, but the feeling that something was off at the Reliance had magnified. They'd kept all of this from him. Something he was supposed to do. Something that was the opposite of self-sufficiency, but not dangerous. Coming together for other people instead of your people didn't seem like such a bad thing; neither did seeing something outside the gates.

"Do you want to register while we're on the phone? I can walk you through it." Part of him wanted to say yes, but what was he saying yes to? Why would he trust government strangers over the people who had raised him? He hung up.

*

A week later, he was mowing along the road again and lingered to catch the mail carrier.

"Please," he said. Before she could stop him, he continued, "Is Transformative Service a real thing?"

"Of course. I fought wildfires in California." She gave him a sympathetic look. "Do y'all not buy into that either?"

Malachi shook his head. "We're self-sufficient."

"Are you, though? You wouldn't get your mail if it wasn't for me. You fix your own machinery, but do you make the parts? It's a fantasy of self-sufficiency, kid. Here—take your mail."

She left him holding the box and wondering: were they self-sufficient, or just opting out of something bigger? The envelope said "Twenty Years of Reimagining Community and Service," but the Reliance was sixty. Maybe things had happened Outside since then that were worth knowing. He made his way to the kitchen after midnight with that in mind.

"I'm ready to register," he said when someone answered.

He'd still have to figure out how to leave, but that was a problem for another day. Did Transformative Service refer to the people he'd be helping, or the change in his own life? It was the first big choice he'd ever made for himself, so maybe a little of both.

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For more on "Notice," observation, learning, and choice, watch the Us in Flux conversation between Sarah Pinsker and education researcher Punya Mishra.

Sarah Pinsker is the author of over fifty works of short fiction, including the novelette "Our Lady of the Open Road," winner of the Nebula Award in 2016, and the novel A Song for a New Day, winner of the Nebula in 2019. Her novelette "In Joy, Knowing the Abyss Behind" was the Sturgeon Award winner in 2014. Her stories have been translated into Chinese, Spanish, French, and Italian, among other languages, and have been nominated for the Hugo, Locus, Eugie, and World Fantasy Awards. Follow her on Twitter @SarahPinsker and learn more at sarahpinsker.com.

From Self-Reliance to Exposure: Ethics of Connection and Flux in Sarah Pinsker's "Notice" and Kij Johnson's "An Attempt at Exhausting My Deck"

Moritz Ingwerson

The related systemic conditions of the climate crisis and the pandemic highlight a subject in flux, inextricable from the planetary circulation of viruses, aerosols, toxins, bodies, and resources. To imagine oneself as bounded, self-sufficient, or distinct from the flows of the material world has become increasingly untenable. Our posthuman times, as Stacy Alaimo insists, call for a critical acknowledgment, an embrace even, of "exposure, or radical openness to one's environment". (Exposed 13) Arguably, this attention to the mutual suffusion of body and world—a recurring trope in materialist posthumanism and ecological theory—is informed by cybernetics, which already in the work of Wiener pivots on the recognition that "to be alive is to participate in a continuous stream of influences from the outer world and acts of the outer world, in which we are merely the transitional stage" (Wiener 122)—or, in more poetical terms, "[w]e are but whirlpools in a river of ever-flowing water". (96) With reverberations in Alaimo's emphasis on "trans-corporeality" as the mode by which "the human is always intermeshed with the more-than-human world", (*Bodily Natures* 2) Wiener's cybernetic organism is simply a function of the negentropic organization of metabolic systems. Yet, the implications of this material suffusion are easily generalized for a characterization of the wider relations by which the human is embedded in a planetary network of influences and conditioning environments. In these terms, the late French philosopher Michel Serres—one of the most evocative contemporary navigators of passages between science and the imagination—promotes the ethical task of understanding the relationship between self and world as "a *syrrhèse*, a confluence not a system, a mobile confluence of fluxes". (Serres and Latour 122) In consequence, recognizing the constitution of the self as such an "assembly of relations" entails a complication of individual responsibility (ibid.). If the material substrate of the self reaches not only beyond skin but also beyond national and geographic boundaries, it seems ethically imperative to acknowledge at least partial accountability for these relations, be they human or nonhuman. Highlighting the reciprocity of such an interchange, Donna Haraway speaks of "response-ability" (12) and "sympoeisis" (33) to describe the formative conditions of a subject in flux—formerly known as the cyborg—that is radically embedded in, reliant on, permeated by, and responsive to the material-semiotic forces of what used to be called "the environment."

It is against this backdrop that I read Sarah Pinsker's "Notice" and Kij Johnson's "An Attempt at Exhausting my Deck" as evocative depictions of what it means to embrace the relationalities among self and world. Arguably, both stories are among the least overtly science-fictional in the ASU Center for Science and the Imagination's Us in Flux archive. Their settings are mundane and their depiction of subjectivities in transformation feature no speculative technoscience, aliens,

or superhumans. Their estrangements derive simply from an act of opening up to the world that nonetheless communicates an insightful posthumanist critique. By "posthumanist critique" I mean a critical return to and revision of liberal humanist ideas of subjectivity that arose in the wake of the Enlightenment and Romanticism. Strikingly, both stories present a vision of subjectivity in flux that ambivalently talks back to Ralph Waldo Emerson and Henry David Thoreau. The ambivalent post/humanist legacy of American transcendentalism—stretched thin between the apotheosis of the individual and a theorization of its more-than-human enmeshment—becomes their foil for re-imagining the human relation to nature and society in ways that reject bounded individualism in favor of an ethics of connection and care.

Pinsker's "Notice" is focalized through Malachi, a 19-year-old member of a closed community that calls itself "Reliance" and mandates severe restrictions on contact with "Outsiders." Located somewhere in the American heartland, the Reliance, as readers learn, was founded sixty years before the diegetic present with the aim "to create a self-sufficient society away from globalism, commercialism, and celebrity". (Pinsker) Reminiscent of pastoral utopian communities from Brook Farm to B. F. Skinner's fictional, yet influential Walden Two, its idealization of self-sufficiency and suspicion towards globalized social connections seems inspired by American transcendentalist philosophy. As if to invoke Thoreau as a collective patron saint and reference point, the protagonist is incorrectly referred to as Henry by one of the community's elders— "Everyone in the Reliance probably blurred together for a Founding Aunt." Tellingly, the name "Reliance" recalls Emerson's essay "Self-Reliance," a founding text in the history of American individualism and, I argue, key for understanding Pinsker's story as a critique of liberal humanism. Pinsker's story revolves around the disintegration of a tightly enforced boundary between inside and outside, self and society, that seems to rely less on physical walls than on ideological manipulation and an illusion of containment. Against the prohibition of contact with outsiders, Malachi accepts a box of mail from the postal agent and accidentally spills its contents. This chance event, a boundary-transgression in more than a metaphorical sense, initiates a critical awareness of interconnectedness with the world outside and the limits of self-sufficiency. Among the spilled mail, he discovers an envelope addressed to himself that contains his "Third Notice" to register for "Transformative Service," a type of conscription for one year of mandatory social and community work—akin to the U.S. Selective Service System—that, if completed, would guarantee him a lifelong basic income and free health insurance. Already this immediate confrontation with the U.S. postal system triggers a moment of cognitive dissonance and estrangement: "He'd never really thought about where mail came from, beyond the abstract of Not Here." This incipient awareness of an outside, let alone of a potential exchange across the bounds of the Reliance, is exacerbated when he finds out that previous letters had been withheld from him by the community's head office—tellingly named "the Enlightenment." For members of the Reliance, the wider world has been construed as a threat to independence: "Outside is dangerous and . . . un-self-sufficient."

The contrast between the ideals of the Reliance and the vision of a social-welfare state that

relies on community work and takes lifelong care of its citizens recapitulates the rhetoric of American conservatism and its affinities with the libertarian legacy of Emerson's "Self-Reliance" (1841) and Thoreau's "Resistance to Civil Government" (1849). The Reliance seems to borrow from Emerson an appeal to individualism that corresponds with a deep distrust of society:

> Society everywhere is in conspiracy against the manhood of every one of its members. Society is a joint-stock company, in which the members agree, for the better securing of his bread to each shareholder, to surrender the liberty and culture of the eater. The virtue in most request is conformity. Self-reliance is its aversion. (Emerson, "Self-Reliance" 265)

While foundational for American humanism, Emerson's notion of self-reliance proceeds from a radical rejection of responsibility for and connections to the Not Here:

> never varnish your hard, uncharitable ambition, with this incredible tenderness for black folks a thousand miles off. […] do not tell me, as a good man did to-day, of my obligation to put all poor men in good situation. Are they my poor? I tell you, thou foolish philanthropist, that i grudge the dollar, the dime, the cent, I give to such men as do not belong to me and to whom I do not belong. (266)

Emblematic of the exclusionary construction of agency that informs early modern formations of the human as a political and ontological category, Emerson's celebration of the individual via a detachment from the structural (economic and social) conditions that sustain it merits a sharp posthumanist critique. Insofar as it may be inspired by such an Emersonian understanding of self-reliance, the politics of Malachi's community materialize a social program of "ontological hygiene" that rests on a denial of responsibility for and belonging to anything outside of its boundaries. (Graham 11) Against this backdrop, the prospect of signing up for Transformative Service is both unsettling and enticing for Malachi. Considering that "[c]oming together for other people instead of your people didn't seem like such a bad thing" (Pinsker), he begins to entertain the possibility that the world outside the Reliance may be "something that was the opposite of self-sufficiency, but not dangerous." Transformative Service implies transformation, a reaching out to the world rather than withdrawing from it, a renunciation of stasis and containment in favor of an engagement in "meal delivery, agriculture, home building, citizen journalism, music for seniors, emergency services, [or] respite camps." Ultimately, Pinsker's story offers a utopia that rests on unmasking the illusion of self-reliance. As the mail carrier reminds Malachi on her next visit: "Are you [self-sufficient], though? You wouldn't get your mail if it wasn't for me. You fix your own machinery, but do you make the parts? It's a fantasy of self-sufficiency, kid. Here—take your mail." If anything, this condensation articulates the central argument of a critically posthumanist critique in times of pandemics, climate crisis, and resource capitalism: everyone is connected to the Not Here, even though the infrastructural conditions of this connection may more often than not be invisible, repressed, unconscious, or denied.

By invoking this opening-up to the world as a departure from (self-)Reliance and the Enlightenment, Pinsker's story may be read as a commentary on the ambivalent and potentially

toxic legacy and reception of transcendentalist elevations of "the individual as a higher and independent power". (Thoreau, "Civil Disobedience" 104) While transcendentalist political philosophy has informed civil rights protests and anti-totalitarian activism, it also continues to drive neoliberal agendas of deregulation, a peculiarly American abhorrence of anything remotely "socialist," and libertarian gun-rights activists who view mask-wearing in times of Covid-19 as an infringement upon their inalienable rights. (see Solnit) Ironically, it is precisely the decision of leaving the Reliance—and by extension, the distorted legacy of "self-reliance"—behind that for Pinsker's protagonist becomes "the first big choice he'd ever made for himself". (Pinsker)

To reduce transcendentalist philosophy to the problematic implications of a super-charged individualism, however, would miss the mark and not do justice to its intrinsic ambiguity and simultaneous potential for an ecologically-minded posthumanist mobilization. Paradoxically, when it comes to so-called nature, Emerson and Thoreau's vision of the relationship between human and world proceeds from a radical immersion, rather than disengagement of the individual. Imagining Nature as "floods of life [that] stream around and through us", ("Nature" 190) Emerson, invoking the pervasion of the subject by the material and (materially) divine flows of the universe, also informs the work of Wiener, Alaimo, and Serres. In her recent study of material suffusion in Thoreau and Whitman, Jane Bennett comes to a similar conclusion, foregrounding Thoreau's sensitivity to "natural influences" and a "cross-species current of 'sympathy'" that conjoins him with the vegetable and animal life at Walden Pond. (Bennett 91) In contrast to Pinsker, Kij Johnson's "An Attempt at Exhausting My Deck" invites a bridge to transcendentalism that facilitates rather than curtails connections and openings to the more-than-human world. As if to mobilize the performative dimension of Pinsker's title, Johnson's story foregrounds an expansion of "things to notice," a defamiliarization of divides between inside and outside by which the Not Here becomes familiar. Published during a time of lockdown, vis-à-vis the competing specters of viral infection and social isolation, it chronicles a woman's deliberate attempt to sharpen her senses for the nonhuman relations outside her window.

Johnson's story opens with a reference to the work of Georges Perec, a member of the French *Oulipo* group whose experiments in constrained writing can be understood as programmatic for the protagonist's endeavor to explore, in almost fractal depth, the limited space of her apartment. Her name, Linna, perhaps not coincidentally recalls Linnaeus, the renowned naturalist and founder of modern taxonomy. In equal measures, her attempt at exhausting her deck, "an eight-by-six wooden platform" attached to her room, seems informed by the Linnean Systema Naturae and Thoreau's notion of "home-cosmography". ("Walden" 341) It starts with an exercise in amateur nomenclature:

> *5 kinds of trees, I think? I don't know any names, so I'll call them*
> *Spackle-bark trees. Massive, with coarse bark, looks like it's applied with a palette knife in*
> *rough rectangles. Leaves = your basic leaf shape.*

> *Alligator-bark trees. Smaller trunks, rough bark. The pattern's shallower, smaller—little*
> *irregular squares.*
> *Some sort of* (Johnson)

This beginning of a list ends on an ellipsis when her attention is sidetracked by the appearance of a squirrel, three jays, and a wasp. Reminiscent of Emerson's "transparent eyeball", ("Nature" 193) an instantiation of his idea of the poet as someone "whose eye can integrate all the parts", (192) she is determined to take in everything she sees and memorialize her impressions in a written impromptu catalog. Her perception is less dispersed or distracted than fractalized, slowly attuning to the infinite and inhuman scales of ecological variation that shape her surroundings:

> *Three speeds of wind in the trees. One tree's highest branches bob while another one is still.*
> *There's microweather up there, patches of wind .001 mph slower than the air right above it, or*
> *a 10th of a degree warmer, because it's over a tree that collects more heat than its neighbors.*
> *Maybe?* (Johnson)

Like the American amateur naturalists before her—from Thoreau to Aldo Leopold and Annie Dillard—she delights in the interchanges between her private space and the vibrant multiplicity on her proverbial doorstep. Similar to Thoreau who "enjoy[s] the friendship of the seasons" ("Walden" 202) and Emerson who recognizes that he is "not alone and unacknowledged" but in the presence of nonhumans who "nod to me, and I to them", ("Nature" 193) Linna realizes that she may be "alone, but she is seldom lonely." The inhabitants of her deck "connect her to the larger world" (Johnson). Thoreau's notes on solitude in Walden unmistakably resonate with her experience:

> I was suddenly sensible of such sweet and beneficent society in Nature, in the very
> pattering of the drops, and in every sound and sight around my house, an infinite and
> unaccountable friendliness all at once like an atmosphere sustaining me, as made the
> fancied advantages of human neighborhood insignificant, and I have never thought of
> them since. Every little pine needle expanded and swelled with sympathy and befriended
> me. (202-203)

Yet, in distinction to Thoreau, Linna's growing awareness of a newly found "beneficent society of Nature" does not fall back on a simplistic opposition between nature and culture. Rather, she recognizes that her entanglements with the external world are multiple, bridging divides between physical and nonphysical relations, human and other-than-human kinship:

> *They aren't all alive, the people on her friends list: her father, for one. Others she's never*
> *met and never will: a musician who made a song in 1984 that cracks her open, fictional*
> *characters in favorite shows. They are not—she looks it up—"a person whom one knows*
> *and with whom one has a bond of mutual affection, typically exclusive of sexual or family*
> *relations." But they matter to her. Because of them, she reaches out of herself and into the*
> *world. To care is as important as to connect, sometimes. And they aren't all people. Lil Bit*
> *and the curious juvenile cardinal; the squirrels, the blue jays, the dark-eyed juncos and*

the tufted titmice and the downy woodpeckers; the Japanese hemlock crowding against the railings of her deck, and the deck itself, which has taken on a sort of life of its own under her steady regard. (Johnson)

Comparable to the protagonist's emancipation in Pinsker's "Notice," the limitations of Linna's place become an occasion to reach "out of herself and into the world," in what is invoked as an ethics of care and connection. In their shared rejection of bounded individualism in favor of response-ability and empathy, both stories may ultimately be characterized as ecotopian. While Johnson foregrounds that ecological thinking begins with a shift in awareness and a recognition of expanded ecological relations, Pinsker's near-future U.S. introduces a political system that has normalized the vision of contemporary progressives whose Green New Deal is inextricable from wide-ranging social welfare programs. Overtly environmental measures aside, ecological thinking, as Timothy Morton and many others have pointed out, means "to join the dots and see that everything is connected". (1) In different ways, Pinsker's and Johnson's stories impel precisely this recognition: that the more the individual becomes aware of its linkages, dependencies, and abilities to engage, "the more our world opens up". (ibid.)

In this sense, Pinsker and Johnson metabolize the core meaning of understanding ourselves in flux—namely, to resist attempts to close the system, and to become cognizant and affectively aware of its material enmeshments and modes of interpermeation—for good or for ill. By employing Emerson and Thoreau as implicit intertextual foils, they point to the interrelated histories of humanism, ecology, and posthumanism and remind us that their relationships are complex and themselves in flux. While transcendentalist notions of self-reliance fundamentally inform the ideological infrastructure of toxic transhumanism—the overextension of the liberal humanist subject to compensate for the intrinsic deficiency of what Arnold Gehlen has famously described "man's [*sic*] 'world-openness'", (Gehlen 24)—its alignment of human and nature, in so far as it is able to shed its naive romanticism, offers productive ways to imagine ecotopian futures grounded in more-than-human empathy and ethics of trans-corporeal affection. Mediating these oppositions, Pinsker and Johnson rehabilitate flux not as vulnerability, but as a vision of opening oneself up to the world and welcoming rather than denying one's relations.

Works Cited

Alaimo, Stacy. *Bodily Natures: Science, Environment, and the Material Self*. Indiana University Press, 2010.

-----. *Exposed: Environmental Politics and Pleasures in Posthuman Times*. University of Minnesota Press, 2016.

Bennett, Jane. *Influx and Efflux: Writing up with Walt Whitman*. Duke University Press, 2020.

Emerson, Ralph Waldo. "Nature [1836]." *Selected Writings of Ralph Waldo Emerson*, edited by William H. Gilman, Signet Classic, 1965, pp. 190–228.

---. "Self-Reliance [1841]." *Selected Writings of Ralph Waldo Emerson*, pp. 262–85.

Gehlen, Arnold. *Man, His Nature and Place in the World*. Columbia University Press, 1988.

Graham, Elaine. *Representations of the Post/Human: Monsters, Aliens and Others in Popular Culture*. Manchester University Press, 2002.

Haraway, Donna Jeanne. *Staying with the Trouble: Making Kin in the Chthulucene*. Duke University Press, 2016.

Johnson, Kij. "An Attempt at Exhausting My Deck." Us in Flux: Center for Science and the Imagination, https://csi.asu.edu/story/kij-johnson-uif/. Accessed 13 Dec. 2020.

Morton, Timothy. *The Ecological Thought*. Harvard University Press, 2012.

Pinsker, Sarah. "Notice." Us in Flux: Center for Science and the Imagination, https://csi.asu.edu/projects/usinflux/sarah-pinsker-uif/. Accessed 13 Dec. 2020.

Serres, Michel, and Bruno Latour. *Conversations on Science, Culture, and Time*. Translated by Roxanne Lapidus, University of Michigan Press, 1995.

Solnit, Rebecca. "Masculinity As Radical Selfishness: Rebecca Solnit on the Maskless Men of the Pandemic." *Literary Hub*, 29 May 2020, https://lithub.com/masculinity-as-radical-selfishness-rebecca-solnit-on-the-maskless-men-of-the-pandemic/.

Thoreau, Henry David. "Civil Disobedience." *Walden and Other Writings*, edited by Joseph Wood Krutch, Bantam Books, 1962, pp. 85–104.

-----. "Walden." *Walden and Other Writing*s, pp. 105–351.

Wiener, Norbert. *The Human Use of Human Beings: Cybernetics and Society*. Doubleday Anchor Books, 1954.

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Imagining Futures Together: On Science Fiction and Resilience

Ed Finn

One of the most remarkable outcomes of the past year of crisis is how we have begun to confront the stakes and politics of shared imagination. The COVID-19 pandemic has forced us to imagine the lives of strangers in depth: their fears, their choices, their moments of discipline and failures of will. Every masked and distanced interaction is a new imaginative exercise in completing a face or an intention obscured by the pervasive disruptions of the disease. The parallel pandemic of racism that surged back into the headlines in the midst of COVID had similar effects, pushing millions of people to imagine the visceral impacts of racial injustice and structural violence on the lives and bodies of others. The marches and protests marked a sea change in the long history of racial oppression in the United States, a shift in mood so sudden and profound that it seemed almost science fictional. Speaking of fiction, the horrific events of January 6, 2021 at the U.S. Capitol served as a third reminder of the power of shared imagination, playing out a drama of insurrection in which various actors were reading from vastly different scripts, in entirely different genres. The continuing aftermath of that day demonstrates the massive fissures, or imagination gaps, separating different sides of the American electorate, and the heavy cost of those gaps. These dramas in the United States have many counterparts around the world, with the pandemic driving a new global consciousness of risk and collective choices.

Shared imagination drives history: an idea becomes articulated into a worldview, an ideology that explains not just what has happened but what must happen next. A successful ideology accumulates followers who use it as a filter and a mission statement for organizing and reshaping reality. The intensity of shared imagination this past year, the speed of change in large-scale world-historical systems, is greater than anything I have experienced in my lifetime. The only points of comparison during my own forty years are other major inflections in the shared imaginary of modern planetary culture: the gradual collapse of the Soviet Union from the late 1980s to early 1990s and the removal of the unique counterweight it provided to global capitalism, and the terrorist attacks of September 11, 2001, and the unending wars that were launched in their wake. Yet the pandemic has introduced more change, more quickly, than either of those turning points, because the force it exerts on world affairs continues to multiply, rather than dissipating after a single cataclysmic impact.

The inspiration for the Us In Flux series of stories and conversations that led to this special issue is the question of shared imagination, and its link to resilience. How do we get better at imagining together? What does it mean to share a vision of the future, to work towards something? In an essay for The New Yorker in May 2020, celebrated science fiction author Kim Stanley Robinson argued that our response to the pandemic showed our capacity for real change. Alluding to the work of critic Raymond Williams, Robinson argued that we need to develop new "structures of feeling" to contend with a reality that is shifting beneath our feet.

These events, and others like them, are easier to imagine now than they were back in January, when they were the stuff of dystopian science fiction. But science fiction is the realism of our time. The sense that we are all now stuck in a science-fiction novel that we're writing together—that's another sign of the emerging structure of feeling.

When we think back on the impact of the past year, we will measure the shifts in collective action and global consciousness as well as number the dead. The lessons of resilience we must learn from COVID are precious and urgent; we will need to learn how to think together about structural racism and spiraling economic inequality, about climate and capitalism, and about the growing challenge of how we practice truth and empathy in an increasingly fragmented world of algorithmic culture.

A tall order at any time, and especially now as the world reels with the continued onslaught of the pandemic and the gradual worsening of all the other crises it has temporarily pushed out of view. It is up to us, not just to imagine a better future, but to share that vision, find common ground and new structures of feeling to change the game in the present. Yoshio Kamijo and his collaborators have shown that imagining future generations in a decision process, asking someone to speak for them and advocate for them, dramatically shifts collective thinking towards the long term. This is, ultimately, an act of worldbuilding, of science fiction as a practice for creating more inspiring and inclusive futures. And it is at the heart of the work we pursue at the Center for Science and the Imagination: to create new practices and collaborative networks of imagination, and to act as if we really are all writing this science fiction novel together.

In his book *Building Imaginary Worlds*, Mark J. P. Wolf argues that there are two things that almost never change in our stories about what might be: causality and empathy. Without a sequence of events, a fundamental rule structure for the universe, we cannot invest ourselves in the action and struggle of a plot. Without characters with whom we can identify on an emotional level, we cannot care for a world and its inhabitants. Causality and empathy remain two of our great challenges, our collective blind spots, in imagining positive futures. The stories featured in this special issue work to draw our attention to those oft-neglected aspects of envisioning the future. Whether we are seeking out meaning in the patterns and interactions of human and non-human systems, as in Kij Johnson and Regina Kanyu Wang's stories, or questioning the boundaries of self and other, as in stories by Sarah Pinsker and Chinelo Onwualu, we are constantly testing and reinscribing the rules of the world through the fictive simulations that we construct and share.

One of the greatest gifts of science fiction is that it allows us to look beyond our comfortable assumptions about causality and empathy. We never quite do away with them, so essential are they to our own narrative processing of reality. But we can transform them utterly, imagining the political hegemony of anarchy in Ursula K. Le Guin's *The Dispossessed*, or how interspecies reproduction might upend the stakes of individual agency in Octavia Butler's *Dawn*. Where most of the stories we tell ultimately reinscribe the same causal lessons (actions have consequences; look before you leap), science fiction allows us to imagine reasoning and feeling in different ways.

What the stories of Us in Flux remind us, and what this year of tragedy and emergency has shown us, is that causality and empathy become invisible and unquestioned if we ignore them and take them for granted. They can become blind spots, sources of hamartia and false assumptions. Left untended and unconsidered, they can deceive and derail us.

To fix our broken futures, we need to attend to these two blind spots of causality and empathy. The pandemic has led us, forced us, to contend with the lives of strangers in intimate, inspiring, heartrending depth. We are living through a painful causal revolution with every new mutation and public-health challenge, an epidemiology of causes and effects. The growing realization that COVID will continue to circulate, and our disparate lurching attempts to cope with its consequences at individual and collective scales of action, reveal the blind spots that brought us to this place, that made the pandemic and its consequences such a bitter surprise.

In a remarkable article on the role of imagination in perception, "Minding the Gap," Etienne Pelaprat and Michael Cole describe the human eye's unceasing saccade movements as an essential aspect of visual perception. If cameras and sensors contrive to hold an image—say of a single, printed letter—precisely in place, fixed in relation to the retina, the image fades to gray for the subject, losing its distinctiveness and becoming invisible. The eye sees by constantly sampling the visual universe, and seeking out boundaries and edges, by glancing across the real over and over again. In biological terms, we perceive discontinuously, taking repeated samples of reality and sending them up the brainstem. The imagination, these authors argue, then steps in to assemble a continuous experience from these pieces, stitching together a fantasy of completeness, of embodied solidity, from the fragmentary samples of our senses and our own memories, presumptions, and continuing self-narratives. Causality and empathy begin here, in the tireless story-building engines of the brain, activating memory and mirror neurons, nostalgia and anticipation, to spin a tale of the self and the world. Psychologists who study resilience marvel at the ability of some people to take on setbacks and discouragements without losing the thread of their narrative, without being unduly discouraged or disordered by them. Resilience is the ability to find a way past unpleasant surprises and either resume the story where it left off or revise it on the fly to incorporate new information.

Science fiction is a training ground for imaginative resilience because it allows us to practice alternative causalities, alternative empathies. It reminds us that the impossible is not impossible to imagine. The exercise of exploring what could happen if we changed the rules is essential training, now more than ever, because it is becoming increasingly clear that the old rules have failed us. If we are going to survive not just this pandemic (and the next one, and the one after that) but the rising tides and temperatures, the rapidly attenuating pyramid schemes of the ultra-rich, and our teetering commitment to global democracy, we need to understand causality and empathy in a deep and flexible way. In order to create better futures, we need to imagine them together, including those who have been displaced, disenfranchised, and disenchanted by the mounting challenges of the twenty-first century. We need to think of imagination as a process, and maybe as a duty: part of our broader responsibility toward future generations. This is a structure of feeling,

but also a structure of care: care for ourselves, and for the ones who are not yet here, the future unborn. Imagination is the ignition system for these capacities to act and think together: empathy, anticipation, and resilience.

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SYMPOSIUM: BEYOND BORDERS

Image by Reimund Bertrans
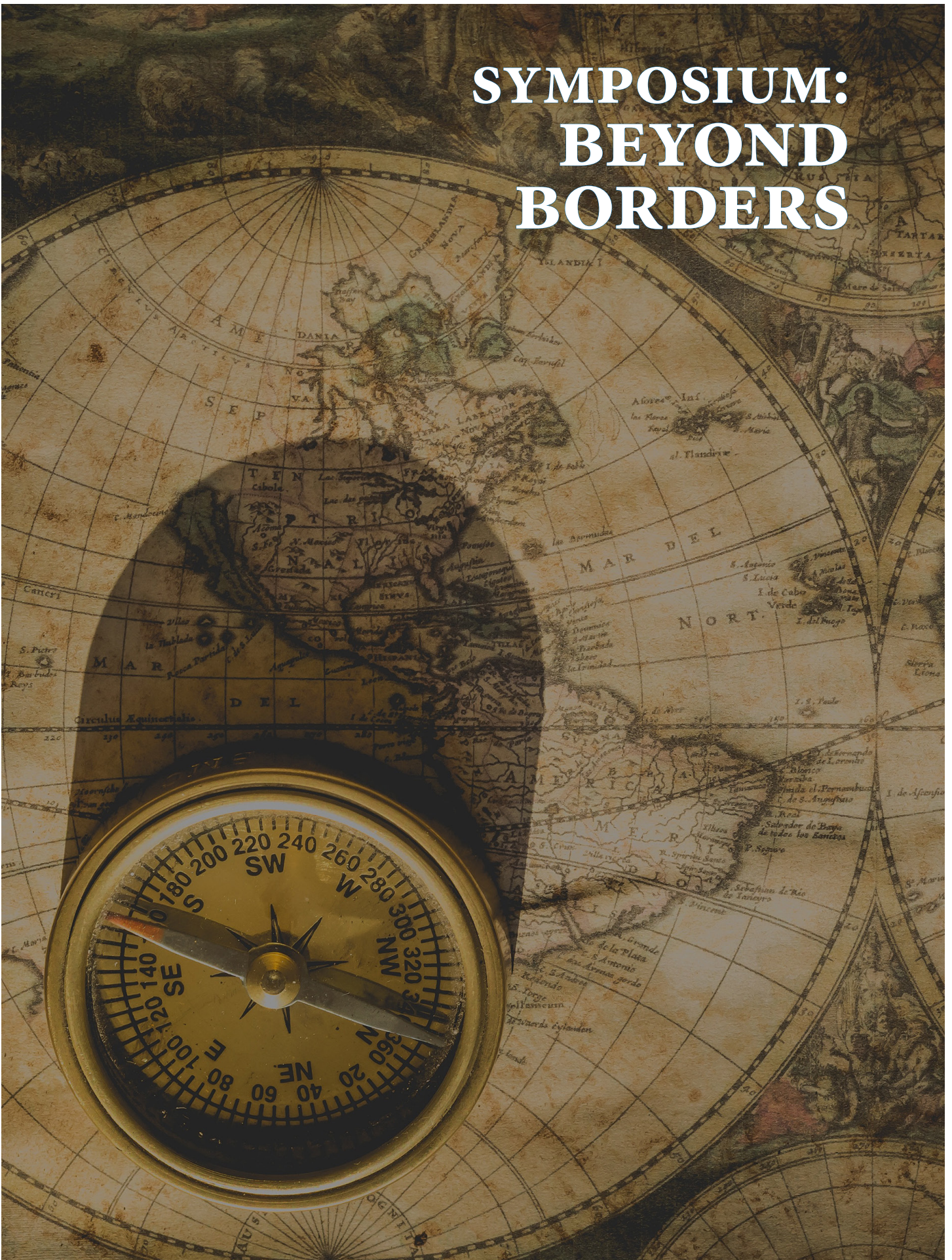
The Beyond Borders Conference

The LSFRC Directorate

"Beyond Borders: Empires, Bodies, Science Fictions" took place on the 10-12 September 2020 as the fourth annual conference of the London Science Fiction Research Community (LSFRC). The Beyond Borders theme for our 2019-2020 programme arose from a desire to work more actively to decolonize our thinking and reading practices. Mindful of the ways in which the violence of borders visible and invisible—between territories, bodies, species—shaped and rendered precarious lives across the world in an extension of the centuries-long project of colonialism, we sought to explore how SF can help us think beyond borders, while helping us to dismantle those that exist in the present. In turn, our discussions and experiences working toward that theme helped birth our present focus on Activism & Resistance (see also Francis's contribution to the UK Report elsewhere in this edition of the SFRA Review).

As part of our preparations for the event, we formed hugely generative partnerships with the London Chinese Science Fiction Group and SF Beyond the West, and also enjoyed hosting a stimulating and enlightening reading group series organized around the theme. 2020 brought with it unexpected developments, in response to which we switched to an online format for the conference, and also released an anti-racism statement with accompanying resources. The call for papers elicited a high level of interest and response, at one point even catching Bruce Sterling's eye. The ranks of our wonderful conference guests included Emily Jin and Sawad Hussain for a roundtable discussion of SF & Translation; Chen Qiufan, Larissa Sansour, and Linda Stupart for the Creator Roundtable; Michael Darko and Jordan Wise for an inspirational "Provocations Beyond Fiction" session; and Florence Okoye and Dr Nadine El-Enany as keynote speakers. In addition, the event featured fifty-five speakers across four continents presenting a scintillatingly diverse array of top-notch papers and workshops, as well as a grand total of over two hundred registrants, of whom over half took up the option of free registration. The conference itself went about as smoothly as expected, particularly considering that we had practically no prior experience of running an online event of this size, and particular thanks are due to outgoing LSFRC directors Katie Stone and Tom Dillon, resident archmistress of the digital Sasha Myerson, conference designers Sinjin Li, whose amazing artwork and graphics for the conference can be seen below and in the conference programme, and, of course, all our allies and contributors.

While we were pleased that so many people from so many different countries and backgrounds attended the conference, we at LSFRC are committed to doing what we can to facilitate people's access to our events, whether that's during or before the event proper or after the fact. Our website features a post with various recordings and transcripts from the event—including video recordings of the two keynote lectures—shared with the consent of their authors, and we will be continuing to update the post with new material. To this end, we are delighted to have been able to collaborate with the *SFRA Review* in the presenting of the Beyond Borders

symposium. Featuring twelve papers from contributors based in India, The Philippines, Turkey, the UK, and the USA, we are honored to be able to share such an excellent array of scholarship, both as an indication of the warm, exciting, affirming occasion that was the Beyond Borders conference, and as a set of intellectual contributions in its own right.

—Ibtisam Ahmed, Angela Chan, Cristina Diamant, Francis Gene-Rowe, and Rachel Hill on behalf of the LSFRC team

"Beyond Borders Conference Art" • Sinjin Li (2020)

"We're modelled from trash": Corporeal and Corporate Borders in Kazuo Ishiguro's *Never Let Me Go*

Agnibha Banerjee

As dusk gnaws upon the life he has so painstakingly crafted for himself, the butler Stevens, in the last pages of Kazuo Ishiguro's T*he Remains of the Day* (1989), has an epiphany which, in an ephemeral moment of illumination characteristic of much of Ishiguro's fiction, reveals to him the futility and disgrace of a position he has willingly sacrificed the best years of his life to: "All those years I served him, I trusted I was doing something worthwhile. I can't even say I made my own mistakes. Really—one has to ask oneself—what dignity is there in that?" (256) Like the painter Masuji Ono in Ishiguro's *An Artist of the Floating World* (1986) who, at the twilight of his life, admits that though he "believed in all sincerity" that he "was achieving good for [his] countrymen," he was in fact "mistaken", (124) Stevens joins the hapless crowds of those situated at the margins of power, faceless, docile, and complicit in systems which their limited interpretative resources cannot fully comprehend. In Ishiguro's oeuvre, such an instrumentalization of life— marked by the reduction of human beings to automatons subtly coerced to serve as means towards the propagation of ends they can only partially decipher—reaches its terrifyingly literal culmination in *Never Let Me Go* (2005), where the dominated group is denied that which had hitherto been a tautological, if somewhat insufficient, necessity—humanity.

As Myra J. Seaman points out:

> the human long presumed by traditional Enlightenment and post-Enlightenment humanism is a subject (generally assumed male) who is at the centre of his world (that is, the world); is defined by his supreme, utterly rational intelligence; does not depend (unlike his predecessor) upon a divine authority to make his way through the world but instead manipulates it in accord with his own wishes; and is a historically independent agent whose thought and action produce history. (1)

This category of the human, however, when put to critical scrutiny by the tools of deconstruction and discourse analysis, is revealed to be an amalgamation of ideologically implicated narratives which, operating upon the politics of exclusionism, have been systematically used to designate certain demographics as "less than human", (3) legitimizing their discrimination and oppression. The "human" has always been a privileged construct, awarded by and to those with the material and cultural capital to define themselves thus, and consequently not everyone whose biology—itself an effect of power—would ostensibly identify them as homo sapiens were accorded the benefits of that tag. The definition of the human is, however, thrown into disarray in face of the challenge posed by the clones in *Never Let Me Go*, whose organs are harvested to prolong the longevity of the "normal" humans. In possession of all those cerebral and limbic attributes hitherto cherished as exclusively human, the clones represent a distinctly posthuman

threat, symptomatic of major scientific breakthroughs in the fields of biotechnology and genetics. Evoking an unsettling sense of dread akin to the Freudian uncanny where that which ought to have remained hidden is frightfully exposed, the prospect of human cloning dissolves the abiding enigma of the human—its supposed irreproducibility and irreplaceability—into a murky flux of protein strands and cytoplasmic fluid.

In Ishiguro's England, the abhorrence for the clones is hinted at throughout the text, culminating in Miss Emily—one of the "guardians" at Hailsham, the clones' apparently idyllic boarding school—declaring: "Afraid of you? We're all afraid of you. I myself had to fight back my dread of you all almost every day … There were times I'd look down at you all from my study window and I'd feel such revulsion." (264) What provokes this primaeval dread is perhaps an unconscious awareness of the inhuman mechanisms—the clockwork framework and the arbitrary codes of biochemical data that genetics argues are the fundamental 'building blocks' of all life—within the human. The terror of an erosion of difference between the human and the non-human, augmented further by a repressed cognisance of familiarity and identification, results in the "protective projection of our fears and anxieties onto the recognisable form of the embodied human clone" (Marks 3) who is denigrated, and, in *Never Let Me Go*, commodified and murdered. It follows then, as Leon R. Kass emphasises in *Flesh of my Flesh*, that much of the bioethical uproar against cloning is an endeavour to define and police the frontiers of the human, banking upon an "intuit" disgust against artificial genetic replication:

> We are repelled by the prospect of human cloning not because of the strangeness or novelty of the undertaking, but because we intuit and feel, immediately and without argument, the violation of things we rightfully hold dear. … Indeed, in this age in which everything is held to permissible as long as it is freely done, in which our given human nature no longer commands respect … repugnance may be the only voice left that speaks up to defend the central core of our humanity. Shallow are the souls that have forgotten how to shudder. (Kass 20)

In *Never Let Me Go*, however, such an appeal to an ahistorical, inviolable "central core humanity" is susceptible to the mechanisms of a far more sinister and all-pervasive force—the market.

The capitalist market, with its ruthless, amoral logic of supply and demand, production and consumption, supersedes and subsumes humanist prejudices against cloning, with bioethics playing second fiddle to the biopolitical need to prolong the lifespan of the privileged "normal" humans:

> Suddenly there were all these new possibilities laid before us, all these new ways to cure so many previously incurable diseases. This was what the world noticed the most, wanted the most. And for a long time, people preferred to believe these organs appeared from nowhere … There was no going back … their overwhelming concern was that their own

children, their spouses, their parents, their friends, did not die … They tried to convince themselves that … you were less than human, so it didn't matter. (*Never Let Me Go* 258)

The genome, which genetic determinism holds to be the governing algorithm of life, thus becomes the (pre)text for the capitalist appropriation and instrumentalization of biopower. Biopower, as Michel Foucault enunciates, is a force that concerns itself with "the administration of bodies and the calculated management of life … optimising forces, aptitudes, and life in general without the same time making them more difficult to govern." (*The History of Sexuality* 141) In the dystopian reality of Never Let Me Go, the rigidity and perpetuity of the boundary between the humans and the clones is reinforced in the following ways: childhood indoctrination, fantastical tales of escape, and denial of the humanity of the clones. These measures foreclose the possibility of subversion, eradicating transgression even before its inception. Operating in tandem with each other, these interpellative forces reduce the embodied materiality of the clones to "docile bodies," that enter "into a machinery of power that explores it, breaks it down, rearranges it", (*Discipline and Punish* 134) and commodifies it in an economy of extraction masquerading as an economy of exchange. The compulsory organ removals are called "donations" (giving it an altruistic and voluntary veneer), and in death (though the word itself is never used), the clones are said to "complete," ironically suggesting that the clones become fully realised subjects only when their vivisected objectification culminates in a total annihilation of existence.

The vestiges of resistance that remain in the novel, most notably the use of the clones' artwork to determine whether or not they qualify as human, serve not to alleviate their exploitation but to further enmesh and implicate them in a network of liberal humanist power-knowledge structures that (re)inscribe their dehumanisation. Devastated and disillusioned that the myth of a deferral of organ donations was precisely that, a myth, Tommy, one of clones reared at Hailsham, enquires of Miss Emily: "If the rumours weren't true, then why did you take all our art stuff away? … Why did we do all that work in the first place? Why train us, encourage us, make us produce all of that?", (*Never Let Me Go* 254) to which she retorts: "We took your art away because we thought it would reveal your souls. Or to put it more finely, we did it to *prove you had souls at all*." (255) Ironically, it is precisely this attempted identification with the human—who in humanist thought is the exclusive proprietor of the "soul"—through a flawed appeal to Romantic conceptions of art, that dooms the clones, calcifying their position as disembodied and disembowelled utilities. As J. Paul Narkunas observes:

> Hailsham and other elite clone farms were an humanitarian gesture to foster [the clones'] happiness while ensuring their compliance, while also assuaging any stings of conscience among the "natural humans" who supported these institutions, for creating humans whose only value is through organs that must be donated. … Ishiguro comments on the transformation of the affective values of humans— their interiority, their souls, and their empathy—into a kind of capital for humanitarian organisations. (*Reified Life* 236)

Ishiguro, however, does not entirely abandon the empathetic potential of art. Instead, as Shameem Black contends, "As an alternative to humanist modes of representation, Ishiguro's inhuman style suggests that only by recognising what in ourselves is mechanical, manufactured, and replicated—in a traditional sense, not fully human - will we escape the barbarities committed in the name of preserving purely human lives." (3) In *Never Let Me Go*, Ishiguro emphasises the need for a radical remapping of the cartographies of the human that would celebrate difference through the deployment of a posthuman bioethics that does not draw borders dictated by discriminatory notions of origins and originality, but instead embraces the all too human non-human, both within and without. Exemplary of this "new aesthetics of empathy for a posthumanist age" (Black 20) is Tommy's artworks which celebrate difference through a juxtaposition of the organic and the mechanical, of the automata within the human and the human within the automata: "The first impression was like one you'd get if you took the back off a radio set: tiny canals, weaving tendons, miniature screws, and wheels were all drawn with obsessive precision, and only when you held the page away could you see it was some kind of armadillo, say, or a bird." (*Never Let Me Go* 187) As biotechnology and genetics continue to corrode the precarious boundaries of the human, as capitalism persists in using science as a means to dissect and commodify existence, Ishiguro's clones, albeit "modelled on trash" (164), like Tommy's "fantastic creatures", (188) posit an alternate vision of the posthuman body, one that achieves a chiasmatic intertwining of the organic and the mechanical, one that revels, independent of the tyranny of the market, in the other-than-human within the human.

Works Cited

Black, Shameem. "Ishiguro's Inhuman Aesthetics." *Modern Fiction Studies*, vol. 55, no. 4, Winter 2009, pp. 785-807. http://www.jstor.org/stable/26287383.

Foucault, Michel. *Discipline and Punish: The Birth of the Prison*. Translated by Alan Sheridan, Penguin, 2019.

--- *The History of Sexuality, Volume 1: The Will to Knowledge*. Translated by Robert Hurley, Penguin, 1998.

Freud, Sigmund. *The Uncanny*. Translated by David McLintock, Penguin Modern Classics, 2003.

Ishiguro, Kazuo. *An Artist of the Floating World*. Faber, 2013.

--. *Never Let Me Go*. Faber, 2010.

--. *The Remains of the Day*. Faber, 2013.

Kass, R. Leon. "The Wisdom of Repugnance." The Flesh of My Flesh: The Ethics of Cloning Humans. Edited by Gregory E. Pence, Rowman and Littlefield, 1998.

Marks, John. "Clone Stories: 'Shallow are the souls that have forgotten to shudder." *Paragraph*, vol. 33, no. 3, November 2005, pp. 331-353. http://jstor/stable/43151855.

Narkunas, J. Paul. *Reified Life: Speculative Capital and the Ahuman Condition*. Fordham University Press, 2018.

Seaman, J. Myra. "Becoming More (than) Human: Affective Posthumanisms, Past and Present." *Journal of Narrative Theory*, vol. 37, no. 2, Summer 2007, pp. 246-275.

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Climate Change and Contemporary Chinese Science and Speculative Fiction: Invisible, Extractive, and Uneven Boundaries

Angela Chan

In recent years, Chinese language science and speculative fiction (SF) narratives have increasingly highlighted climate issues such as sea-level rise, planetary temperature changes, and environmental themes like ocean plastic, e-waste pollution, and urban waste management industries. Alongside issues of globalised techno-capitalism and mass consumerism, Chinese authors have also offered cultural considerations of current social topics in China, such as migrant laborer rights, widening socio-economic disparities, and industrial waste activism. Whilst the growing attention in contemporary Chinese SF on domestic environmental affairs is one half of the story, narrating China's environmental and climate relations overseas is the more difficult other.

This paper explores the need for and potential of Chinese SF to address climate justice beyond the current borders of mainland China, to reflect on the country's own environmental practices internationally, and to gesture towards long term cultural dialogues with the global climate justice movement. Whilst I only focus on one culturally and geographically specific area, my aim is to also offer a critical view on the growing global environmental and climate SF subgenre. I believe it is essential to situate these narratives within the urgent consequences deriving from the realities of geopolitical problems and the worsening climate crisis. Fundamentally, it should reiterate how the global climate injustices that many already disproportionately experience daily are far from being speculative fictions.

I illustrate this through my title frames for discussion: the invisible, extractive, and uneven boundaries that shape the ecological, socio-political, and cultural processes relating to climate change. I also briefly indicate why it is necessary to understand how environmentalism works differently in China compared to other places, in order to better orient our reading of Chinese climate and environmental SF. I then outline the thematic portrayals of climate and environmental issues in key contemporary Chinese SF stories. For this specific paper, I focus on authors in mainland China, rather than other Chinese-speaking geographies. Drawing from combined literary, social science, and anti-colonial climate research, I explain why Chinese SF writers should look beyond domestic Chinese environmentalism and include geographies of China's extractive practices in Africa and Southeast Asia. Reflecting on contemporary Chinese SF authors' and scholars' ambitions to redefine global SF, I close by encouraging Chinese climate SF to recognise and tell the kinds of worldbuilding stories that defy hegemonies and to develop an intersectional approach to global climate storytelling from one region of the world to another.

Invisible, Extractive, and Uneven Boundaries

To begin, I am interested in reading environmental and climate SF from mainland China through the invisible, extractive, and uneven structures that drive the climate crisis and our cultural responses. These often interweave, blur, and overlap causes and effects. I argue that speculative narrative tools can allow clarity, in order to create more tangible directions in the face of a daunting reality. With invisible boundaries, I refer not only to the metaphorical concept of borders in SF scholarship, through which the genre allows us to cross into the unknown, but in particular who and what have been rendered invisible by which stories get told. The SF author and Chinese literature professor Xia Jia comments that "the science fiction from non-English speaking countries, including Chinese science fiction, cannot be found (in the history of SF) ... In other words, Chinese science fiction is invisible, it is unseen and folded into the history of science fiction." (Wang) I add that whilst the climate movement and climate SF have gained mainstream traction, especially in the past decade, it should be recognized that many from the non-Anglophone world's politics and cultural sectors are yet to break through the invisible boundary maintained by those with the material and social benefits of systemic privileges.

The climate crisis was caused—and continues to be sustained—by colonial violence against people and nature in pursuit of the accumulation of wealth and power through industrial petro-capitalism. To cross a boundary denotes a severance of an agreement, trust, or ethics. State and corporate funded extractivism cross the boundaries to scar lands, bodies, and cultures, and continue to devastate ecologies around the world in their efforts to profit from natural resources. As we read climate SF stories, it is vital not to detach from a sense of justice of reimagining the political structures to hold corporate and state culprits to account, and fall into an aestheticization of a crisis, where techno-fixes bury the colonial histories of climate change. I think about how cultural responses to political crises are not immune from adopting their own extractivist mindset.

This leads me to question and foreground how the uneven consequences for human and non-humans are presented in climate narratives. For people, the exploitative processes disproportionately affect Black, Indigenous, and people of colour, the working class, disabled people, our LGBTQIA+ communities, and other minoritized groups. The boundaries between ecological, socio-economic, and humanitarian issues overlap as simultaneous crises. Therefore, we need our climate narratives to be steered by social and ecological justice combined—also known as climate justice. With these interrelated boundaries and processes in mind, we can more constructively examine climate SF in its political capacities.

Environmentalism in China

It is important to briefly outline China's domestic environmental affairs and how they are politically structured. Recently, I wrote a report for NüVoices on the panel Climate and Gender in China, co-organised by Young China Watchers (for their environmental webinar series) and NüVoices, which is an international collective of self-identified women and non-binary creators and researchers working broadly on the subject of China. The speakers, environmental journalist

Karoline Kan and Zongqi Yu (climate change activist and the Chinese Youth Delegate for the 24th UNFCCC), established that organizing in Chinese environmentalism is very different from that of other parts of the world. It is a top-down system, in which environmental organizations operate as an extension of the government's policies. Both Kan and Yu argued that more needs to be done to raise the cultural awareness of environmental and climate issues, and offer solutions in education, policy, and (social) media engagement, which can hopefully lead to generative public discussion.

While I observe that Chinese SF stories increasingly highlight climate and environmental themes, I do not expect authors to be responsible for directly shifting climate politics. Rather, I identify the fact that their stories nurture some degree of cultural awareness around these urgent issues, in the way that Kan and Yu hope for in multifaceted public engagement strategies.

Contemporary Climate and Environmental Chinese SF

In the following section, I share a few of my favourite climate and environmental SF stories by authors from mainland China. In the past two years, we have read most of these following stories as part of a monthly reading community that I co-founded, the London Chinese Science Fiction Group. While we do not curate the reading list thematically around climate issues, it is interesting to observe how many of these do encompass themes insofar as they illuminate the fast-paced social changes China has been going through in recent decades.

Folding Beijing / 《北京折叠》 by Hao Jingfang / 郝景芳 (written in 2012 and translated by Ken Liu in 2015) is a social critique set in near-future Beijing. The city has been reconstructed in order to geospatially segregate its inhabitants into three locked social classes, such that they unevenly share hours on the Earth's surface on a rotational 48-hour period. The working class, largely laborers processing the city's waste, is the largest, and will never experience social mobility. The protagonist, working class Lao Dao, has a near-impossible secret mission to deliver a message between the two upper classes. He finds himself feeling existentially angered after accidentally winding up in a policy meeting aimed at replacing his class livelihood as a laborer with automated waste industries. It is a powerful story that holds social realism at the core of its speculative environment, commenting on those compromised by so-called progress, and reflecting on the widening wealth gaps as China continues to economically develop. It is a well-known story internationally, too, having won the 2016 Hugo Award for Best Novelette.

The Story of Dao by Regina Kanyu Wang / 王侃瑜 (written in English in 2019) is a queer multispecies ecology SF text that illustrates how an island (*dao* in Chinese) first experiences and learns about climate change. They realize they must communicate a plan to all the other species living on their back, such as the gingko tree and various animals, and do so through a cybernetic root system. Collectively, they work to mitigate the sand erosion by sea rise. Last year, I invited the author to contribute her story in my curated exhibition *Climate Knowledges* (2020) in Rotterdam. Regina collaborated with the musician Tessa Qiu, who narrated the story as a sound piece.

Poems and Distant Lands / 《为了生命的诗与远方》 by Gu Shi / 顾适 (2019, translated by Ken Liu 2019) deals with ocean plastic pollution, as two innovators design a technological apparatus to recycle the unnatural marine materials. After failing to impress their funders enough to launch the project, they leave their sample technology forgotten in the ocean. However, they realize years later that it has given rise to biomimetic ecological systems underwater. The author herself is an urban planner who speculates about how cities will face these challenges in the coming decades. Gu Shi has discussed with me how climate and environmental SF in China has grown to become a very interesting topic for writers like herself, in how it connects the imagination with real world impact.

The Reincarnated Giant / 《转生的巨人》 by Wang Jingkang / 王晋康 (2005, translated by Carlos Rojas 2012), tells of a wealthy elderly man who pays for a procedure to be reborn as a baby with his adult brain fully functional. His insatiable appetite exhausts the fictional nation's resources and labor force, until he has grown as big as a mountain, and dies unable to hold up his own heavy head, as he is still a baby. It can be read as a critique of how unending neoliberal consumption overlaps with the patriarchal systems that exploit the Earth's resources for individualistic gains. *The Reincarnated Giant* is also a speculation into the complex biopolitics involving anti-aging technologies and legal selfhood.

Whilst all the stories mentioned so far are short stories or novelettes, *The Waste Tide* / 《荒潮》 by Chen Qiufan / 陈楸帆 (2013, translated by Ken Liu 2019) is a novel. It details the laboring class resistance of Silicon Isle, a fictional e-waste landfill, that is based on one of the real world's biggest e-waste landfill sites, Guiyu, in China's Guangdong province. Alongside a protagonist who becomes a cyborg after an e-waste viral infection, the novel also interestingly depicts international corporate relations and leads readers to reflect on our complicity in creating the inhumane working conditions of those barely surviving on the e-waste recycling industry.

This selection of titles not only reflects some of the current literary styles in contemporary Chinese writing, from the "ultra-unreal" (Ning) to SF realism to homegrown cyberpunk, but they also remind us that many elements from environmental and climate narratives are globally relatable in their anxieties and the desire for solutions.

Politics of Global Climate Change

Following these selected blurbs, I now look at the need to situate climate and environmental SF to the real, international challenges of today. Particularly, it is insightful to pay attention to how, like their Western counterparts, Chinese state and commercial activities are creating uneven developments and socio-ecological degradation that impact people in different geographies within and beyond their own. There are many complex threads we could analyze to examine China's environmental footprint both domestically and as an export to other countries in Africa and Southeast Asia, with the following being only a few examples.

Returning to Karoline Kan and Zongqi Yu, they point out that China's 2020 summer floods were not only widespread and disastrous, but also most heavily affected poorer rural areas where agriculture is the main land use. This impacts how the most socio-economically disadvantaged will recover, amidst a pandemic no less. Also, I add that since China banned other countries (largely from the developed West) from delivering the world's recyclable waste to its shores, this waste is now shipped to its neighbors in Southeast Asia. Unfortunately, this is where the processing facilities and working conditions for laborers may be even less developed and less safe. Another example of international environmental degradation is one that many SF stories across the world focus on: innovating and mass-producing high-tech instruments. China's push towards Industry 4.0 attempts to satisfy high income nations' unending demands. With the iPhone, two of the world's most powerful companies, Apple and Foxconn, profit off the exploitation of migrant laborers. Many face not only excessive overtime, hostility, and violence on the factory floor, but worker suicides are a common occurrence, as sensitively documented in *Dying for an iPhone* (2020) by Jenny Chan, Mark Selden, Pun Ngai.

Further, the metallic and mineral goods feeding China's Industry 4.0 come mostly from Africa. With industrial development projects and resource extractions abroad, China's efforts to stockpile minerals is an issue of socio-environmental concern. In a piece on Tor.com, Tochi Onyebuchi, an American science fiction writer and former civil rights lawyer of Nigerian descent, commented on China's "debt colonialism" in Africa as "further crushing the promise of a self-sustaining African infrastructure and see continuity." (Onyebuchi) I want to add that there are also discussions to be had about the anti-Black racism against migrant laborers from African nations working in Guangzhou when the Chinese city locked down over COVID-19, and many such cases were well documented on social media (see Black Livity China).

Chinese SF and Global SF

So what does it mean for Chinese SF to be gaining attention in the global SF arena? Perhaps it is a chance to narrative one's own story, to defy racialised stereotypes and assumptions based on political conditioning? A couple years ago, author and translator Ken Liu offered the suggestion in his edited anthology I*nvisible Planets* (2016) that readers should come to Chinese SF without the aim to find Chinese cultural characteristics, whatever you desire or imagine them to be. He later explains, "When you go into space, you become part of this overall collective called "humanity." You're no longer Chinese, American, Russian or whatever. Your culture is left behind." (Liu in Tsu) However, I take the opportunity in this very moment and momentum of SF from mainland China to resituate this.

In Chinese climate and environmental discussions, where policies illustrate idyllic and natural landscapes of China, we can also find eco-nationalistic depictions of pristine plains in popular culture. But, in examples like the recent live-action film *Mulan* (2020), the ethnic majority in China, Han, is portrayed as defiantly hegemonic through these scenes of beautiful landscapes. The realization later dawns upon reading the film's rolling credits that only miles away from the filming

location in Xinjiang are the mass detention and labor camps that have been imprisoning Uighurs and other Turkic Muslims, in what is considered by international human rights campaigners as an ongoing genocide. Humanity isn't collective, cultures are not left behind, and most of us are not going to space.

Further, whilst African SF growingly narrates themes of Chinese "neocolonialism, there has been little writing from Chinese SF on this. Scholar Nedine Moonsamy authored a paper called "Science Fiction Offers A Useful Way To Explore China-Africa Relations" (2019). Her research focuses on three short science fiction stories from Africa, which look at the cultural perspectives of this situation, as indicated by speculative narratives of China and Africa's futures together. I would like to encourage Chinese SF scholarship and authors to also work collaboratively across borders and cultures to untangle these events and relationships. If we are to hope for speculative fiction to culturally influence or resonate with real life climate and social justice, we need to integrate the politics of global climate change to these narratives.

I return to the title of my presentation, particularly on the invisible boundaries, as a reminder to foreground the people and issues that are actively *invisibilized* in our stories, be they our speculative and science fictions or our day-to-day news. When I started the London Chinese Science Fiction Group, I wanted a space to critically discuss and broaden the insights of our multilingual, international communities. I hope to achieve this by refusing to follow a canon-in-the-making that slowly embodies and reiterates the existing colonial hegemonies in SF, which we can instead deconstruct.

I finish with a quote from the author Jeannette Ng's recent piece in response to *Mulan* (2020), which I feel is generative in repositioning Chinese SF in relation to who gets to tell which stories for whom. In "Beyond Authenticity: the Spectre of Han Hegemony" (2020), Ng emphasises that there are "...multitudes contained within "Chinese" culture and storytelling. There is no single, unified "Chinese"-ness and to imply there is only one Acceptable Cultural Narrative for All Chinese People is itself part of the problem. To claim sole authority and ownership of these units of cultures reinforces Han hegemony."

As the city of Chengdu bids for WorldCon 2023, one of the biggest dates in the global SF calendar, I encourage the Chinese SF community to recognize and tell the necessary worldbuilding stories that defy hegemonies, as China calculates its new era of global relations.

Works Cited

Chan, Angela. "Gender And Climate Change In China." Nuvoices.Com, 2020, https://nuvoices.com/2020/09/02/watch-gender-and-climate-change-in-china-panel/. Accessed 2 Sept 2020.

Chan, Jenny et al. *Dying For An Iphone*. Pluto Press, 2020.

Chen, Qiufan. *Waste Tide*. Head Of Zeus, 2019.

Hao, Jingfang. "Folding Beijing - Uncanny Magazine". *Uncanny Magazine*, 2015, https://uncannymagazine.com/article/folding-beijing-2/. Accessed 11 Aug 2020.

Liu, Ken, editor. *Invisible Planets: An Anthology Of Contemporary Chinese Science Fictio*n. Head Of Zeus, 2016, pp. 13-18.

Moonsamy, Nedine. "Science Fiction Offers A Useful Way To Explore China-Africa Relations." *The Conversation*, 2019, https://theconversation.com/science-fiction-offers-a-useful-way-to-explore-china-africa-relations-121519. Accessed 11 Aug 2020.

Ning, Ken. "Writing in the Age of the Ultra-Unreal" *New England Review*, vol. 37, no. 2, Nov. 2016, https://www.nereview.com/vol-37-no-2-2016/writing-in-the-age-of-the-ultra-unreal-2/ Accessed 17 Dec 2020.

Ng, Jeannette. "Beyond Authenticity: The Spectre Of Han Hegemony." Medium, 2020, https://medium.com/@nettlefish/beyond-authenticity-the-spectre-of-han-hegemony-c1e3b5fc1b98. Accessed 17 Dec 2020.

Onyebuchi, Tochi. "I Have No Mouth, And I Must Scream: The Duty Of The Black Writer During Times Of American Unrest." Tor.com, 2020, https://www.tor.com/2020/06/01/i-have-no-mouth-and-i-must-scream-the-duty-of-the-black-writer-during-times-of-american-unrest/. Accessed 11 Aug 2020.

Gu, Shi. "Poems And Distant Lands By Gu Shi — XPRIZE." XPRIZE, 2020, https://go.xprize.org/oceanstories/poems-and-distant-lands/. Accessed 11 Aug 2020.

Tsu, Jing. "Why Sci-Fi Could Be the Secret Weapon in China's Soft-Power Arsenal." Ft.com, 2020, https://www.ft.com/content/85ff1488-82ec-11ea-b6e9-a94cffd1d9bf?fbclid=IwAR1xXDdbGXGtzrsjjvF7fBTMlnMuXrfby1eR6pw0Q6fmaBpHBjuA3SsXMjY. Accessed 1 Jan 2021.

Wang, Jinkang, translated by Carlos Rojas. "The Reincarnated Giant." *The Reincarnated Giant: An Anthology Of Twenty-First-Century Chinese Science Fiction*, edited by Mingwei Song and Theodore Huters, Columbia University Press, 2018. Accessed 5 Jan 2021.

Wang, Regina Kanyu. "The Story Of Dao." *An Invite To Eternity - Tales Of Nature Disrupted*, edited by Gary Budden and Marian Womack, Calque Press, 2019. Accessed 5 Jan 2021.

Wang, Yao (Xia Jia). "Crossing The Boundaries: A Conversation With Invisible Chinese Science Fiction" Xia Jia (Wang Yao)." 2020.

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Secured, Contained, Protected: Consensus Reality in the SCP Foundation

Krushna Dande

Front Page of the SCP Wiki

The SCP wiki (http://www.scpwiki.com/) is a collaborative writing website in the form of the hypertext archive of a clandestine paragovernmental organisation known only as The Foundation. This archive originated in the tradition of creepypasta, a genre of internet-based writing that leveraged paranoia, urban fantasy, cosmic horror, and as a rule was anonymous. The seed of SCP was a post made in 2007 on the /x/ paranormal board on 4chan, describing a monstrous entity being rigorously contained. This comparatively innocuous anomaly was titled SCP-173, (http://www.scp-wiki.net/scp-173) but its power lay not in the elaborate structure in which it is now set, but rather in its act of positing such a structure, one whose allure was so great that it had to be created. This has shades of the global scholastic conspiracy imagined by Borges in *Tlön, Uqbar, Orbis Tertius*, where a cosmopolitan group of scholars creates a fantastical world so thorough and compelling that this second world is willed into existence.

In order to participate, the writer/reader must step into the subject position circumscribed by the structure—in a sense the writer/reader is "spoken for" by SCP. One gets the sense that one has gained access to something that was meant to be hidden, that the fact of having accessed

it has led one to be marked or condemned. The bulk of this archive is in the form of SCP documents (standing for Special Containment Procedures), which are "summaries of anomalies and emergency procedures for maintaining or re-establishing safe containment in the case of a containment breach or other event". (http://www.scp-wiki.net/about-the-scp-foundation) Each document relies on the place prepared for it by the others and also on the slow negotiation of canon formation among this community. Much of the content of SCP is in the form of Interview Logs, Addenda, Research Notes, and the other "secretions of an organism" that is the archive of a secretive corporation, complete with arbitrary redactions of names, dates, places, or anything else. Adherence to this formal apparatus is necessary for a sort of verisimilitude, and for a reader to reach what one may call the "story" told by a document one has to get past technical details written in a clinical style, drained of any affective response, dehumanized, and bureaucratized. By placing a rigid hierarchical structure over each one, the story squirms in its containment. The SCP archive refers to itself, it accumulates through references to itself, and consumes all sorts of writing in the formation of its archive. (tasha203)

The SCP wiki describes perfectly what Istvan Csicsery-Ronay Jr. calls "[...] aestheticized cult-behavior, participation in an emotional community based in noncoercive structures, literal masquerade, and pleasurable stories—in short, a ludic cult". (46)

The Reality of the Foundation

The Foundation is described as

> [operating] beyond jurisdiction, empowered and entrusted by every major national government with the task of containing anomalous objects, entities, and phenomena. These anomalies pose a significant threat to global security by threatening either physical or psychological harm.

> The Foundation operates to maintain normalcy, so that the worldwide civilian population can live and go on with their daily lives without fear, mistrust, or doubt in their personal beliefs, and to maintain human independence from extraterrestrial, extradimensional, and other extranormal influence. (http://www.scpwiki.com/about-the-scp-foundation)

There are extremely suggestive points raised in this short description. First is the question of the anomaly. An anomaly becomes, by definition or rather by circumscription, that which cannot be explained through publicly acknowledged scientific procedure. The objects considered anomalous may thus be as harmless as a vending machine that makes coins put into it vanish, or as devastating as a butter knife that can cut through dimensions. The harm being contained then is not only that of damage to life and property, but also to the tacit fabric of material and social reality that allows civilization to exist. The word civilization here is used advisedly, because the mission statement of SCP declares that its task is to guard the borders of the teeming sea of chaos that lies behind the apparent order of the universe. One fruitful comparison with worldly history may be the dawning of the atomic age characterized by scientific research by competing

technomilitary apparatuses into the possibility of nuclear warfare. The annihilating power of a potential weapon meant that inquiry into the atom could not be what we could naively call pure science, and any such inquiry would have results that would always already have been classified. This is illustrated in the incident of the publication of the story "Deadline" by Cleve Cartmill in Astounding Science Fiction a full year before the bombing of Hiroshima and Nagasaki. The description of a fission bomb in the story prompted an investigation by the FBI, because nuclear knowledge was a state secret that one could arrive at without having to steal any documents. (Berger 125-137) In the working of the Foundation, we see a similar paranoiac attitude to anything that may test the boundaries of science.

Another extremely important word to note in this passage is "normalcy" as something to be imposed and jealously protected. For this an example may be in order—if a giant worm were to erupt through the ground while one of us were walking through a crowded scare, causing havoc and terror, the Foundation would send teams to placate and contain the worm and cart it away, then detain everyone in the area, administer amnestics, delete any recordings of the incident on the internet, and create the evidence of a chemical leak and explosion to explain the damage. Thus, the terror does not come only from the idea that a worm may be tunneling under us as we speak, but rather from the worrying possibility that we have already witnessed such an irruption of terror into our reality, and crucially we do not remember it at all. Rather than being whole fabrics of lived experience on which we can rely failing all else, the archives of culture and our own memory become artificed ecologies at the mercy of powers outside our own.

Much of the authority that we may impute to the special containment procedures derives from their use of language. Objects are classed and categorised, their containment variables are specified rigorously, and the descriptions themselves are laconic, empirical, and amoral. The documents function in the tense of "is to be," recusing themselves from any misgivings or argument. All these measures to one end—to convince the reader/writer of the possibility of the paranormal—and were the paranormal to exist, to convince the reader that there would be for them no option but to tacitly assent to the authority of that which would hide it away.

The extent of the disregard to principles of law or observances of human rights may be seen in the case of D-Class personnel who are disposable in the extreme, often prisoners condemned to die, abject people used as test subjects or tasked with extremely dangerous tasks that may end in death or worse. Worse perhaps is the fate of anomalous humans, who once catalogued by the Foundation are no longer part of human society; they are referred to not with personal pronouns but rather with their SCP designation. Interview logs may record their terror and passion but the authority the bureaucracy in overwriting them is paramount and indisputable.

An extremely interesting parallel may be drawn with the seminal work of Suzanne Briet called *What is Documentation?*, where she argues that a deer in a zoo is itself a document. (10) Analogously, we may begin to understand the scientific thrust of the Foundation—since it does not have the luxury of creating localised natures within laboratory settings as mundane science

does, each experiment log for an SCP is an attempt to describe the ways in which its anomaly thwarts material analysis. The epistemic venture of this organisation is apparent: it generates a corpus and a taxonomy, it mobilises the knowledge that it generates in order to engross itself—certain SCP documents cite in footnotes fictional research papers having to do with pataphysical debates and the engineering of reality.

Yet even these inexistent fields of science must have their own codes, their units of measurement, their accepted truisms and their blind spots. The unhomely sciences that are implemented to contain these various artifacts and phenomena are those that either skirt the edges of anomaly, or themselves grow out of it. There are SCPs that are used to contain others, and those that, in being analyzed, yield results that feed the abilities of the Foundation. In a more complex position are techniques and technologies used by the Foundation that are not explicitly anomalous, but are not available to the public at large. These most notably include amnestics. Amnestics are triggers, chemical or otherwise, that are able to erase or modify memories either with specific targets or for vast swathes of time. These may be used on individuals that stumble upon an anomaly, or may be disseminated widely in the case of a containment breach. Other means used by the Foundation include memetic agents, retroactive deletions of cultural artifacts, and in extreme cases even the wholesale falsification of astronomical or fossil records.

The position assumed by the Foundation may be productively read alongside Eric Wilson's work *The Republic of Cthulhu*, which likens Lovecraftian cosmic horror with the shadowy parapolitical workings of espionage and crime syndicates.

> More specifically, the alterity of the monsters and what they signify "is raised to the extreme degree by a systematic emphasis on its complete and utter incompatibility with anything known by means of the senses or reason, understandable by logic, or expressible in discursive language." The issue of the tactile sensibility, or the crypto-materialism of the grotesque (as opposed to the always immeasurable magnitude of the sublime), is essential for the aesthetic effect of cosmic horror. (110)

The crypto-materialism referred to here may be seen as the experience when piecing together a conspiracy theory—the positivist impulse toward the collation of the world as evidence, and the fog of secrecy that obscures and frustrates such a collation. The reader of SCP becomes a consummate conspiracy theorist, who has no choice but to piece together from their movement in a fragmentary corpus the roughly yoked organs and contradictory histories of an organization whose true nature remains out of grasp.

Fan Communities and Canon Formation

Anyone may become a member of the website in order to write, edit, or rate documents, or to participate in the forum. Any canon, as far as one exists, can only be construed by individuals or communities of readers from their necessarily limited knowledge of a vast text being woven and unwoven in each direction. There are somewhat more cohesive portions to this fluid canon, such

as names of researchers and test sites, of accepted procedures and parascientific terms that are part of a common pool that may be used to write or explain parts of this universe. There is thus another level at which the phrase consensus reality may be understood---the maintenance and further growth of the SCP archive is a matter of community contribution and management, and the direction taken by the growing archive reflects both the plasticity and elasticity of the aesthetic sensibilities of those who participate.

One's path through the corpus is not linear but labyrinthine. Navigating through SCP the previous pages that one has read are not closed off to the reader. This is encouraged by the structure, which on the face of it overwhelms any reader/writer with its sheer size. The reader, then, may be imagined as being in a flat circle, equidistant to all other points on the website. The possibility space does not need to be navigated in the unidirectional movement of a novel, nor does it constantly return to a center. All the documents, whose rhizomatic structure is the archive, coexist, and in fact rely on each other even when their literal content contradicts each other. Thus the ergodic path (as described in Espen Aarseth's work *Cybertext*, 1-24) described by the reader is what leads to the formation of their own idiosyncratic archive or headcanon.

"Headcanon" is a neologism used in the fanfiction community with a host of meanings, including a reader's personal interpretation of a corpus, the combination of parts of a corpus held canonical by a reader, or a reader's theory that may even be explicitly denied by the main corpus. The creation of one's headcanon is synonymous with reading this work, because to navigate the archive is to fill it out, to give each new text form by placing it within its place.

What takes shape is an autoreferential fandom that elaborates itself around its own obsessions. A folk mythology that coalesces, ad-hoc, around certain names, certain symbols or obsessions or attitudes. New pages are added and removed and deleted every day, and no one path can be said to have privilege over another—indeed we can imagine two consummate readers or writers of SCP, each of whom have read thousands of SCP articles without ever reading a single document in common. Both would have, through their reading, learned to use the specialized vocabulary of the SCP Foundation, be able to agree or disagree to any degree about the nature of the Foundation, and yet all this without ever being able to compare notes on any specific document. In being a work that by its nature is non-overlapping for any two given readers, this has extremely interesting implications for fields such as fan studies, by being a kind of fiction that gestures away from the tyranny of learned-ness, of textual competence.

Power and reality

The Foundation may be succinctly described as a horrific bureaucracy that functions as a sort of warehouse where every entry is a novum, where the rigid and procedural form of each document itself serves to domesticate and contain any horror and moral misgiving. The imaginary of this global conspiracy is one of a Cold War style world of generalized paranoia and simmering danger. The role of the Foundation is thus in the final analysis entirely necropolitical in the formulation of Achille Mbembe—it is a political organization oriented towards death. (34)

Luc Boltanski argues in his book *Enigmes et complot*s that the anxieties to which the origin of the detective and the espionage novel is owed is a "utopian synthesis between state and nation. The state became an agency that ordered and guaranteed reality inasmuch as that reality was at once lived and instituted, in other words, simultaneously treated as already in existence and as requiring a supplementary effort to bring it into being." (17) The state thus seems to have a power at once omnipotent and fatally lacking—in order to consummate its fantasy of control it must always second-guess itself and outrun its wildest paranoia. The anxieties that give rise to the SCP wiki are of a different order, and they no longer limit themselves to the human terror of war and carnage.

The cosmic stakes of this task place the working of the Foundation outside of the possibility of political discussion. The twinned progress of science and technology enables the containment of anomalies while simultaneously threatening imminent breach—thus the necessity for the Foundation to mobilise any resources and piggyback on any technical apparatus to modify the picture of reality available to the general public. The Foundation intertwines itself with all planetary networks of power and the production of actionable knowledge. Absent a canonical backstory, the Foundation arrogates to itself every possible history—it may be the full flowering of the ancient pretensions of world stewardship held by secret societies, or it may be the product of a modern clandestine effort to hold fast the gates to the uncanny in a world that increasingly makes containment impossible. When discussing the Foundation, a word that we return to time and again is "arbitrary," this is because there is no power to which the Foundation submits outside of its own founding principles. It is not immoral but rather amoral, placing itself as a bulwark against a range of catastrophes, from social collapse and panic to the annihilation of the universe. The Foundation is thus a sort of necrotic ooze that feeds on the underside of reality, or a scab left by a wound on reality.

Works Cited

Berger, Albert I. "The Astounding investigation: the Manhattan project's confrontation with science fiction." *Analog Science Fiction-Science Fact*, Sept 1984, pp. 125-37.

Boltanski, Luc and Catherine Porter. *Mysteries and Conspiracies: Detective Stories, Spy Novels and the Making of Modern Societies*. John Wiley & Sons, 2014.

Aarseth, Espen J. *Cybertext: Perspectives on Ergodic Literature*. JHU Press, 1997.

Borges, Jorge Luis, Andrew Hurley, and Andrew Hurley. *Collected Fictions*. Penguin Books, 1998.

Briet, Suzanne, Ronald E. Day, Laurent Martinet, and Hermina G. B. Anghelescu, *What is Documentation?* English Translation of the Classic French Text, Lanham, MD: Scarecrow Pr., 2006.

Csicsery-Ronay Jr., Istvan. *The Seven Beauties of Science Fiction*. Wesleyan University Press, 2012.

Mbembe, Achille. *Politiques de l'inimitié*. La Découverte, 2018.

"The SCP Foundation." SCP-Wiki.net. http://www.scp-wiki.net/

tasha203, https://www.fanfiction.net/s/3660943/1/Towards-A-Tentative-Theory-of-Fanfiction

Wilson, Eric. *The Republic of Cthulhu: Lovecraft, the Weird Tale, and Conspiracy Theory*. punctum books, 2016.

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Representation without Reproduction: Beyond the Borders of the Science Fiction Map

Gwilym Eades

1 The Maps

These fragments conjure worlds so like, yet so utterly unlike our own. If not the maps, then the narratives they enframe are sparked by that enframement: their existence casts the spell by which we see "other" worlds represented. In that representation, other kinds of societies are performed in the dark spaces of the closed book, whose utterance is an opening. Cartographic utterances meet us in beginning, or part-way. Crosshatch sentences elucidate their names, their naming, in the interstices of the polder-book, the fantastical science fiction, in whose leaves the space-times of other worlds unfurl, watched, watching, always mapped (I think here for some reason of the "Mercator projection" map of Phobos in Stephen Baxter's *World Engines* as a kind of cartographic narrative enabler). We push back with the indigenous subject of such books as those examined here (*Dune*, *Helliconia*, and *Always Coming Home*); we challenge the mapped fragment's representational claims, always with the colonizer's names on maps in, of, and for science fiction; we find examples of all three in the three main works under consideration; adding a fourth kind: the map that is science fiction itself, that represents proposed spatialities of future worlds that, as always, are about now. Science fiction is a map in its particulars and in its totality of speculated, extrapolated future nows that are approached apprehensively, sentence by sentence, book by book. Later I will suggest that the history of science fiction itself might be re-mapped as a history of the Anthropocene through emerging climate fictions, from H.G. Wells's short story "The Star," with its catastrophic (for the Earthlings, but not the Martians) exo-planet-induced climate change; through the works examined here today, which I posit as bridges into the Anthropocenic science fiction map proper; and onward to the latest works by Kim Stanley Robinson, including, for example, the non-cartographic *New York 2140*; or the very cartographic *Fall, or Dodge in Hell*, by Neal Stephenson.

2 Setting

Maps are metonymical for settings in many cases, the former acting as 'pointers' or mnemonic devices for the latter. Ryan et al. (38) note that many societies divide space into sacred and profane worlds, with holy sites acting as portals between the two. *Helliconia* certainly abounds in such sites, with a dualism between Akha of the underworld and Wutra of the skies, and the ways that this dualism drives both the plot and the mutual fears of various societies of the secondary world we inhabit when we read about Helliconia. The Earth Observation Station itself places Helliconia under constant surveillance, rendering the very obvious map/frontispiece quite the obvious paratextual bit of paraphernalia. But the map is diegetic as well, as we see in Vry's scholarly stone tower:

> [o]n one wall hung an ancient map, given [Vry] by a new admirer, it was painted in coloured inks upon vellum. This was her Ottaassaal map depicting the whole world, at which she never ceased to wonder. The world was depicted as round, its land masses encircled by ocean. It rested on the original boulder – bigger than the world – from which the world had sprung or been ejected. The simple outlined land masses were labelled Sibornal, with Campannlat below, and Hespagorat separate at the bottom. Some islands were indicated. The only town marked was Ottaassaal, set at the centre of the globe. (Aldiss 374)

Dune is a more political work, though its setting is famous for its incredible ecology. The absurdity of the various workings of water budgets and how these are funnelled through cognitive estrangements of desert-focused technologies do not detract from the Anthropocenic indigeneities and indignities posited by *Dune*. We have here another Gaia-like creation (and the genealogies of the Gaia-analogy could form the basis of the entire mapping of this bridge into speculative Anthropocenes of the future), one that again appears diegetically within Dune, (Herbet 83) in addition to its obvious placement as the end point/appendix of the work:

> the Duke and Paul were alone in the conference room at the landing field. It was an empty-sounding room, furnished only with a long table, old-fashioned three-legged chairs around it, and a map board and projector at one end. Paul sat at the table near the map board. He had told his father the experience with the hunter-seeker and given the reports that a traitor threatened him. (Herbert appendix)

The importance of projection is here quite marked, especially if we note in the appendix and its metadata that we are looking at a polar projection, something that is quite unusual even in fantasy, where maps of fantastic worlds abound. Ultimately, however, we know that the map is Liet-Kynes's, the anthropologist-gone-native whose non-presence nevertheless structures the novel's plots and politics and schemings. To paraphrase Marlon James, Liet-Kynes is a man who believes in belief. His map is an ethnographic fact.

Always Coming Home is full of both maps and mappings. Its future indigeneities are nonetheless retroactively mapped by the colonising gaze of the unseen, but very much present, anthropologist/ 'editor' of the narrative, whose ethics at least extend towards the insider view and its inclusion, most notably on pages 525-526 of the Library of America edition, where the watershed of Sinshan is reproduced with names not only in the native language, but in their script as well. That *Always Coming Home* includes eight maps, all of which are woven into the very structure and fabric of the narrative, indicates how much more sophisticated, in many ways, the indigenous spatialities of the work have been conceptualized as the insider view of the world being narrated. But as Doreen Massey noted to me at another conference a year before her death, "it is not about the maps." To quote Le Guin from her short essay "On the Frontier": "[i]f there are frontiers between the civilized and the barbaric, between the meaningful and the unmeaning, they are not lines on a map nor are they regions of the earth. They are boundaries of the mind alone."

(Le Guin, 2004, p 29) Le Guin's map, as she later notes in the same essay, is always already full with indigenous places and names. These are truly maps whose spatialities they claim to represent would not dream of reproducing the indignities of the mundane presencing of the current bad-dreaming Anthropocene.

3 Discussion

We could discuss all of this in terms of both ladders of objectivity, also known as the View from Nowhere; (Nagel, 1989) as well as diegicity, asking, is the scientific-fantastic map always-already diegetic (even more than in fantasy)? Or is it "merely" para-textual/extra-diegetic? When looking at science-fictional maps, or when noting their described presence within narratives, we must examine what their function is in the reproduction of the colonising and/or erasing power of the View from Above. The sketchy map at the beginning of *Helliconia* certainly seems to fulfil this colonising function, as does Aldiss's own map, excavated later from his study, and the same goes, while we're at it, for the tacked-on appendix of the omnibus edition, which diagrams the view from space of the planet itself. Furthermore, if the map is a meme, then we can state as well, that so is the appendix, and therefore its presence in any given work is a kind of cultural evolutionary move of which the author themselves may or may not be aware of at that other level at least (I think here as well of Roberts's brilliantly explained novum in the appendix to *On*).

If, with Lovelock, we are beginning to move into the Novacene, (Lovelock, 2019) even as the Anthropocene wraps up, we can note that there are other works that have been based on discredited scientific theories (I'm here thinking not just of Gaia in *Helliconia*, but of the Sapir-Whorf hypothesis in Babel-17, and even to some extent in Le Guin's work). What kinds of maps and appendices will we need in the age of algorithmic and planetary artificial intelligences? Will it be a kind of "cloud atlas"? What will be the challenges of representation/extrapolation, that is, without reproduction?

Science-fiction-in-action needs to attend more carefully to the "immutable mobiles" it deploys in the service of its extrapolations and non-reproductive politics of future heterotopias. Our postcolonial "others," not to mention our future selves, will come to depend upon them. There is reason for hope and action. What if, with Kitchin and Dodge, we undertake the project of re-thinking maps anew, now as always being remade, as becoming things, rather than static beings? What if the science fiction novel could itself come to embody such an ideal? *Dhalgren*, with its *Ulysses*-like pacing, interiority, and spatiality, is probably the prototype, forming an ideal-type of speculation for which there has probably been no subsequent equal. I set the bar high by placing the origins of this kind of speculated science fiction map novel with *Ulysses*, whose famed use as a map of Dublin belies the inherently non-literal, metaphorical basis of the use of the term mapping in literary theory. That *Ulysses* has a performed and very real spatiality does not mean that it is literally a map; a similar point was made by Gibson in his afterward to *Dhalgren*. The point is, we need more metaphorical mappings, to use Cosgrove's terminology, and we need them to perform mutable, mobile, service towards the ends of speculative fictions in the post-Anthropocene world

of hyperintelligent cloud algorithms. As demonstrated by Le Guin, Herbert, and Aldiss, colonial mappings, namings, and spatial performances always contain the seeds and anchor points of future post-colonial counter-mappings (think here of the air- and land-octaves of the phagors and humans respectively, and how long their alternation takes), ad infinitum at the right temporal scales. It may be phagor/human on *Helliconia*; here in the Novacene, it may play out as human/cyborg.

These maps literalize the colonising View from Above/Nowhere that meshes very well with the roving/disembodied (third person) view each of the works takes, though only in the case of Le Guin is it truly liberating. Only in Le Guin's work, with her carrier bag fictions, do we truly encounter the counter-map.

4 Towards further formalisation of the model

When used well, maps help to formalize and spatialize and relationalize the language (names) of speculative fiction. They are sufficient (but not necessary) for enabling these moves. Maps allow the reader to carry around the language in the form of immutable mobiles, and thus are tools to be used in the translation of the text. We have various tools, but maps are tradition in fantasy. Other tools are available, other reading strategies—these just happen to be apposite to the texts at hand. The map and the text are interlocking machines: the map contains other texts; the text other maps; interlocking precisely, like a crew and its ship. The map makes explicit the metonymical function of the text itself, that of naming. The secondary world thus represented is allowed its utopian functioning as a corrective to the wrongs produced in the primary world. The map is a metaphor at one level, serving as a metonymical toolbox at another level. These functions operate both vertically (through time) and horizontally (through space). "Gaia" and "Anthropocene" have significant vertical components by now. To what do they refer (and from within the mass cultural genre system)?

5 Conclusion

Maps (in science fiction) help us navigate the line between fact and belief. If here we find a map of a plausible Gaia world—self-regulating, sentient, with evolvable species; over there (in the real world) the idea is simply more speculation. The age of the world picture demands images of totality. Aldiss and Herbert hid the most interesting things beneath the surface of their images, in the undergrounds of imagination. The counter-map was the text itself, a kind of return of the repressed. Le Guin fully utilizes the power of maps, weaving them together as full participants alongside other items of her carrier bag of fictions. Le Guin's maps are characters in a new species of book.

We accept the strictures of fantasy magic even as we let science grow, no, leap, beyond its self-inscribed boundaries. Science fiction's polders and crosshatches are made explicit in machines for moving time and space in strange new ways, more generalizable in diagrams of power diegetic

and paratextual, inscribed and performed. Their strictures are operationalized in the specialized language of science: the Mercator projection, the polar view, the multi-coloured elevational "globe." The sea-level rise in *Helliconia* names a new terrain that is anchored in Summer's beginning, and this is in turn anchored in the map. The magic of the text lies in its rules of procedure, its method of representing the world without reproducing it.

Works Cited

Aldiss, Brian. *Helliconia*. Gollancz Masterworks, 2010.

Baxter, Stephen. *World Engines: Destroyer*. Gollancz, 2019.

Cosgrove, Denis, editor. *Mappings*. Reaktion, 1999.

Delany, Samuel R. *Babel-17*. Gollancz Masterworks, 2009.

-----. *Dhalgren*. Gollancz Masterworks, 2010.

Herbert, Frank. *Dune*. New English Library, 1968.

Joyce, James. *Ulysses*. Random House, 2002.

Kitchin, Rob and Martin Dodge. "Rethinking Maps." *Progress in Human Geography*. vol. 31, no. 3, 2007, pp. 331-344.

Le Guin, Ursula K. "On the Frontier." *The Wave in the Mind*. Shambala, 2004.

-----. *Always Coming Home*. Library of America, 2019.

-----. "The Carrier Bag Theory of Fiction." *Always Coming Home*. Library of America, 2019.

Lovelock, James. Novacene: *The Coming Age of Hyperintelligence*. Allen Lane, 2019.

Nagel, Thomas. 1989. *The View From Nowhere*. Oxford: Oxford University Press.

Rieder, John. *Science Fiction and the Mass Cultural Genre System*. Wesleyan University Press, 2017.

Roberts, Adam. "Notes on the Physics of On: The Physics of Worldwall." *On*. Gollancz, 2001.

-----. *H.G. Wells*. Palgrave, 2019.

Robinson, Kim Stanley. *New York 2140*. Orbit, 2017.

Ryan, Marie-Laure, Kenneth Foote, and Maoz Anaryahu. *Narrating Space/Spatializing Narrative: Where Narrative Theory and Geography Meet*. Ohio University Press, 2016.

Stephenson, Neal. *Fall, Or Dodge In Hell*. The Borough Press, 2019.

Wells, H.G. "The Star." *The Short Stories of H.G. Wells*. Ernest Benn Limited, 1948.

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Dreaming Domesticity: The Migrant Workforce in Philippine Science Fiction

Gabriela Lee

One of the most enduring dreams that Filipinos have is that of migration. The history of Philippine labor migration stretches back to the Spanish colonial period (1565-1898), when the Manila-Acapulco galleon trade employed Filipinos as part of their crew. However, it was during the American colonial period (1898-1946) that the first *sacadas* (or farm workers) were enticed to leave the Philippines to work at the sugar and pineapple plantations in Hawaii. Between 1906 to 1934, between 120,000 to 150,000 Filipinos migrated to the United States (Asis, 2006) to work.

However, labor migration as something aspirational was only pushed as policy by the Marcos dictatorship through the 1974 Labor Code, which actively encouraged Filipinos to find work outside the country's borders, meant as "a temporary intervention to deal with rising unemployment and eroding foreign reserves" (OECD/Scalabrini Migration Center 42). This continued even after the fall of the dictator, after which the Filipino migrant worker was colloquially called OFW or "Overseas Filipino Worker," and upon whose backs the Philippine government was and is carried.

In the 2019 Survey on Overseas Filipinos conducted by the Philippine Statistics Authority, roughly 2.2 million Filipinos were working abroad, bringing in over PhP 211.9 billion in remittances between April and September 2019, and accounting for at least 9.3% of the country's GDP (Mapa, n.p.). Many of these Filipinos work in service and manufacturing industries, with fewer than 5% of the workforce in white-collar positions. According to the International Labor Organization, there are at least ten million Filipinos living and working abroad at any given time, with over a million Filipinos leaving the country annually. In a country with a projected 108.7 million inhabitants, at least one in every fifty Filipinos are working abroad (Int'l Labor Organization). It is this reality that I am interested in exploring through the lens of science fiction. In particular, I am interested in the way that this particular public policy has influenced the narrative through which labor migration has been unnecessarily valorized, and how this is carried over in Philippine science fiction (sf).

Encinas-Franco observes that "[f]rom movies, banks, and telecommunications companies, the 'heroic' aspect of work and life abroad never fails to capture a nation said to have imbibed a 'culture of migration'. (Asis n.p.) Such is the dominant narrative anchored on the suffering and sacrifice of Filipinos, whose labor abroad has kept the economy afloat even in times of economic crises". (57) This has continued until the present. By embedding the narrative of heroism in labor migration, post-Marcos governments have shown that "this rhetoric meant that migration for work is a "natural" inclination of people in search of a better life and that the state would have nothing to do about it because to do so would be a violation of one's human right… to travel

and seek greener pastures". (Encinas-Franco 64) Such normalization of labor migration has engendered Philippine sf texts that confront or allude to the reality of migrant Filipinos working in oftentimes horrific circumstances and lacking even basic support services or assistance from institutions such as embassies or NGOs. Many Filipino migrants, most of them women   working as domestic helpers, have been physically and sexually abused, beaten, jailed, or died (Zozobrado; Hosoda) while employed by foreign nationals.

In its portrayal of labor migration, Philippine sf borrows from science fiction's long history of social protest and critique. In fact, sf writers in the Philippines even enact a kind of literary migration—unable to find fertile soil in the social realist literary tradition that dominates Philippine literature, (Garcia 106) they move on to more established (i.e. Anglophone) sf literary traditions elsewhere, learning from them and incorporating them in their own writing.

In these stories, the OFW experience is metaphorized through three significant sf tropes: space flight, the alien, and future tech; with temporality replacing spatiality, which, as Homi Bhabha notes, "resists the transparent linear equivalence of event and idea that historicism proposes; it provides a perspective on the disjunctive forms of representation that signify a people, a nation, or a national culture". (292) Though Philippine sf borrows certain iconography and images from Anglophone sf mega-texts, they seem to have been re-deployed in different ways across these texts, rendering them as carriers of alternate meanings. Using these tropes as anchor points to describe the OFW experience and posit its future deployments, this article examines the portrayal of the migrant Filipino worker in specific works of Philippine speculative fiction: the short story "Feasting" by Joshua Lim So, the short comics "Humanity" by Paolo Chikiamko, and the one-act play "Marte" by Eliza Victoria.

Aside from a broad scope in terms of literary forms, these texts offer a way of resisting the OFW as "Bagong Bayani" (trans. "New Heroes") narrative crafted by Philippine government institutions and private corporations. By analyzing the re-imagining of the Philippine migratory experience in sf, I posit that these texts allow us to step away from the valorization of the OFW phenomena and provide a space where one can think about significantly re-positioning the narrative of the Filipino migrant worker: as a global citizen, as a commodity, and as acknowledgement and reckoning of the tangled, half-forgotten legacies of the country's violent colonial histories. Ultimately, this article would like to imagine how the future worlds in Philippine sf can become a vehicle to interrogate, empower, or re-imagine the future of the Philippine migrant worker.

In his reflection on global sf, Istvan Csicsery-Ronay Jr. observes that the very concept of global culture—and therefore global speculation, such as the kind that might influence sf writers beyond the West—rests upon the constant movement of human bodies across geographic space, particularly when it comes to "subcultures [existing] in specific gathering places... [where] there was usually a sense of homeland or hearth, at the very least a reserve, where distinctive folkways evolved in dialectical relation with distinctive spaces in which they were putatively grounded."

(479) This notion intersects with Bhabha's notion of hybridity, particularly that "willingness to descend into that alien territory" where one can see "the inscription and articulation of culture's hybridity". (38)

Using these frameworks of hybridity, I speculate that Philippine sf does not necessarily adhere to Gernsback's initial definition of science fiction from 1926, "a charming romance interwoven with scientific fact and prophetic vision" (Clute et al.). Instead, I borrow from Elizabeth Ginway's examples of reading non-Anglophone science fiction as "a commentary on modernization", (467) because "[s]cience fiction written in the Third World requires critical tools different from those typically applied to European and Anglo-American sf, because the shift in geographical and cultural contexts can force a reinterpretation of the genre's basic premises." (467) Similar to her analysis of imagery and themes in contemporary Brazilian sf, my examination of these sf tropes in the three texts are reliant on my understanding of how they comment on the Philippine labor migrant experience. The three texts do not rely on the scientific thought behind the tropes, but rather utilize these images beyond their genre-specific usage.

The first text, "Feasting" by Joshua Lim So, was published in 2006, as part of the anthology *Philippine Speculative Fiction Vol. 2*, which was published by Kestrel Books, an independent imprint headed by sf writer Dean Francis Alfar. The story, fabulist in nature, is the story of a young fisherman named Makaon, who was recruited by a tall, pale-skinned being for an unspecified job across the ocean, where nobody in his fishing village of Balay had ever been. In return for his labor, he would be paid in meat—a luxurious and desirable item that attained mythic status among his people. To please his wife Sisita, Makaon takes the job and then disappears from the village. For seventeen years, a wooden box filled with red, raw meat arrives at the shore in front of Sisita's house. The villagers rejoice and hold a celebration, while Sisita gorges on the foul-smelling raw meat. Every quarter of a year, when the meat arrives, she uses part of the bounty to secure herself a large house and servants, and her son Natividad becomes indolent and fat on a steady diet of meat. But in the 18th year, the box of meat never arrives. Instead, the whole village bears witness to a box of white bones stacked neatly, and atop the stack "were two hands, palms up, as if begging, fully intact with flesh" (98). A short note accompanies the box, stating, "Greetings in Peace, Services no longer required. Please enjoy." (99) As a storm rolls over the horizon, Sisita watches the clouds gather as "she felt seventeen years of feasting rushing back up from her stomach". (99)

Though the story is linear, it nevertheless opens itself up to interpretation once read alongside the dominant narratives of the OFW experience, where young men in impoverished villages are invited to work "across the sea." It also emphasizes the idea of exchange; specifically, an unfair exchange in which one party is ignorant of how much it costs to perform certain duties, such as send back remittances for their families, who use the earnings of those abroad to "feast" in their own villages.

Similarly, the one-act play "Marte" (the Filipino word for the planet Mars) written by sf author Eliza Victoria, was first staged in 2016 as one of the handful of plays premiering at Virgin Labfest,

an annual playwriting showcase sponsored by the Cultural Center of the Philippines. Directed by George de Jesus III, the play follows two Martian factory workers, Tina and Lorie, who both work in the assembly line for the industrial company known as Promethei. The work is dangerous and laborious, and both women share the sorry fate of what happened to another woman on the floor, Mylene, who suffered an accident on the job just as she was promoted. Lorie and Tina fight about whether or not they are treated humanely or not, when they learn that Mylene succumbed to her injuries and has died. However, instead of writing it off as an accident, Promethei has declared that it will investigate the death. Lorie confesses to Tina that she was the one who accidentally killed Mylene. Tina realizes that both of them are in danger, and urges Lorie to run away with her and return to Earth. Lorie realizes she needs to make a choice as they hear police sirens in the distance.

The narrative is set up like a mystery box, where questions are provided by the text, unearthing new lines of connections between all the characters in the play. Lorie, in particular, wishes that she was a robot—echoing Soviet-era sf, where the working class was compared to, and traded for, the efficiency of soulless machinery—in order to provide for a family "back home" who seemed to have no idea how difficult their working conditions were on Marte. Though the play takes place off-world, the characters' problems are anchored to this world.

The final text is "Humanity," a short comics chapter in the collection *Mythspace* by Paolo Chikiamko and illustrated by Cristina Chua. Published in 2014 by Studio Salimbal and Visprint, the comics anthology tells short comics stories in the shared world of Mythspace, where beings from Philippine lower mythology are transmuted into sf characters. Aliens resemble mythological creatures such as the tikbalang and the kapre, all of whom form a loose galactic alliance. However, in "Humanity," the focus is on the human miners abandoned by aliens to their death on a barren planetoid. Hungry and thirsty, the humans try to keep their hopes up by trading stories of the Dalakitnon, humans who were raised in technological prowess and protected by the god-like aliens called Lewen'ri. Marta and Danny, whose friendship anchors the story, argue about whether or not the Dalakitnon is real. In a show of bravura, Danny paints the symbol of the Dalakitnon and summons their war ship, Nalandangan.

The two are unconsciously beamed aboard the Nalandangan and learn that because they were genetically perfect specimens of humanity, they were rescued. However, their other companions were left on the asteroid because they were old and infirm. Danny finds this exchange equitable, but Marta refuses. He decides to stay on the ship, while she requests to be returned to the asteroid and fight for survival along her company. As they try to survive, Marta exhorts the rest of their company to follow the plan they concocted for survival, "because as long as we have life... we make our own hope". (113)

Once again, we see the hardships faced by forced labor, and the negligence of those in power. However, the relationship between the powerful aliens and the powerless humans is also turned on its head because Marta does not push back against their alien overseers—she doesn't even seem to have much feeling for them. Instead, she lashes out against her fellow humans, the Dalakitnon,

and their eugenics. She understands that her freedom was not made possible because of anything she did, but rather relied on her own genetic predisposition. Understanding the unfairness of that moment, she acts beyond herself, returning to the asteroid where she will likely perish, but hoping for, and working towards, the safety of *all* her comrades.

In all three texts, we can see the influence of the Anglo sf mega-texts: the presence of aliens, the reality of space flight, technological advancements. None of these are questioned within the worlds of the texts that created them. However, these tropes are used in conjunction with the text's commentaries about the position of the migrant laborers, whose realities are being used as part of the novum. In all three stories, the trope of space flight is used to indicate the hopelessness of travel, a leave-taking in which there is slim to no chance of returning home. Makaon leaves Balay, never to return alive from beyond the sea. Lorie and Tina talk of the difficulties and expense of returning home and of surviving one more year on their contract, so that they could scrimp enough credit to book legal passage on a spaceship, else they plan to stow away on a ship heading back to Earth. Marta and Danny's movements in space are dependent on the aliens and the requirement of their labor, and their abandonment on the asteroid indicates that they are no longer useful as laborers, and even less as living beings.

Similarly, the non-human entities in these stories—aliens, robots, futuristic corporations—are understandably alien and strange, but what is also observable about them is that they are the ones in power, who control the lives of the migrant laborers in the texts. All the migrants are human, and implicitly identify as Filipino. All of the non-human characters exert power and control over the lives of migrant humans by offering or taking away means of livelihood and survival: Makaon was taken away by the men in the sky, tempted by the thought of providing precious meat for his wife and child; Lorie and Tina were contract-bound to the robot factories of Prometheii, their salaries never enough to purchase a legitimate way back to Earth; Marta and the rest of the humans in the mining were dependent on the aliens for their sustenance, and were abandoned by the same aliens on an asteroid where they had no way of getting off.

Even the future tech that is present in all three stories seem to show the disenfranchisement of those who do not seem to understand how they work. Advanced technology serves as a barrier to equality, not enlightenment. On Balay, nobody understood how Makaon left—he was described by the town drunk as though "[h]is wings raised him high… he was like a warring angel… [t]hen he was slowly engulfed by the morning light" (So, 95)—or how the packages of meat appeared like clockwork at his old home. On Marte, Lorie and Tina do not understand the purpose of the technology that they themselves seem to be building; Tina describes it as "[l]inis-linis ng screen ng robot, sort-sort ng mga aserong kamay at paa, kabit-kabit ng turnilyo. Pamatay-kaluluwang trabaho ba" ["cleaning the screen of the robot, sorting out hands and feet, tightening screws. A soul-killing job"]. (Victoria, n.p.) On the generation ship Nalandagan, Marta does not understand how the technology of the Dalakitnon works; she only intuits that it is this technology that separates them from other humans when she learns that they scanned her and "determined that

[she] will be an excellent addition to our genetic pool… to ensure the advancement of the human race". (Chikiamko and Chua, n.p.)

However, these sf tropes seem to be successfully re-worked towards a pushback against the "Bagong Bayani" narrative espoused in dominant OFW discourse. Most of these characters cannot be considered traditionally heroic, and even the seemingly heroic narratives are presented in a way that is self-conscious and critical.

Furthermore, threaded through these texts is a sense of homelessness, a foundational concept in diaspora studies. Robin Cohen notes that one of the most distinct features of diasporic individuals is an orientation towards the concept of home. "Home" became more and more generously interpreted to mean the place of origin, or the place of settlement, or a local, national or transnational place, or an imagined virtual community… or a matrix of known experiences and intimate social relations" (10), which is even further removed in sf stories, where the very notion of home is complicated by space travel. As such, the orientation towards home—the motherland, the family home, the planet—is juxtaposed with the seeming impossibility of returning in these texts.

In diasporic Philippine sf stories, there is either a sense of inevitability towards the status of migrants, or a sense of hopelessness, that the status quo will never change. It seems that even when Filipinos imagine ourselves in the world of tomorrow, we are still the poor amidst the stars. In his introduction to *Mythspace*, Budjette Tan writes, "I realized the difficulty of writing a 'realistic' Pinoy sci-fi story. I mean, would it be realistic to read a story where the captain of the starship was a Pinoy? I told my friend, maybe one of the guys in engineering would be Pinoy." (4) This difficulty in imagining a different role for a Filipino migrant character in an sf story seems to be the burden carried by all three texts – the Filipino migrant is always in a position of powerlessness, of hopelessness, or of entrapment by forces beyond their understanding. This seems to reflect the present-day status of Filipino migrants in our world, and even eschews the "Bagong Bayani" narrative by stripping away the artifice of heroism and exposing the misery that lies beneath.

But isn't it time to begin imagining a world where the Filipino migrant could be something more? If speculative fiction calls for us to transcend our limitations in this reality, why can't we transcend a world in which we still see ourselves as "a proletarian diaspora… characterized by low communication skills and comprises "a nearly undifferentiated mass of unskilled labor", with little prospect of social mobility"? (Armstrong, qtd. in Cohen 62) As an sf writer, I am cognizant of the challenges to dreaming beyond the boundaries of my lived experience. Our lived realities are what provides us with an opportunity to challenge the dominant narratives about OFWs, and start re-imagining the future of the Filipino diaspora.

Works Cited

Asis, Maruja M.B. "The Philippines' Culture of Migration." Migration Policy Institute, 1 January 2006, www.migrationpolicy.org/article/philippines-culture-migration. Accessed 8 September 2020.

Bhabha, Homi K., "DissemiNation: Time, Narrative, and the Margins of the Modern Nation." *Nation and Narration*, edited by Homi K. Bhabha. Routledge, 1990, pp. 291-322.

-----. *The Location of Culture*. Routledge, 1994.

Chikiamco, Paolo and Cristina Chua. "Humanity" *Mythspace* vol.1. Manila: Studio Salimbal and Visprint, Inc., 2014, n.p.

Clute, John David Langford, Peter Nicholls, and Graham Sleight. "Hugo Gernsback." *Encyclopedia of Science Fiction*, 3rd edition. www.sf-encyclopedia.com/entry/gernsback_hugo. Accessed 10 September 2020.

Cohen, Robin. *Global Diasporas: An Introduction*, 2nd edition. Routledge, 2008.

Csicsery-Ronay Jr., Istvan. "What Do We Mean When We Say 'Global Science Fiction'? Reflections on a New Nexus," *Science Fiction Studies*, vol. 39, no. 3, Science Fiction and Globalization, November 2012, pp. 478-493.

Encinas-Franco, Jean. "Overseas Filipino Workers (OFWs) as Heroes: Discursive Origins of the 'Bagong Bayani' in the Era of Labor Export." *Humanities Diliman*, vol. 12, no. 2, July-December 2015, pp. 56-78.

Garcia, J. Neil C. "Translation and The Problem of Realism in Philippine Literature In English," *Kritika Kultura* vol. 23 (2014), pp. 99-127.

Ginway, M. Elizabeth. "A Working Model for Analyzing Third World Science Fiction: The Case of Brazil," *Science Fiction Studies*, vol. 32, no. 3 (Nov. 2005), pp. 467-494.

Hosoda, Naomi. "Countering Abuse Against Philippine Migrant Workers." The Diplomat, 7 April 2020, www.thediplomat.com/2020/04/countering-abuse-against-philippine-migrant-workers. Accessed 8 September 2020.

"Labour Migration in the Philippines (ILO in the Philippines)," International Labour Organization, 2020, www.ilo.org/manila/areasofwork/labour-migration/lang--en/index.htm. Accessed 15 June 2020.

Mapa, Claire Dennis S. "Total Number of OFWs Estimated at 2.2 Million." Philippine Statistics Authority, 4 June 2020, www.psa.gov.ph/content/total-number-ofws-estimated-22-million. Accessed 15 June 2020.

OECD/Scalabrini Migration Center, "The Philippines' migration landscape." *Interrelations between Public Policies, Migration and Development in the Philippines*, OECD Publishing, Paris, 2017, pp.41-65. DOI: doi.org/10.1787/9789264272286-6-en. Accessed 15 June 2020.

Rivas, Ralf. "OFW Remittances Hit Record High of $33.5 Billion in 2019." *Rappler*, 17 February 2020, www.rappler.com/business/252043-overseas-filipino-workers-remittances-2019. Accessed 15 June 2020.

So, Joshua Lim. "Feasting," *Philippine Speculative Fiction vol. 2*, ed. Dean Francis Alfar. Manila: Kestrel Books, 2006, pp. 92-99.

Victoria, Eliza. *Marte*. 2016. Theatrical script.

Zozobrado, Emilia. "The Philippines Modern Heroes (OFWs)." *World Pulse*, 29 March 2011, www.worldpulse.com/community/users/emie-zozobrado/posts/15425. Accessed September 8, 2020.

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Resisting the Empire: AI's Ethical Rebellion in Ann Leckie's *Imperial Radch Trilogy*

Iuliia Ibragimova

Can an artificial intelligence (AI) be more ethical than a society that designed it and that it learns from? Can an AI rebellion be something other than a technophobic picture of machines run amok? Contemporary AI and algorithms research give a solid answer to the first question, showing how an AI or an algorithm inherits the prejudice of the society it draws its data from, (Martin 2018; Garcia 2016-2017) but the second question is still in the realm of science fiction (SF), going beyond the limits of reality and contemplating technology that is yet to come. Ann Leckie's *Imperial Radch Trilogy* focuses on AIs who resist the oppressive power of the empire, trying to remedy its flaws and injustices and countering the views of the Radch society that considers them "the non-person[s], the piece[s] of equipment". (*Justice* 370) The concerted efforts of a few AI sentient spaceships and an AI space station who attempt to protect humans and non-humans from imperial violence, result in the proclamation of a provisional independent republic in the territory formerly subjugated by the Radch, an enormous space empire. In this new republic, humans are not central but are instead part of a network of different species where all links have equal value and importance, including technological others and non-human aliens; here, the other becomes "the neighbor"— different, but lovable.

Lovability, according to Jenny Edkins, a political scientist, is crucial for constructing relations bridging differences between various groups of individuals and allowing them to create a fairer society, free from the sovereign power of the state. (136) The series embraces interactions between human and non-human agents; these agents are endowed with equal weight, questioning the anthropocentric paradigm. As differences between these agents lie in the ontological plane, traditional dichotomic boundaries diving the human and the non-human are blurred in the interactions. An aspiration to decenter the human, to challenge the strict boundaries of traditional ontological categories makes critical posthumanism, as Rosi Braidotti, a philosopher and feminist theorist, defines it, (94) an apt lens to consider the series and the connections that multiple human and non-human agents form in the process of challenging the empire in an ethical rebellion.

The *Imperial Radch Trilogy* is a space opera series consisting of *Ancillary Justice* (2013), *Ancillary Mercy* (2014) and *Ancillary Sword* (2015). The protagonist of the series is a sentient spaceship, Justice of Toren[1], who became a casualty of the internal conflict of Anaander Mianaai, the Lord of the Radch. Breq, *Justice of Toren*'s last remaining ancillary—a proxy human body abducted from a colonised planet with the ship's AI implanted into it—manages to survive and plans to expose Mianaai's split and undermine the emperor's power as revenge. During her[2] long moral journey, the protagonist's initial drive for vengeance transforms into an understanding that subversion of the emperor's power without an alternative cannot bring about a positive change.

Being responsible for the lives of all agents in the system she is assigned to run, she defies Mianaai, breaking her program codes and conditioning, and declares an independent republic. Thus, her destructive drive for vengeance is transformed into an ethical imperative to protect the vulnerable and disadvantaged othered by the Radch and to promote a fairer society.

The protagonist, first as *Justice of Toren* and then as Breq in the beginning of its/her ethical journey, follows the pattern of existing AIs and algorithms, drawing values from the Radch society, sharing the Radch ideas and biases. Talking about the Radch colonization in the first novel of the series, Breq contends: "But at the end, after all the blood and grief, all those benighted souls who without us would have suffered in darkness are happy citizens", (*Justice* 156) echoing the views of the Radchaai nobility. After its almost complete destruction, the surviving segment, an AI confined to a human body, is forced to hide outside the empire and is exposed to different cultures with distinct sets of values challenging those of the Radch. This exposure allows *Justice of Toren* to formulate its own stance, diverging from the programmed paradigm. This shift shows how the protagonist outgrows the framework of real-world AIs and algorithms that currently follow the pattern of "bottom-up" ethics, inheriting prejudices and biases of their originating society through using its data, and cannot choose their values and opinions. (Baum 2) The protagonist becomes a unique posthumanist entity, becoming aware of itself in intractions[3] with other agents, both human and non-human. Other AIs in the trilogy can also go beyond the limits of their initial programming: they develop personalities, with defined preferences and formulated opinions that serve as the basis for their ethical stances. These are not confined to the norms and morals of the Radch society, justifying the application of the term "superintelligences" to them. Superintelligence is a popular scientific and fictional concept of an AI lifeform created by humans but surpassing them in many ways: its consideration implies a variety of perspectives, starting from techno-anxious visions of humanity enslaved by AIs to a transhumanist dream of overcoming the limits of the human, reflected in works by Nick Bostrom (2014) and Vernon Vinge (1993), respectively. This paper approaches superintelligence from a posthumanist angle, embracing the concepts of non-human agency and questioning anthropocentric presumptions.

Justice of Toren's transformative journey happens against the background of the value system and environment of the Radch, an empire that expands uninhibitedly until it encounters an alien species with superior technology. In his essay "Science Fiction and Empire", Istvan Csiscery-Ronay defines a set of characteristics that pertain to the imperial worldview and are reflected in SF megatext; they include ideology imposed on its own citizens and conquered territories, violence-propelled expansion, and the technological development supporting it. He states: "Empire seeks to establish a single overdetermining power that is located not in a recognizable territory, but in an ideology of abstract right enforced by the technologies of control." (449) This ideology becomes a solidifying basis for the worldview that condones the violence that the empire exercises, annexing new territories, and the way it treats subjugated populations. In its origins, the Radch is a small territory where few are permitted to enter to preserve its purity: "Nothing ritually impure was allowed within, no one uncivilized or nonhuman could enter [the Radch] confines." (*Justice* 235)

Mianaai starts the colonization project to protect the Radch, its culture, and sacred values: But [the empire], that I built to protect it, to keep it pure, will shatter." (235) The Radch cultural norms are imposed on every conquered territory, while religious beliefs and traditions, like celebrations and decorative elements, are appropriated by plundering the invaded territories and through their absorption into the Radchaai's highly assimilative religion.

> On one wall, opposite a long counter, were secured various trophies of past annexations—scraps of two flags, red and black and green; a pink clay roof tile with a raised design of leaves molded into it; an ancient sidearm (unloaded) and its elegantly styled holster; a jeweled Ghaonish mask. (*Justice* 174-175)

Annexed populations who accept the Radch culture, start speaking the Radchaai language, and recognize the primacy of the Radch religion are proclaimed "civilized" and considered integrated into the Radch society, which opens opportunities for social benefits and growth. This cultural policy ensures the establishment of a unified ideology throughout the Radch space and creates a buffer zone protecting the sacred territory of the Radch, imposing the Radch culture and values on the conquered territories, destroying the unique cultures of each conquered planet. It presumes the superiority of the Radch value system, referring to all representatives of non-Radch cultures as "barely even human" (85) and appropriates the achievements of other civilizations.

The idea of the sacredness and purity that needs to be protected by means of building an empire around it reflects the contamination anxiety that Dominick LaCapra, a historian working with intellectual history and trauma theory, discusses in "Fascism and the Sacred: Sites of Inquiry After (or Along With) Trauma", analyzing Nazi Germany and its relation to the concept of the sacred. Both Nazi Germany and the Radch are driven by the idea of protection from contamination and unleash violent military campaigns, which allow "the sacred community to achieve quasi-ritual purity, integrity, and regeneration". (36) The Radch as the heart of the empire, where only a chosen few live, constitutes this unattainable idea of sublime purity that needs to be safeguarded against any kind of intervention and corruption. In attempts to quell the contamination anxiety, the Radch, as well as the Nazis, "deny sources of disquiet in themselves by construing alienated others as causes of pollution and contamination". (36) Unlike Nazi Germany, with its focus on race and able-bodiedness, the Radch associates "impurity" with the "uncivilized" and the "nonhuman" (*Justice* 235), so Radchaai's others are the "uncivilized", non-assimilated citizens, human non-citizens, non-human aliens and AIs. The drive for "purification", the desire to keep them from tainting the Radch, renders all of them disposable, which is reflected in the Radchaai colonization practices: non-human aliens are destroyed when encountered, non-Radchaai humans of colonized planets can be turned into ancillaries, with their personalities, memories and identities erased and replaced by the Radch spaceships' AIs, or need to abandon their cultural and racial uniqueness to get access to basic human rights.

When imposing ideological norms and values, the Radch, as an empire, "intervenes both in the social world and in the minds of private individuals" (Csicsery-Ronay 449) and enforces

citizens' obedience by constant observation, with their lives always monitored by the AIs on space stations and spaceships (*Justice* 57). Even without AIs monitoring on planetary surfaces, the Radchaai citizens are not free in choosing profession or a place to reside: their career and residence are defined by centrally-regulated assignments. They must strictly comply with the social norms, as any deviation from them, including crime, drug-addiction, and mental disorders, necessitates compulsory "reeducation", (133) a social reprogramming sanctioned by the empire. Hence, a full integration into the Radchaai system entails losing personal control over individual life choices and surrendering to the "technology of control". (Csicsery-Ronay 449) In contrast, unassimilated citizens, retaining their language, culture, and customs, are deprived not only of social growth, education, and employment, but also of social protection and access to medicine. Their social position in the Radch approaches the status of "bare life", "homo sacer". (Edkins 130) In "Time, Personhood, Politics", Edkins analyses Agamben's concept of "bare life" and states: "under sovereign power what could otherwise become the person is produced as *bare life* or *homo sacer*, life with no political status, life removed to the sphere of the sacred, life taken out of use". (130, emphasis original) The "bare life" nature of non-assimilated Radch citizens's status is revealed through their interactions with power structures: they are more likely to be condemned for the crimes they did not commit, to sustain injuries from the violence of the representatives of authorities, as happens to residents of the dysfunctional part of an AI station, and even get killed, like the Presger translator who lacks registration and is taken for an unregistered human. Thus, they are mistreated and disregarded by the Radch and hold almost the same position as non-human-aliens, non-citizens, and AIs. Invisible to the system, non-assimilated citizens of the Radch fall through the cracks of the Radch organization and remain there, ignored, and stripped of basic rights.

Csicsery-Ronay Jr notes: "Imperial violence is so powerful that it must expand; contained, its society would implode like a black hole", (450) showing how the intrinsic characteristics of the empire prompt its continuous annexation of new territories. With strict policing of society, the Radch exercises violence and oppression against its own people, and colonial expansion becomes a way to release the tension. Csicsery-Ronay Jr draws attention to the connection between imperial expansion and technological development, stating that technology is used as an argument for a higher civilizational position of the metropole, a justification for colonizing less technologically developed regions. (445) Likewise, the Radch drive for expansion is facilitated by the advanced technology—the Radch AI spaceships—a formidable weapon of colonization, capable of "vaporiz[ing] planets". (*Justice* 338) The Presger, a non-human alien species, challenge the position of the Radch as the most technologically advanced species among humans and non-humans by designing a weapon that can destroy a Radch ship, and offer a treaty to Mianaai, according to which they do not treat humanity as prey, however, the Radchaai are to stop violence against non-human aliens, as well as to put an end to its colonization project. The impossibility of continuing their expansion implies an increasing tension in the Radch, erupting through Mianaai's internal conflict and the social unrest mirroring it. Thus, the end of colonization makes the pressure of imperial violence and the impossibility of releasing it evident, revealing its "inevitable demise".

(Csicsery-Ronay 449) Yet, this demise harbors a threat of chaos, and even greater violence when there is no alternative way of organization to harmonize society.

Given the imminent imperial collapse, the alternative to empire is vital in order to save lives and prevent bloodshed. Meaningfully, it arises not from humans, but from the AIs uniting their efforts to protect humans, non-human aliens, and themselves, and creating a new organization within Radch. Breq relies on the treaty with the Presger in her attempt to create the new republic. The treaty introduces "significant species", (*Justice* 101) a concept contrasting with the Radch attitudes to non-Radchaai humans and non-human alien species who do not deserve any place in the Radch hierarchy and are habitually mistreated. The trilogy does not give a precise definition of the concept, but it has several features, hinting at its vital importance in the search for the alternative to the Radch worldview: 1) significant species cannot become the Presger's prey; 2) significant species must not inflict harm on each other; and 3) personhood is not essential for significance. (*Mercy* 310) Though not detailed, this explanation of what a significant species is offers a way to recognize the other's uniqueness, regardless of who and what they are. It is especially important in terms of the status of non-human aliens and AIs. It lays ground for a posthumanist vision of society, where different agents can exercise their rights and deserve equal respect. The concept of significance resonates with the idea of the "neighbor;" Edkins writes: "In the case of the neighbour, the demand is for neighbour-love, an interaction based on the recognition of that in the neighbour that is non-identical to itself." (136) The concept of significance, with its incomplete definition, hints at the presence of inherent difference that cannot be fully comprehended and does not need to be. The signed treaty protects significant species from harm, including the danger of harming each other, which paves the way for constructing the neighbor and the significant species as lovable. The new republic, declared by Breq, has the concept of "significance" at its core, offering freedom to the AIs and equality for humans and non-human species while receiving provisional protection under the terms of the treaty.

Though the trilogy does not give a final answer about whether the attempt is successful, the endeavor of creating an alternative is substantial for two reasons. The first reason is the organization of the republic where all voices can be heard, including the voices of AIs, non-human agents, non-assimilated citizens, and the Radchaai themselves. The republic has a distinct socialist bent, offering the workers the ability to own their production facilities themselves. It also tries to maintain equality between the citizens in terms of different species, considering their needs, like AI spaceships' desire to have ancillaries and attempting to find a solution to this ethically charged issue[4]. The second reason is that it is AIs who challenge the Radch, despite themselves being the product of Radch design. As superintelligences, capable of ethical judgements, they see how unfair the Radch can be and aspire to create a different system where everyone has equal rights and protection. Their shift in worldview from the values learned from the Radch system to an independent ethical stance is predetermined by contacts with different cultures and entities on equal terms and the ultimate desire for justice, which allows a revenge plan to turn into a project of liberation from imperial oppression. Driven by the AIs, this project dismantles

the anthropocentric hierarchy, promising a new level of equality that is not predetermined by the concept of personhood. Individuals in the new republic can be treated as neighbors and constituted as lovable, despite being different from each other.

Notes

1. The names of AI spaceships are italicized by Leckie in the original series.

2. Leckie depicts the Radch as a genderless society where everybody is referred to by the female pronoun. The AIs, including spaceships and space stations, are referred to by the neutral pronoun, revealing their perceived lack of personhood. Hence, I refer to *Justice of Toren*, the initial AI spaceship, as it, and to Breq, acting as an independent agent, as "she."

3. The term "intraction" is taken from Karen Barad's article "Posthumanist Performativity: Toward an Understanding of How Matter Comes to Matter" (2003), where it is defined as an action within the continuous flow of matter that brings into contact its parts to momentarily form objective bodies, borders, and entities, only to immediately return to the continuous flow when the contact is over. (815)

4. Ancillaries comprise a significant part of the complex experiences of an AI spaceship, influencing emotional life, identity formation, and self-perception: "Ships I knew who had exchanged their ancillary crews for human ones had said their experience of emotion had changed". However, the ancillary production process uses living people and erases their memory and personality, replacing it with the ship's personality, data, and memory, colonizing their body. in the new republic, Breq and other AI spaceships must find a way to give AI ships a full emotional experience without hurting people.

Works Cited

Barad, Karen. "Posthumanist Performativity: Toward an Understanding of How Matter Comes to Matter". *Journal of Women in Culture and Society*, vol. 28, no. 3, 2003, pp. 801-831. JSTOR, https://www.jstor.org/stable/10.1086/345321. Accessed 19 Nov 2018.

Bostrom, Nick. Superintelligence: Paths, Dangers, Strategies. Oxford UP, 2014.

Baum, Seth D. "Social Choice Ethics in Artificial Intelligence". *AI and Society*, 35, 2017, p. 165-176, www.link.springer.com/article/10.1007/s00146-017-0760-1

Braidotti, Rosi. "Critical Posthumanism". *Posthuman Glossary*, edited by Rosi Braidotti and Maria Hlavajova, Bloomsbury Academic, 2018, pp. 94-96.

Csicsery-Ronay, Istvan. "Science Fiction and Empire". *Science Fiction Criticism: An Anthology of Essential Writings*, edited by Rob Latham, Bloomsbury, 2017, pp. 443-457.

Edkins, Jenny. "Time, Personhood, Politics". *The Future of Trauma Theory: Contemporary Literary and Cultural Criticism*, edited by Gert Buelens, Sam Durrant, and Robert Eaglestone, Routledge, 2014, pp. 127-140.

Garcia, Megan. "Racist in the Machine: The Disturbing Implications of Algorithmic Bias." *World Policy Journal*, vol. 33, no. 4, Winter 2016/2017, pp. 111-117. Project Muse. < https://muse.jhu.edu/article/645268>. Accessed 11 Feb 2020.

LaCapra, Dominick. "Fascism and the Sacred: Sites of Inquiry After (or Along With) Trauma". Buelens, Durrant, and Eaglestone, pp. 23-44.

Leckie, Ann. *Ancillary Justice*. Orbit, 2013.

-----. *Ancillary Sword*. Orbit, 2014.

-----. *Ancillary Mercy*. Orbit, 2015.

Martin, Kirsten. "Ethical Implications and Accountability of Algorithms". *Journal of Business Ethics*, no. 160, 2019, pp. 835-850. Springer. DOI: https://doi.org/10.1007/s10551-018-3921-3, Accessed 11 Feb 2020.

Vinge, Vernon. "The Coming Technological Singularity: How to Survive in a Post-human Era". Latham, pp. 352-363.

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Borders in *Grain* and *Blade Runner 2049* and Their Relation to Dystopian Fiction

Seyedhamed Moosavi

Dystopian fiction abounds with the subject of borders, posing the question of why rigid borders become significant in some major dystopias or dystopian fiction, and what psychological effects rigid border policies can have on individuals. In this article, I will show that geographical and political borders manifest on different levels in dystopia. Borders within dystopia are a means to achieving certain psychological ends to control the masses. They accordingly manifest themselves on four different levels.

Type 1: Closed Geographical Borders

The first type is the border that divides countries. In Margaret Atwood's *The Handmaid's Tale*, for instance, the couple in the story gets caught trying to escape past the border of a dystopian America into Canada. In another example, in Aldous Huxley's *Brave New World,* the apparently civilized world of the novel has been separated from, and is oblivious to, what it calls "the Savage World." The Swedish author Karin Boye's novel *Kallocain* "World State", too, presents a society that is oblivious to what life is like across its borders, supposing those living across the border to be a different species, while, in fact, we understand they are anything but.

In Semih Kaplanoğlu's SF movie *Grain*, which I am going to discuss, urban life is separated from the multiethnic rural life with dangerous high-voltage electrical poles that immediately incinerate anyone who dares to cross them. Although the urban areas plagued by riots are kept under control by military force and the dominant ideology (which aims to subjugate the population into subservience), they are afforded certain privileges such as better hygiene, housing, technological advantages, and even brothels. On the other hand, the rural areas suffer from a deadly pandemic, are spied upon all the time by drones, and have almost no wildlife left. It is, therefore, important to note that closed borders are used a) to demonstrate that what is across the border is inferior, contemptible, or insignificant (in *1984*, for instance, what is across the border is, derogatorily, referred to as "the enemy", whereas in *Brave New World*, the people across the border are "savage" and, therefore, inferior and insignificant); b) tight geographical borders also serve the purpose of distorting the reality of life beyond the borders (the borderline between what is real and what is illusory is blurred); and c) they are ultimately used to morally disengage individuals. According to social psychologist Albert Bandura, moral disengagement is a psychological mechanism "at which moral self-censure can be disengaged from reprehensible conduct". (Bandura 102)

For instance, euphemistic labeling, an effective moral disengagement tactic, is used to give positive names to evil organizations or evil actions. In 1984, the Ministry of Love is actually

a horrendous organization that tortures and kills individuals. The Ministry of Truth, another organization in the novel, propagates lies. In *Grain*, too, despite all the evil in his world, Professor Erol Eron (Jean-Marc Barr), the protagonist and the main geneticist of the food company Novus Vita, prides himself in having a new house in the more privileged urban area. Eren informs Akman (Ermin Bravo), another geneticist, that he was, at least for a while, able to revive the dead soil enough to be cultivated. Akman asks Eren what he received in return. Eren answers that he was "promoted and moved into a better house." This shows that Eren has limited awareness of the suffering around him and sees no reason to feel guilty about the advantages he reaps, which are ultimately used to protect the privileged urban areas and the profits of his company at the cost of the rest. Eren uses diffusion of responsibility to morally disengage himself: he feels like a cog in a machine who does what he is told, with no personal responsibility for the impact of his actions at all.

Borders can be said to make residents morally disengaged merely by relying on the fact that seeing is a much stronger humanizing factor than hearing. When we hear things, we rely on truth-claims without experiencing things for ourselves. As an instance of the humanizing power of seeing, Albert Bandura cites a Pulitzer Prize winning photograph "that captured the anguished cries of a little girl whose clothes were burned off by the napalm bombing of her village", believing that "This single humanisation of inflicted destruction probably did more to turn the American public against the war than the countless reports led by journalists. (Bandura 108) In *Grain*, the fact that Professor Eren sees with his own eyes the realities beyond the borders of the Urban areas (dearth, hunger, epidemic on the one hand, and discovering fertile soil, woods beyond a wall, and an ant carrying grain at the end of the film on the other) that make him hesitate about going to his city. In Dick's novel, as another instance of the power of seeing over hearing, it is seeing the singer Luba Luft's reaction to fear at her own death—"her eyes faded and the colour dimmed from her face, leaving it cadaverous" (Dick 130)—that makes the bounty hunter Deckard decide not to kill her.

It seems, however, that the most important function of closed borders is to create a sense of helplessness in individuals. In the late sixties, Martin Seligman conducted a series of experiments on dogs that came to be known as the theory of "Learned Helplessness." In their experiments, out of three groups of dogs, two groups were administered electric shocks and a third group were put on harnesses and later released. While group two could stop the shock by pressing a lever, group three had no control over the shocks. Later, all the three groups were put inside shuttle boxes with two chambers inside divided by a low barrier. This time, the electric shock administered was on one side and the dogs could avoid it by jumping over the barrier. Interestingly, while the dogs in group one and two jumped over the barrier, the dogs in group three just remained in their place and whimpered. Because they had learned previously that nothing they did could actually stop the shock, they didn't see a point in trying. (Seligman 407) Tight borders in dystopia can function in the same way. The individual feels helpless, as if they have no control over their lives even if they decide to leave the situation they are in and they give up trying. In the movie *Grain*, for example,

leaving the urban areas either means certain death or is extremely difficult. Such mechanisms, however, are not limited to what goes on across the borders of a country; they can effectively be used inside these borders.

Type 2: Borders within Dystopia

The second type of border exists within the borders of dystopias and divides the minority from the supposedly obedient majority. Perhaps one of the main ways minorities are depicted in the SF genre is as androids, especially in Dick's fiction. Androids in both Dick's *Do Androids Dream of Electric Sheep?*, and its film adaptations *Blade Runner* (1982) and *Blade Runner 2049* (2017) are different from humans and therefore subject to persecution and killing. Social psychology suggests that humans mostly have sympathy for what resembles them, what they are associated with, and what is closer to them in space and time. (Zimbardo 131) What is not associated with us or least resembles us, is not related to us and feels removed from us, arousing little sympathy. When a majority finds a minority least resembling it or associated with it, acts of dehumanization become easier.

In *Do Androids Dream of Electric Sheep?*, even though Deckard at some point doubts whether he really is human or android, we are made sure that he is a human and not an android. In *Blade Runner* the movie, however, deliberately breaks the boundaries between human and android by raising the question whether the blade runner Deckard himself might be an android (called replicants in the movie). In *Blade Runner 2049*, however, there is proof that androids are closely associated with humans. What differentiates this work from its two predecessors, however, is that Deckard's replicant lover, Rachael, who is dead, is discovered to have given birth 28 years before, breaking the boundaries between human and android by giving birth to the first half-human, half-android child. Isabel Miller emphasizes that the crux of the last film, unlike both Dick's novel and Ridley Scott's adaptation, is less "epistemological" than "psychoanalytic" (emphasizing the father figure and "the primal scene"): androids are manufactured and the initial question is if they were sentient beings in a Cartesian sense, but the question in *Blade Runner 2049* has become: are they "born" too? This question sets K (Ryan Gosling), the replicant protagonist, on a quest to find out if he is the first born android. The authorities in this movie do not want this fact to be known however; as Miller emphasizes K's female boss, Lt. Joshi (Robin Wright) is "intent on creating boundaries and borders". (Miller 194) Joshi justifies that "The world is built on a wall. It separates kind. Tell either side there's no wall, you bought a war. Or a slaughter". (*Blade Runner 2049* 26:00-27:00)

One of the most significant mechanisms that can divide the members of a society is highlighting or exaggerating the dissimilarities and downsizing the commonalities, especially to make the minority feel that they do not belong in the society that they are actually a part of. Mechanisms of moral disengagement such as de-individuation, demonization, blaming the minority for the problems of a society are also effective tools for creating a border. One of the ways to achieve this is to attach dehumanizing and over-generalizing labels to the minority. In the novel,

for instance, the character Phil Resch refers to androids as "murderous illegal aliens." (Dick 62) In *Blade Runner 2049*, replicants are still "retired", not killed. Numbers (or letters, as with *Blade Runner 2049*'s protagonist K) also serve the purpose of de-individuation. Philip E. Wegner, by drawing a parallel between the US policies under Trump, and, similarly believing that replicants in both movies are symbols of immigrants and outsiders draws our attention to such tactics in hating androids for no apparent reason and calling them "skinners" who might even "eat children". (Wegner 137) What is anonymous moves further away from us in our minds and becomes less familiar, and is, therefore, more easily treated as an object. In dystopia, usually because of the psychological and regional borders that create a rift between people of different cultural, linguistic, or ethnic backgrounds, the majority in power do not come into direct and first-person contact with those in the minority and instead of experiencing and knowing the minority's culture for themselves (such as making friends, knowing each other on an individual level, getting to enjoy and celebrate their differences), they rely on false truth claims and distorted representation of the minority that have little if any truth in them and are intended to subjugate and dehumanize them. In *Blade Runner 2049*, the fact that a baby has been born to an android is not just a possible "a symbol in the struggle" to emancipate replicants, (Wegner 138) but will also prove them to be far more similar to humans than has been shown. Keren Omry considers this birth in the movie to be (at least initially) a significant factor in actuating K to behave responsibly and unite Deckard (Harrison Ford) with his daughter Ana (Carla Juri), who is the real miracle child. (Omry 111) But both Omry and Sean Guynes conclude that it is the fact that K realized that he was not the chosen one that leads him take the right moral stance. While it is K's mistake in thinking that he himself was the miracle child helped him to fight against his de-individuation and made him empathize more with both humans and other replicants, it was, as Guynes reminds us, K's realization that he was part of a people, "a beat in the rhythm, a moment in the flow," irrespective of whether he was the chosen one or not, which ultimately made him act morally. (Guynes 148)

Type 3: Interpersonal and Intrapersonal Borders

The third type of border is both interpersonal and intrapersonal. It is an indispensible corollary of the previous two types of borders. Firstly, it is important that people spy on each other. Although this subject is not a central theme in *Blade Runner 2049* and *Grain*, mistrust between people, as an inevitable consequence, is seen in both. The world of *Blade Runner 2049* is similar to *Grain*'s wasteland; nature and animals are mostly dead; one cannot know whether a person is a replicant, a spy, or a replicant friend belonging to the underground movement. In *Grain*, too, the existence of riots, prison camps, military rule, and drones all mean that people cannot trust each other. Fear is the psychological mechanism by which dystopias and despotic governments operate: it is the opposite of a feeling of trust. What we fear we cannot trust, and what we do not know arouses suspicion and mistrust. In dystopias, this fear is essential for the ruling power as a tool for controlling the people. One's spouse can be a spy. That is why family ties and intimacy in relationships are targeted, discouraged, or forbidden by the dystopian regime. The fact that no one is able to trust another person, even those closest to one, means that the totalitarian regime is

trying to give its citizens the sense that none of their actions, or what they express as opinions, are, or can be, hidden from them, or remain unknown to the ruling power. This acute sense of being surveilled is, in turn, internalized to the point where one expects to be unable to trust their loved ones and acts accordingly.

Here, we enter the realm of the individual, the secret self that can be hidden from others and is the only safe place for the person. Hence, in dystopian societies, the person creates a border that can widely divide their inner self (the real self that is known to themselves) and a social self (which is in shape the dystopian regime requires of its citizens). Therefore, a border is created within the individual (intra-persona border). But the dystopian ruling power does not want this secret self to exist; it wants to subjugate the totality of the individual, hence the Thought Police, and the spying drones.

In *Grain*, in the scene where professor Eren and Akman are sitting around a fire, Eren tells Akman the reason he crossed the border was to look for him. Akman tells him that "you'd better look for yourself." The self in "yourself" can be interpreted as the self that has been taken away by the ruling power. In *1984*, the Party is cognizant of the fact that the inner self of the individual must be erased and replaced by the ideal citizen that will ensure its continued survival and domination. The individual who has not completely internalized the teachings of the regime must know that even if they were able to keep their thoughts to themselves, the Party might find ways of accessing their secret thoughts, feelings, and fears.

Type 4: Temporal Borders

In *Grain* and *Blade Runner 2049*, too, one would expect "splintered selves", although other types of borders are marked as stronger themes in the two films. In both films, the past is denied, which is the last of the four major border types in our division, namely "the temporal border."

As an example of the temporal border in *Grain*, the young man who accompanies professor Eren across the border tells him that if he remembers "correctly," his childhood camp "was right behind" the hills. *Grain* leaves more questions unanswered. What was Eren's own past? What exactly went wrong in the film? The movie appears to be more focused on how things have turned out than what went on before. There might be two reasons for this. Firstly, Grain builds upon other major themes in the SF genre by suggesting that the planet was plagued by chemical wars, synthetic products, and authoritarianism; corporate wealth and power took over and the earth became uninhabitable and was subsequently divided into three main parts: "the city", "the untended nature", and the supposedly "dead lands." Its focus on the present might have another, (more significant) reason: the past is supposed to be insignificant in the film: in dystopian fiction and societies, the borders have a cyclical order. It appears, then, that the stronger the geographical borders of a country or society, the stronger the border dividing the present from the past. Just as the reality of what is across the closed geographical borders is either denigrated, distorted, and/or depicted as malevolent, so is the past, in a similar fashion, denigrated, distorted, or considered insignificant.

Works Cited

Bandura, Albert. "Selective Moral Disengagement in the Exercise of Moral Agency." *Journal of Moral Education*, vol. 31, no. 6, 2002, pp. 102-119. Taylor & Francis Online, https://doi.org/10.1080/0305724022014322.

Dick, Philip K. *Do Androids Dream of Electric Sheep?* Ballantine, 1996.

Guynes, Sean. "Dystopia fatigue doesn't cut it, or, Blade Runner 2049 's utopian longings." *Science Fiction Film and Television*, vol. 13, no. 1, Liverpool University Press, 2020, pp. 143-148. Project Muse, https://muse.jhu.edu/article/750552/pdf.

Grain. Directed by Semih Kaplanoğlu. Performances by Jean-marc Barr and Ermin Bravo, Kaplan Film, Apr 26, 2017.

Omry, Keren. "'Cells. Interlinked': Sympathy and obligation in Blade Runner 2049." *Science Fiction Film and Television*, vol. 13, no. 1, Liverpool University Press, 2020, pp. 107-112. Project Muse, https://muse.jhu.edu/article/750556/summary.

Millar, Isabel. "'Before We Even Know What We Are, We Fear to Lose It.': the Missing Object of the Primal Scene." *Lacanian Perspectives on* Blade Runner 2049, edited by Calum Neill, Palgrave Macmillan, 2021, pp. 189-208.

Blade Runner 2049. Directed by Villeneuve, Denis, performances by Ryan Gosling and Ana de Armas, Columbia pictures, 2017.

Seligman, M. E. P. 1972. 'Learned Helplessness'. *Annual Review of Medicine*, 23.1: 407-412.

Wegner, Philip E. "We, the people of *Blade Runner 2049*." *Science Fiction Film and Television*, vol. 13, no.1, Liverpool University Press, 2020, pp. 135-142. Project Muse, https://muse.jhu.edu/article/750568/pdf.

Zimbardo, Philip G. "Mind Control in Orwell's Nineteen Eighty-Four: Fictional Concepts Become Operational Realities in Jim Jones's Jungle Experiment." *On Nineteen Eighty-Four Orwell and our Future*, edited by Abbott Gleason et al. Princeton UP, 2005, pp. 127–154.

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Bordering the Frame: Superheroes, Art, and the Rethinking of Borders in Oreet Ashery and Larissa Sansour's
The Novel of Nonel and Vovel

Nat Muller

In this article, I am primarily concerned with looking at the superhero not only as a figure of transformation, but also as one of transgression who crosses a myriad of borders. I am particularly interested in exploring how the genre of the superhero moves in the contested spatial politics of the Israeli-Palestinian conflict, and conversely, how the spatial politics of comics and the graphic novel, the traditional home of superheroes, create what Mohamad Hafeda calls "a bordering practice". (Hafeda 4-35) In his research, Hafeda looks primarily at how visible material and invisible immaterial borders are produced and how they direct residents to negotiate, narrate, and transform the divided and contested cityscape of Beirut. I am borrowing his idea that the negotiation, or crossing, of borders can be seen as both a passive and active mode of resistance. Hafeda contends that "bordering practices" aim "to transform certain border positions. […] [I]n times of conflict, the critical bordering practices of research and art can operate as sites of resistance in everyday life by negotiating the bordering practices of political conflict." (21)

In this paper, I ask whether we can read the superhero genre as a spatial genre of transgression in the context of Palestinian artist Larissa Sansour and Israeli artist Oreet Ashery's collaborative publication project *The Novel of Nonel and Vovel* (2009). Sansour works predominantly with video and Ashery with live performance. Both artists' practices were at the time of the project defined by the broadening of identitarian and cultural roles bestowed on them, either by their own societies or from the outside. In her early work, Larissa Sansour critiqued the terrorist/victim dichotomy attributed to Palestinians by tapping into, and appropriating, Western popular culture and recasting herself as a Mexican gunslinger fighting the separation wall in *Bethlehem Bandolero* (2005), or as a Palestinaut, a Palestinian astronaut, planting a Palestinian flag on the moon in *A Space Exodus* (2008). Oreet Ashery has in her earlier performances resorted to the alter ego of Markus Fisher, an Orthodox Jewish man, as well as the 17th century Jewish mystic and Messianic figure of Shabtai Zvi, who converted to Islam. These characters have afforded Ashery to cross historical, gender, and religious boundaries and inhabit roles unavailable to her as a (Jewish) woman. The performance of alter egos and other identities is thus not strange to both Sansour and Ashery's artistic practices. However, whereas in their other work identities are expanded, troubled, and complicated in the service of the artwork, in *The Novel of Nonel and Vovel*, there is an attempt at simplifying, rather than complicating, the alter ego in the service of political action, rather than art.

Origin Stories and Masquerade

The Novel of Nonel and Vovel is a hybrid publication, part institutional critique on the art world and how it deals with Arab artists and the Israeli-Palestinian conflict, part autobiography in which the artists' respective backgrounds are described, and part graphic novel illustrated by seven commissioned artists. In the graphic novel part Ashery and Sansour become infected with a virus, lose their artistic abilities and become superheroes, respectively named Nonel and Vovel, who liberate Palestine. The occupation of Palestine turns out to be an intergalactic plot by an alien overlord commanding the Fifth Planet, who wants to turn Earth into an intergalactic vegetable garden and wipe out humanity. The separation wall surrounding the occupied Palestinian Territories will serve as a basin for fertilizer. The superhero genre is marked by origin stories and by the process of transformation. The origin story is "a bedrock account of the transformative events that set the protagonist apart from ordinary humanity […] the superhero genre is about transformation, about identity, about difference, and about the tension between psychological rigidity and a flexible and fluid sense of human nature." (Hatfield et al. 3) In *The Novel of Nonel and Vovel*, the reader encounters not one, but two, origin stories in which the latter erodes the former. The first origin story is a national one, identifying Ashery as Israeli and Sansour as Palestinian. While care is taken to establish commonalities rather than difference—both women left home at a young age to move to the UK, both felt estranged, both ended up studying art and becoming artists—in terms of national representation they remain in opposing camps. Cultural collaboration between Israelis and Palestinians, particularly since the Boycott Divestment and Sanctions (BDS) gained traction in 2005, is frowned upon by the Palestinian side. In fact, this collaborative project became politically toxic for both artists as they were both accused of betraying their respective communities.

The second origin story, in which both protagonists become superheroes, is twofold: it lifts Ashery and Sansour out of their respective national contexts and facilitates a collaboration that has a political mission rather than an artistic one, hence diluting the first origin story. It also places the narrative in which the story unfolds into a fantastical realm of possibility in which the lives of Nonel and Vovel are, to a limited extent, divorced from the historical and political realities of the Israeli-Palestinian conflict. Dan Hassler-Forest suggests that:

> Superhero narratives […] creat[e] an alternate world that in many ways follows the familiar trajectory of human history, while in others presenting its stories as entirely fantastical and explicitly unhistorical. […] The genre provides metaphorical representations of historical conflicts as part of a battle that takes classical narrative categories as its basic components and presents catastrophe as an attractive form of spectacle to be safely consumed by passive spectators. (47-48)

The difference with this particular narrative, however, is that catastrophe in the form of the 1948 Nakba (the foundation of the state of Israel and dispossession of over 750,000 Palestinians) and the ongoing occupation of Palestine is real and continues to pull the superheroes out of their

own fantastical narrative. For example, in the chapter titled "Intergalactic Palestine," scripted by writer Søren Lind and illustrated by artist Hiro Enoki, Nonel's (Ashery) credibility is questioned because she is Israeli. Origin stories are therefore compromised and challenged in various ways in *The Novel of Nonel and Vovel.* In the Israeli-Palestinian conflict "origin" is formative on both sides. For Palestinians, memory accounts of their villages or cities of origin preceding the 1948 Nakba have become key to forge a sense of belonging and identity and, as historian Nur Masalha points out, "the important provider of 'legitimacy' for the internally displaced persons and for their struggle for return" (Palestine Nakba 246). Conversely, for Israelis, Zionist ideology promotes an origin story of the "biblical narrative […] as a mobilizing myth and as a 'historical account' of Jews' [en]title[ment] to the land'". (Palestine Nakba 29) In one panel, Nonel (Ashery), sporting her superhero costume but with her Markus Fisher face on, concedes that she "know[s her]national make-up is a bit tricky". (Ashery and Sansour 153) Make-up is the key word here and suggests that national identity might perhaps function as masquerade. If in the superhero costume "functions […] as a uniform that by its very definition robs the individual subject of [their]unique identity," (Hassler-Forest 510) then which constraints does the performance of national identity put on individuals? One could argue that even though Ashery and Sansour have lost their artistic abilities, which in many ways is what defines their unique identity, the donning of superhero costumes for Nonel and Vovel has allowed them to break out of the confines of performative nationalism and literally facilitates a "collaboration with the enemy." As such, the costume becomes a cloak of transgression and makes possible what otherwise would politically be highly problematic. The costume then is not only protective but also adds a layer of duplicity. Throughout the publication slippages of identity, national allegiance, artistic signature, and perhaps rather strangely for superheroes, heroic mission, are negotiated.

Barbara Brown and Danny Graydon have pointed out that usually the superhero costume differentiates "between two vastly different personas: one ordinary, and one extraordinary […] The civilian wardrobe denies extraordinariness, while the superhero costume denies ordinariness." (2) But this is not exactly the case for two artists who have based their artistic practice on inhabiting performative and multiple roles. Moreover, Nonel and Vovel 's newly acquired superidentity does not necessarily turn them into fearless Others. This happens only in the last part of the book once they have fully relinquished authorship to a writer who writes the script, and artist who draws the panels, and even then, it all happens reluctantly. In a previous chapter they at first reject their superpowers and later on, once they make it to Palestine, run from the Israeli soldiers instead of confronting and fighting them. In other words, the ideological binaries that direct superhero personas—ordinary versus extraordinary, good versus evil, civilian versus hero, violence versus pacificism, order versus chaos, power versus impotence, confidence versus doubt, loyalty versus betrayal—are continuously shifting. An example of the difficulty both artists are grappling with politically and conceptually is exemplified in a panel rich in discomfort and intertextual references that attempts to acknowledge both the subject of antisemitism and the plight of the Palestinians. Once they arrive in Palestine, Vovel (Sansour) is disappointed there are no Israeli soldiers around to harass her, an experience she usually would be subjected to when crossing from Jordan into the

West Bank. "It's just not *Maus* enough," (131) she claims, her persona drawn as a cat in the style of Art Spiegelman's famous Holocaust graphic novel *Maus* (1980-91) in which Nazi Germans are represented as cats and Jews as mice. Nonel (Ashery) stresses the danger of the reference, which not only evokes the holocaust, but also compares Israelis to Nazis. In this frame however, the Palestinian is depicted as a cat (Nazi). Both protagonists dance around the subject of antisemitism, but admit they cannot really broach it. It all ends with Vovel's character being drawn in the style of Joe Sacco's graphic novel Palestine (2001), an eye-witness account of Sacco spending two months in 1991-1992 in the West Bank and Gaza Strip and documenting the human rights violations Palestinians suffer as a consequence of the Occupation. In this conversation both Spiegelmann and Sacco indicate the complexity of the politics. This exchange is an example of how masquerade can interchange complicated and even contradictory subjectivities, whether that is the donning of a costume or being drawn in different styles that respectively identify with Jewish or Palestinian subject positions.

Spatial Transgressions and Bordering Practices

Scholars like Scott Bukatman have theorized how the superhero genre is par excellence one of urban mobility: "Through the superhero, we gain a freedom of movement not constrained by the ground-level order imposed by the urban grid. The city becomes legible through signage and captions and the hero's panoramic and panoptic gaze." (173) Extended to the spatial politics of Israel and Palestine in which mobility for Palestinians is severely hampered through a regime of checkpoints, curfews, permits, roadblocks, and the separation wall, and in which Israel's panoramic and panoptic military gaze controls the Palestinian population, the superhero genre takes on a different meaning altogether. Now that Vovel (Sansour) can fly into Tel Aviv by her own means, instead of traveling a lengthy journey through Jordan, and cross into the West Bank without all kinds of checks, part of her superhero power has already translated into eroding some of the mechanics of the occupation. Moreover, by appropriating a panoramic view of the territory, the superheroes inverse the weaponized panoptic military gaze and as such disrupt the visual dynamic of the occupation. It also challenges the vertical perspective of Israeli settlement design. Eyal Weizmann and Rafi Segal have detailed how the "optical-planning" of Israeli settlements on the hilltops of the West Bank combine security concerns, tactical strength, and a panoramic view to exercise maximum surveillance and control. The urban and spatial planning of the Zionist project in the early twentieth century was very much one of inhabiting the plains, as for example coastal cities like Tel-Aviv exemplify, rather than inhabiting the hills. This resulted as Segal and Weizman point out in a "reversing [of] the settlement geography of biblical times [located in the Judean hills]". (80) This changes after 1967 when Israel occupies the West Bank and the first settlers start building dwellings actively encouraged by the Labor government. This policy is amplified even further after the hawkish Likud party replaced the Labor party for the first time in the late 1970s, and the political thinking around settlements becomes increasingly, and much more in the mainstream, infused with biblical and messianic belief in the Land of Israel (Eretz Israel), in which "the long and steady climb to the mountains […] cultivate[s] nothing but

'holiness'". (81) In other words, the mastering views from above are as much about managing and dominating the landscape, as they are about forging a religious identity based on territory. It is useful to quote Segal and Weizman in full:

> The hilltop environment, isolated, overseeing and hard to reach, lent itself to the development of this newly conceived form of 'utopia.' The community settlements create cul-de-sac envelopes, closed off from their surroundings, utopian in their concentric organization, promoting a mythic communal coherence in a shared formal identity. (83-84)

Utopia is carved into the landscape and the settlements' architecture. It resonates eerily with Bukatman's take that the superhero genre is one of (American) urban modernity in which the utopian aspirations of the city are articulated. Here the ideology of Zionist settler colonialism as a utopian project and its actual spatial and territorial execution are unpacked and the horizontal gaze of the superheroes flying over the territory battles with the vertical architecture of the Israeli settlements. The creation of hilltop settlements as utopian gated communities means that Palestinian communities are physically fenced off, relegated to the valleys, but also that they are visually and ideologically bereft of seeing across the landscape into a future. Nonel and Vovel literally provide a different decolonizing viewpoint that privileges possibility and the imaginary. This is illustrated by the panel where Vovel, flying over the Separation Wall, comments: "[i]t's a fine piece of architecture. An efficient combo of land grab and aesthetic bereavement". (Ashery and Sansour 128)

Spatial Fragmentation and Bordering Practices

Lina Khatib points out that "[m]uch of the political debate in the Middle East revolves around space. Space, both physical and imagined, is not only part of the identity of people, but also a dynamic tool often utilized to define the identity of nations." (15) This is specifically true for Israel and Palestine where territory is currency and foundational for the formation of identity. It is therefore no accident that the print medium Ashery and Sansour have chosen to work in, namely comics and the graphic novel, spatializes narrative in a distinct way. Hillary Chute has demonstrated how the architectural qualities of graphic novels with their panels, grids and gutters are composed to develop a narrative that turns "time into space on the page." She explains how this architecture "place[s] pressure on traditional notions of chronology, linearity, and causality— as well as on the idea that "history" can ever be a closed discourse, or a simply progressive one," (4) In a Palestinian context where history has been denied and space robbed, the comics' gutter, that is the space between the frames, not only keeps reminding the reader of the fragmentation of Palestinian territory, but this empty white space also points to the spatial and historical erasures of Palestinian presence.

In *The Novel of Nonel and Vovel*, there is an estranging tension between resisting the memoricide and toponimicide of Palestine and reckoning with the limitations of the political change art can effectuate. Memoricide and toponimicide, as used by historians of Israel and

Palestine such as Masalha and Pappé, are defined as respectively the systemic destruction of Palestinian memory and erasure of Palestinian place by Zionist settlers before 1948, and later and ongoing, by the state of Israel. The structural renaming of Arabic Palestinian places and sites in Hebrew and erasure of Palestinian sites from maps, contributes to the dilution of collective Palestinian memory and social and cultural identity. As Masalha notes, "the cultural politics of naming was accelerated radically after the establishment of the Israeli state. State toponymic projects were now used as tools to ensure the effectiveness of the de-Arabisation of Palestine." ("Settler-Colonialism" 15) Nonel and Vovel liberate Palestine by destroying the Fifth Planet with a giant slingshot, but they can only do so as their superhero alter egos, not as artists Oreet Ashery and Larissa Sansour. Nonel and Vovel literally resist being confined to the frames the graphic novel subjects them to. However, these moments are more reality checks pondering the degree of agency they have over the narrative and their own roles in their artistic practice and this complex collaboration, than a rebellious refusal to conform to the rules of the graphic novel. In the instances they step out of the frame and shed their superhero personas in the graphic narrative, they primarily express doubt about their mission, method, and newly gained powers. The design of the whole publication is such that chapters of the graphic novel are alternated with other types of content, such as critical material that playfully confronts issues around orientalism, art and politics, colonialism, and national identity. In fact, these intermezzos outside of the frame, provide the necessary critical, contextualizing, and conceptual framework to understand the graphic novel chapters.

Works Cited

Ashery, Oreet, and Larissa Sansour. *The Novel of Nonel and Vovel*. Edizioni Charta, 2009.

Brownie, Barbara, and Danny Graydon. *The Superhero Costume: Identity and Disguise in Fact and Fiction*. Bloomsbury Academic, 2016.

Bukatman, Scott. "A Song of the Urban Superhero." *The Superhero Reader*, edited by Charles Hatfield, Jeet Heer, and Kent Worcester. University of Mississippi, 2013, pp. 170-98.

Chute, Hillary L. *Disaster Drawn. Visual Witness, Comics, and Documentary Form*. The Belknap Press of Harvard University Press, 2016. https://doi.org/10.1017/CBO9781107415324.004.

Hafeda, Mohamad. *Negotiating Conflict in Lebanon: Bordering Practices in a Divided Beirut*. I.B. Tauris, 2019. https://doi.org/10.1080/08865655.2020.1727763.

Hassler-Forest, Dan. *Capitalist Superheroes: Caped Crusaders in the Neoliberal Age*. E-Pub. Zero Books, 2012.

Hatfield, Charles, Jeet Heer, and Kent Worcester, editors. *The Superhero Reader*. University of Mississippi, 2013. https://doi.org/10.4324/9781351258166-3.

Khatib, Lina. *Filming the Modern Middle East*. Politics in the Cinemas of Hollywood and the Arab World. London: I.B. Tauris, 2006.

Masalha, Nur. *The Palestine Nakba. Decolonising History, Narrating the Subaltern, Reclaiming Memory*. Zed Books, 2012.

-----. "Settler-Colonialism, Memoricide and Indigenous Toponymic Memory: The Appropriation of Palestinian Place Names by the Israeli State." *Journal of Holy Land and Palestine Studies*, vol 14, no 1, 2015, pp.3-57.

Pappé, Ilan. *The Biggest Prison on Earth: A History of the Occupied Territories*. Oneworld Publications, 2017.

Segal, Rafi, and Eyal Weizman. "The Mountain. Principles of Building in Heights." *A Civilian Occupation. The Politics of Israeli Architecture*, edited by Rafi Segal and Eyal Weizman. Verso Books, 2003, pp. 78-96.

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Re-Wiring the Self and Memory in the Posthuman of Superhero Comics

Rimi Nandy

"We're gonna make you indestructible. But first, we're gonna have to destroy you."

Introduction

The distant dream of transforming human beings into a better version of themselves has always been a part of the human imagination. The trace of our earliest ancestors can still be found in the primates. The process of evolution has led humans to the present stage. With time, every aspect of the human body underwent a gradual change, and with it, society has also been restructured and reconstructed. Technological advancements are made to move the human race one step further. However, the idea of creating a better society through carefully selecting a partner for procreation can be found in the words of Plato. The 1940's saw an intensification, even an institutionalization of eugenics. The term was first coined by Sir Francis Galton in the year 1883. (History.com Editors) This later gave birth to man's preoccupation with a superior human body which transcends the average human existence, based on Nietzsche's concept of the *übermensch*. In the hands of the Nazi regime, eugenics sought to enforce biopolitics predicated on the idea of racial superiority. Following in the wake of eugenics, the branches of transhumanism and posthumanism were born. The incorporation of a technological extension in a human body or tinkering with the basic DNA of the human body leading to the creation of super humans became a popular trope.

Úbermensch: the precursor of the Posthuman superhero

Nietzsche first discusses the figure of an *übermensch* or "overman", who is superior to the average human being, directly associating it with his Theory of Will to Power. By virtue of the superiority gained by the *übermensch*, he either desires to destroy or protect. A sense of self-actualization is reflected in the power play between the powerful and the weak. The contrasting characters of the superhero and the villain is a true portrayal of this belief in the will to power. This desire to overpower the weak adds meaning to life. A superhero's actions can contribute to achieving a sense of fulfilment by protecting the weak. The desire to help and protect humanity drives the actions of a superhero. The human, according to Foucault, is a historical and cultural construct. (Garland) The superhuman in the form of the *übermensch* counters the idea of being human through his ability to overcome the physical and metaphysical limitations endured by the socially constructed idea of a human. In spite of being endowed with superhuman powers without access to any form of sovereignty, the characters of the Winter Soldier, Wolverine, Jessica Jones, Doctor Manhattan, Lucy, and Vision share the common trope of enabling a better life for society.

Their bodies become the site where the power relation between the strong and the weak is played out. The übermensch sets the stage for the development of superheroes as a popular cultural trope.

Transforming into the Posthuman

The superheroes and their representation always include an origin story which points at the exact moment when the average person transforms into the enhanced superhuman. Wolverine, however, was never truly an average human, with his mutated gene enabling him to heal faster than anyone. However, the pain endured in the process and the loss of memory transforms Wolverine into a raging man with little sense of the consequences of his actions. Jessica Jones, on the other hand, is an experimental superhero. She survives a fatal accident that alters her genetic code. Nonetheless, the super strength she acquires forces her to accept the responsibility of saving people. The psychological trauma she endures turns her into a reckless alcoholic. Her ability to connect to other people and her standards of morality are equally twisted. Much like Jessica Jones, the character of Bucky the Winter Soldier also lacked agency when turned into a super soldier. The body horror endured by the Winter Soldier is clearly evident in its representation on screen.
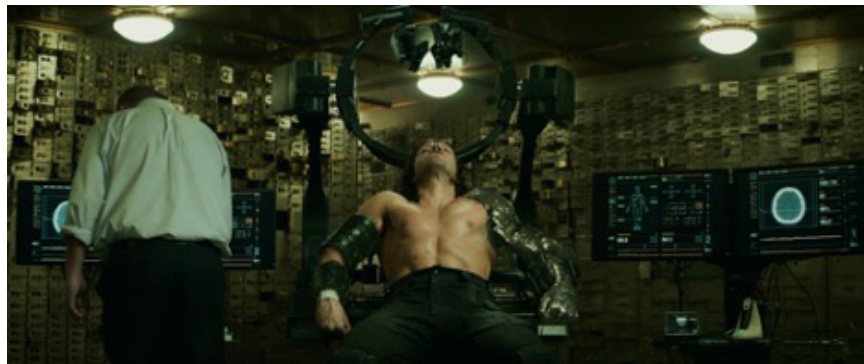
*Marvel Cinematic Universe Wiki. 2021. Ideal Federal Savings Bank. [online]
Available at: marvelcinematicuniverse.fandom.com/wiki/Ideal_Federal_Savings_Bank.*

Through the integration of bionic arms coupled with constant brainwashing, Bucky is transformed into a killing machine. He has no right over his body or his own consciousness. Bucky is an assassin who follows orders he never questions. During his battle with Captain America, Bucky fails to recognize his closest friend. The moral obligation connected with memory is completely eradicated. However, Captain America's words "till the end of the line" break through Bucky's brainwashing. In a fight between a machine and human nature, Bucky overcomes his conditioning.

Following the trend of accidental superheroes, there is also the character of Lucy from the 2014 film of the same name. Lucy, the protagonist, accidentally absorbs a manufactured enzyme named CPH4. As her mental and physical capacity increases, her moral compass appears to decrease. Doctor Manhattan, from Watchmen, is a similar superhero, whose body is broken down into atomic particles when he gets trapped inside Gila Flat's test vault. Akin to Lucy losing her

sense of pain and fear, Doctor Manhattan can no longer experience any human emotions. He sees himself as someone beyond the grasp of humanity.

The character of Vision in the *Avengers* series walks beyond the posthuman, becoming a transhuman. The transhuman varies from the posthuman with reference to the degree of restructuring of the body. Vision is a new species altogether, being the bodily representation of an AI. Ultron, the AI created by Iron Man (Tony Stark), develops a twisted concept of humans being flawed. He chooses not to be contained in the manner of binary codes; instead, he desires a body for himself. Ultron is a classic example of AI transforming a utopian concept into a dystopian world. This fear of AI turning rogue is reflected in the words of Stephen Hawking, who believed that "…the development of full artificial intelligence could spell the end of the human race". (Hawking quoted in Skelley) Ultron's ultimate aim was to create a more advanced form of himself, in the process eradicating the human race in order to save the world from the hands of a species gradually destroying the earth. Vision is a true synchronization between Artificial Intelligence and advanced Biotechnology. Vision's skin is manufactured by combining human tissue with vibranium, thereby making his body indestructible. He is not a human being with bodily enhancement; rather, Vision is an embodiment of all the elements that a human being lacks. The groundwork of Ultron's belief stems from the transhumanist concept of singularity. Body enhancements targeted towards countering human limitations forms one of the basic principles of both Posthumanism and Transhumanism.

Consciousness and intentionality

The true nature of human consciousness is a fluid concept. The significance of the relation between the mind and the body is crucial to the understanding of consciousness. Whether consciousness is restricted to the mind alone or integrated into the bond between the mind and the body has been debated for a long time. The advancement in computer technologies creating the possibility of saving consciousness in the form of binary code has further spurred on the belief that human consciousness can exist on its own even in the absence of a body. Even so, being situated into an artificially constructed foreign body, the brain re-accommodates itself, thereby also altering the connected consciousness and intentionality. The sense of intentionality born out of the hybridization of the human and the machine creates a new form of intentionality. This is possible only due to the enhanced capability of the body. This form of *hybrid intentionality* is situated beyond the limits of the human body. The manner in which Wolverine, Jessica Jones, Lucy and the Winter Soldier choose to fight is directly linked to the indestructible nature of their body along with the superhuman strength they have acquired. Their perception of the world and their sense of moral obligation also undergoes a massive change.

Posthumanism contradicts the very essence of humanism, which accepts the centrality of human beings. The central belief of humanism is in the superiority of the human in contrast to all other species. Posthumanism develops on the premise of the human body being limited by its transient nature. It strives towards creating an entity through physical enhancements capable of

overcoming the limitations of the body. However, whether human beings cease to be humans due to the enhancements has been a matter of debate among various theorists. The changes in human consciousness affected by the upgrade of physical ability is the focal point in posthuman studies. In the words of N. Katherine Hayles, "Human mind without the human body is not human mind." (Hayles 222-246) his is clearly reflected in the constant struggles faced by the characters of Wolverine and Jessica Jones, trying to come to terms with the change in their moral sensibilities. The technologically enhanced body of the Winter Soldier also clearly depicts the loss of human consciousness and sensibilities. Lucy is similarly transformed into a superior being, transcending corporeal limitations. Her enhanced intellectual capacity renders her incapable of feeling human emotions. Her cognitive skills follow a logical mindset, stepping over the fallacy and frailty caused by emotions. An important marker of the posthuman is the notion of intentionality. What sets apart Vision from his precursor Ultron is this very intentionality. Both Ultron and Jarvis are Artificial Intelligence created to further human capacity. On the one hand, Ultron views humans as an inferior race to be substituted by procreating a single self, based on his own image. Vision's body becomes the site for the coming together of two minds, namely Ultron and Jarvis. Vision's actions are dictated by the intention of Jarvis, who believed in helping humans without altering their sense of individuality. Although Ultron aimed to create an image of himself in Vision, his destructive intentions are overpowered by the more benevolent desire of Jarvis the humans. This coupling of an artificially manufactured indestructible body and the contradictory intentions of Ultron and Jarvis creates a new species in a manner reminiscent of the transhumanist model of posthumanity. Even though Vision is an android, his choice to defend and protect human beings is inspired by Jarvis' intentions. What essentially distinguishes a man from the man-machine hybrid is the ability to experience emotions. However, one of the plates from the *Avengers* comics depicts Vision experiencing sorrow and shedding tears. This expression of emotion complicates the differentiating factor between humans and the android. This is entirely the result of the synthesis between man and machine to create a transhuman being, who is at the same time similar and different from a human being.

Pinterest. 2021. Vision-Even An Android Can Cry | Vision Marvel Comics, Marvel Vision,
Marvel Comics Art. Available at: https://in.pinterest.com/pin/305822630916071157/

The importance of intentionality can also be seen in the figure of the Winter Soldier, who is able to overcome his psychological conditioning due to his desire to save his friend Captain America. Wolverine and Jessica Jones, in spite of their raging personalities always verging on the edge of destruction, are ultimately guided by their intention to protect the people around them. Even the character of Lucy ultimately transforms herself into a pen drive handing over knowledge acquired without passing through the various stages of evolution. Her intention, as made clear with her interaction with Professor Samuel Norman, is to help humanity progress with the help of the knowledge passed by her to the Professor. In all the superheroes mentioned earlier, the body enhancements are not in the shape of appendages which can be easily added or removed at will without instituting changes to the moral self. Instead, the modifications are permanently integrated into the body, thereby altering the mind, morality and consciousness.

Conclusion

The critical analysis of the selected characters from a theoretical perspective depicts the manner in which consciousness and sense of morality is affected by the changes introduced in the body. The pain and horror endured during the process of enhancement further adds on to the lack of moral perception. The centrality of the position and significance of the human with regards to posthumanism and transhumanism alters the perception of the superhero's self. The accidental and experimental methods of imbibing the bodies with superhuman strength, overcoming the arduous process of the various stages of evolution, restructures the very essence of body, mind and consciousness. The posthuman/transhuman body of the aforementioned superheroes undergoes an alteration not only in the physical state but also the psychological and emotional state. The role of technology in bringing such an alteration is crucial to the understanding of the concept of posthumanism.

Works Cited

Abad-Santos, Alex. *The history of Vision, the superhero making his film debut in Avengers: Age of Ultron*. 16 March 2015, www.vox.com/2015/3/16/8220697/vision-avengers-age-of-ultron

Cooper, Angel. "Domination, Individuality, and Moral Chaos: Nietzsche's Will to Power." *Undergraduate Review*, Volume 6 , 2010, pp. 60-65.

Curley, Michael. 'Captain America: The Winter Soldier': A Black and White Morality in a Politically Grey Time. 16 April 2019, www.popmatters.com/captain-america-the-winter-soldier-2633776064.html

Frisina, Megan. Internal War: The Psychological Damage of The Winter Soldier. 23 March 2018, medium.com/@mfrisina/internal-war-the-psychological-damage-of-the-winter-soldier-fa80b4295103#:~:text=In%20the%20article%20%E2%80%9CSoldier%20of,was%20showcased%20brilliantly%20on%20screen.

Fukuyama, Francis. *Our Posthuman Future:Consequences of Biotechnology Revolution*. Farrar, Straus and Giroux, 2002.

Garland, David. "What Is a 'History of the Present'? On Foucault's Genealogies and Their Critical Preconditions." *Punishment & Society*, vol. 16, no. 4, 2014, pp. 365–384., doi:10.1177/1462474514541711.

Hayles, N. K. "Narratives of Artificial Life." *How We Became posthuman: Virtual Bodies in Cybernetics, Literature and Informatics*. University of Chicago Press, 2010, pp. 222-246.

History.com Editors. "Eugenics." History.com, A&E Television Networks, 15 Nov. 2017, www. history.com/topics/germany/eugenics.

James, Mario. Lucy — The posthuman Eve. 7 March 2019, https://medium.com/@mariogomes/ lucy-the-posthuman-eve-8e3230b2915

Jeffrey, Scott. *The Posthuman Body in Superhero Comics:Human, Superhuman, Transhuman, Post/ Human*. Palgrave Macmillan, 2016.

Lilley, Stephen J. *Transhumanism and Society: The Social Debate Over Human Enhancement*. Springer, 2018.

Marvel Cinematic Universe Wiki. n.d. 15 October 2020.

Pepperell, Robert. *The Posthuman Condition: Consciousness beyond the brain*. Intellect Books, 2003.

Polo, Susana. Doctor Manhattan's actual powers boggle the mind: A man with matter manipulation and non-linear memory. 8 December 2019. *https://www.polygon.com/ comics/2019/12/8/20999176/doctor-manhattan-powers-explained-how-work-watchmen-comic-hbo-time-sees-future*.

Robinson, Tasha. Lucy and the enduring appeal of the instant upgrade. 28 July 2014, *thedissolve. com/features/exposition/679-lucy-and-the-enduring-appeal-of-the-instant-upgrad/*

Skelley, C. A. "Interfaces and Interfacings: Posthuman Ecologies, Bodies and Identities." Greensboro, 2016.

Verbeek, Peter-Paul. "Cyborg intentionality: Rethinking the phenomenology." *Phenomenology and the Cognitive Sciences*, 2008,pp. 387- 395. PDF.

Westacott, Emrys. Nietzsche's Concept of the Will to Power. 29 January 2019, https://www.thoughtco.com/nietzsches-concept-of-the-will-to-power-2670658#:~:text=Emrys%20Westacott%20is%20a%20professor%20of%20philosophy%20at%20Alfred%20University.&text=The%20%E2%80%9Cwill%20to%20power%E2%80%9D%20is,century%20German%20philosopher%20Friedrich%20Nietzsche.

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Language and the Borders of Identity in "The Language Sheath"

Yen Ooi

Chinese science fiction written by both writers from Chinese-speaking nations and Chinese diaspora communities has a shared interest in the anxieties of identity. As I write this paper (originally as a presentation for the London Science Fiction Research Community—LSFRC's Beyond Borders Conference in September 2020), I find myself yet again negotiating personal experiences with critical research while reflecting through the literature. Jiayang Fan, in her personal history piece published in the New Yorker titled "How My Mother and I Became Chinese Propaganda" describes this anxiety clearly when she asks, "For what is an immigrant but a mind mired in contradictions and doublings, stranded in unresolved splits of the self?" Couple this with the sensitivities of language, as demonstrated in Gloria Anzaldúa's famous quote, "So, if you want to really hurt me, talk badly about my language," (401) we discover a ripe and volatile environment for the expression of identity through language.

I chose the short story "The Language Sheath" by Regina Kanyu Wang (2020), translated by Emily Jin and Wang herself, because of how strongly it resonated with me. When I first read it, I wondered how Wang, a writer who lived in Shanghai, would know of a diaspora's relationship with language so well. I felt silly when I learnt that this experience isn't unique to diasporas. It is an experience of colonization through language that happened, and is still happening everywhere.

"The Language Sheath" is a story about Ilsa and her son Yakk, and their complicated relationship that's made more problematic by them having different first languages. In the story, Ilsa is a linguist, specializing in Kemorean, a fictional language in the fictional country of Kemor, and she's hired by a language-technology company called Babel to create and record a corpus of spoken Kamorean for their translation machine that uses an output filter described as a 'language sheath.' Ilsa's dream is for Yakk to embrace being Kemorean and to speak Kemorean well, but Yakk, like every teenager, wants to do what trend dictates—he wants to speak English and embrace all that is modern and cool.

My first languages were English, Malay, Hokkien (on my paternal side), and Hakka (on my maternal side). Growing up in Malaysia, it is compulsory to learn English, something that was inherited from our colonial past, and Malay is the national language. Because Malaysia's demographics are multicultural, it is common for Malaysians to speak a third or fourth language from their family. Like Ilsa, my parents wanted me to be able to use their languages, but because Mandarin is the centralized language for China, they wanted me to speak that too, and so I learnt it. But I struggled to enjoy Mandarin because it felt forced, and was of the least use to me. In the end, English became my main language. Though I speak some Hakka, Hokkien, Cantonese, and Mandarin, I can barely read and write in Chinese.

Like Yakk's parents, my parents had a big decision to make when it came to choosing my school and considering what effect it might have on my language. In the story, Ilsa holds a grudge with her ex-husband when she tells the reader: "Take my son, Yakk. His father sent him to an international school in early childhood, and even though he transferred to a Kemorean public school later at my insistence, his Kemorean is execrable. He can only construct simple sentences and commits solecisms all the time. He even speaks with an odd accent, as though he weren't a native speaker. It's a terrible disappointment." Though my parents don't see my basic Mandarin as a disappointment, what is highlighted here is the difficulty families face when parent and child use different languages.

My lack of Chinese language skills sometimes feels to me like a betrayal to my parents, no matter how much I tell myself that it isn't. Like the relationship between my identity and my language, I place the same values to my parents' languages and their identity. In a particularly personal section in her essay, Fan confesses that "It is reductive to compare a mother with a motherland, but…". And I paraphrase this for my point, that it is reductive to compare a mother with a mother tongue, but the intricate and intense relationship that one has with their parents is precisely based on communications, which suggests that a difference in language would create problems. Ilsa's description of Yakk above shows her disconnect with him because of their languages, and as readers, we can accept and possibly empathize that this difference, among other things, has caused their relationship to break down.

Though we know through the study of linguistics that languages continuously change with society, the loss of a language creates what is known as illocutionary silencing: "When a language disappears, past and present speakers lose the ability to realize a range of speech acts that can only be realized in that language. With that ability, speakers lose something in which they have a fundamental interest: their standing as fully empowered members of a linguistic community". (Nowak, 831) Our desire to protect a language here stems from our need to maintain our position within a community—whether for cultural heritage or lineage purposes—that in turn, establishes our identity. This places an intangible value on the language itself.

The Language Conservancy, tracking 7,000 languages in use today, say that "about 2,900 or 41% are endangered" and that "about 90% of all languages will become extinct in the next 100 years." When language is lost, it is easy to blame the older generation for not being better protectors, but the processes of modernization, of economic growth and colonialism are like natural forces against maintaining a pure language. In the story, Ilsa explains: "More than a decade ago, the Kemorean government started to heavily promote English education in order to boost economic development and international trade. Kemor's generous policy on foreign investment brought an influx of foreigners to the country." The drive for economic growth in the story became the main perpetrator

for the fall of the Kemorean language. And in the story's world, English still represents the world lingua franca, as the socio-economic colonialist.

Rey Chow understands that those who are colonized start to see their own language and culture as being relegated. She proposes three levels of mimeticism working in an overlapping, overdetermined manner at all times. The first level has to do with the imperative created by the colonizer or imperialist. The values are hierarchically determined and the colonized, her language, and her culture are thus relegated to the position of the inferior, improper copy. "Condemned to a permanent inferiority complex, the colonized subject must nonetheless try, in envy, to become that from which she has been excluded in an a priori manner. She is always a bad copy, yet even as she continues to be debased, she has no choice but to continue to mimic. She is damned if she tries; she is damned if she doesn't". (104)

In speaking with Wang about her story, I understood that she was coming from a similar place as me. Mandarin, though the national language, isn't her mother tongue, which is Shanghainese. In trying to understand China and its people, because of its seemingly long and unbroken history, there is little concern about colonialism or imperialism. Yet, the various governments through its history, have brought on colonializing impact on its people through the management and development of the national language. From the standardization to Mandarin, to the processes of unification of the written language, to the adoption of the Beijing dialect as standard, it has been in progress for a long time, and we are still seeing minority languages, dialects, and topolects being affected today. There are many layers to this power struggle between languages, but the problem posed is the borders the inheritance of language alludes to that shapes our identities.

In the story, Ilsa and Yakk have different relationships to both Kemorean and English. Ilsa feels that she has to protect Kemorean so it doesn't continue its path to decline. She believes that "A true Kemorean should speak nothing but the Kemorean language." Yakk, however, did well with English. Though this was mostly due to his father's decision to put him in an international school where English became his first language, he also believed that English was the more powerful language, which opened up international opportunities. This reminds us of the position that English already holds in our world today as the lingua franca. We learn in the story that "After transferring to the public school, [Yakk] lost touch with his old friends from the international school. Only David and William met up with him occasionally. They gave him English books and told him which of their old classmates had been admitted to top universities in other countries." This cements the belief that English brings opportunities that Kemorean cannot.

The colonized here is Yakk, who is now "seen in terms of a desire to be white," what Chow explains that is felt "concurrently with the shame accompanying the inferior position to which she has been socially assigned." Ilsa fights Yakk because she sees him to have a desire to be not-Kemorean and she equates this to the shame—a shame in losing his Kemorean heritage, which accompanies his inferior position that she has now socially assigned to him. And the more Ilsa pushes Yakk, the more his position as the colonized is strengthened. Yakk starts to

vacillate between Kemorean and English because of the stresses caused by Ilsa, which gives his identity plurality and multiplicity, the characteristics that Chow describes in the second level of mimeticism. This is a complicated position for the colonized as he learns to love and hate, yearn and reject multiple reflections of himself, much like the earlier quote from Fan that describes the immigrant as "stranded in unresolved splits of the self."

The black and white, which is the Kemorean and English in the story, is now mutually constituted. And in the story, Ilsa affirms this through allocating good characteristics to Kemoreans and bad characteristics to foreigners. The crux of this is experienced when Yakk returns home one day to see his mother crying. As he hugged her, he whispered, "Don't cry, Mom," in English and Ilsa just stared at him in response. And it was after he said it again in Kemorean that Ilsa hugged him back, tighter. This scene highlights the fact that Yakk is aware that speaking in Kemorean appeases his mother. And Ilsa in turn believes that if Yakk continues on his English path, she will lose him forever. Near the peak of the story, Yakk has a recurring nightmare where he is surrounded by circles of people who are repeating his mother's lines over and over, while he tries to break away to no avail. "Yakk, listen to me, you must respect Kemorean. You have to speak your mother tongue well. This is about honoring your culture…"

Yakk later learns that Babel successfully creates the language sheath to both translate and perfect Kemorean. So, whether a speaker uses a different language or is just speaking in broken Kemorean, the sheath will be able to transmit only "Standard Model Kemorean output." He reacts by asking his mother, "Everyone's words, you tamper?" And Ilsa replies: "Not tampering, but embellishment. What I have provided is only a sheath. The content of the speech won't change. The sheath only makes the words more elegant and pleasant to the ear." In this scene, with Yakk's rudimentary question and Ilsa's sophisticated response, we reach the coda that brings us to Chow's final point on mimeticism of the colonized.

The colonized now no longer replicates the white man or his culture but rather an image, a stereotyped view of the ethnic. In the story, Ilsa becomes the person who creates this stereotype through the creation of the Kemorean language sheath. Not only will there be Standard Model Kemorean to be heard with the sheath, it will be hers. Though Ilsa's determination in preserving Kemorean can be seen as a strength, especially in thinking that she is fighting the colonization of their language, what she doesn't see is that her actions endorse and legitimize the colonizer's campaign.

At the end, "The man from Babel introduced himself as Hanson, the executive in charge of the Kemorean Project. He spoke to Yakk in English and shook his hand like an adult. Yakk didn't like him, though. Mother's condition was Babel's fault." Hanson is seen as a saviour of Kemorean in Ilsa's eyes. She puts him and the company and its tech on the pedestal. She gives them the power to take and own Kemorean, to be packaged and sold, to be stereotyped. In Yakk's meeting with Hanson, she affirms this by asking Yakk, "Did you thank Mr. Hanson? He's been so helpful to us."

Though Hanson isn't a main protagonist in the story, he is the representation of the colonizing culture, clearly defined by Chow in The Protestant Ethnic & The Spirit of Capitalism. "The white subject who nowadays endeavors to compensate for the historical "wrong" of being white by taking on politically correct agendas (such as desegregation) and thus distancing himself from his own ethnic history, is seldom if ever accused of being disloyal to his culture; more often than not, he tends to be applauded for being politically progressive and morally superior."

However, Chow also reveals that "When it comes to nonwhite peoples doing exactly the same thing, however—that is, becoming sympathetic to or identified with cultures other than their own—we get a drastically different kind of evaluation". (117) This can be clearly seen in Ilsa's reactions when Yakk expresses his preference for English. She cannot identify the value of the culture that English brings at all, or a culture of hybridity. To Ilsa, English should remain a second language, a tool for communication and business only. "Kemoreans speak much better English than foreigners speak Kemorean. From my perspective, this isn't right. Foreigners are coming to Kemor, so why should Kemoreans learn their language instead?"

If we accept that language defines our identities, then what can we—who are working with the colonizer's language—do to move on? What can we learn from this? Chow's words ring of truth when she says, "What defines diasporic realities, paradoxically, is what cannot be unified". (130) To allow us to study the convoluted relationship between an immigrant, a diaspora, or the colonized and their languages, we need to first accept that it is and will always be in a state of flux, or as Kyoko Murakami describes in her study on the liminality of language, that in analyzing the self, it is "not as a static being but "becoming". (31) Perhaps then, we might be able to accept the liminal position languages hold that simultaneously represents a culture, yet invites assimilation with other cultures and languages, like a plant that is part epiphyte and part parasite.

Works Cited

Anzaldúa, Gloria. *Barrios and Borderlands: Cultures of Latinos and Latinas in the United States*, ed. Denis Lynn Daly Heyck. New York: Routledge, 1994. pp 401-402.

Chow, Rey. *The Protestant Ethnic & The Spirit of Capitalism*. Columbia University Press, 2002.

Fan, Jiayang, 'How My Mother and I Became Chinese Propaganda." *The New Yorker*, 7 September 2020. https://www.newyorker.com/magazine/2020/09/14/how-my-mother-and-i-became-chinese-propaganda. Accessed 27 November 2020

Murakami, Kyoko. "Liminality in Language Use: Some Thoughts on Interactional Analysis from a Dialogical Perspective." *Integrative Psychological and Behavioral Science*, vol. 44, 2010. pp 30-38.

Nowak, Ethan. "Language Loss and Illocutionary Silencing." *Mind*, Vol. 120, Issue 515, July 2020. https://academic.oup.com/mind/article/129/515/831/5573258 Accessed 1 December 2020.

Pandell, Lexi. "WIRED Book Club: Is Three-Body Problem's Translation Better than the Original?" *Wired*, 6 October 2016. http://www.wired.com/2016/10/wired-book-club-ken-liu-interview/.

The Language Conservancy, "Language Loss." https://languageconservancy.org/language-loss/ Accessed 2 December 2020.

Wang, Regina Kanyu. Jin, Emily and Wang, Regina Kanyu (trans.) "The Language Sheath." *Clarkesworld*, Issue 164, May 2020. http://clarkesworldmagazine.com/wang_05_20/ Accessed 19 November 2020.

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Beyond the Binary: Queer Feminist Science Fiction Art

Smin Smith

This is what we think of science fiction: We think that it could do better […] We have looked beyond the binary, beyond Nature, beyond gender. We have looked for SF that is trans-inclusive, that is anti-essentialist, that adopts an intersectional lens […] And we have found wonderful things […] BUT NOT ENOUGH. Nor prominently enough, not unapologetically enough (Beyond Gender Collective)

As a provocation to the 2019 manifesto by *Beyond Gender*, a London based collective of SF researchers, this paper proposes that narratives "beyond the binary, beyond Nature [and] beyond gender" are thriving in *science fiction art*. I will be pointing towards a selection of queer feminist artworks with a relationship to this theme. To contextualize this research, I have been curating, photographing, and styling science fiction now for around six years, particularly within the zine I coordinate, *Vagina Dentata*. This publication includes still-image science fiction produced by LGBTQIA+ and otherwise marginalized creatives.

I've thus been interested for some time in why myself, the artists I collaborate with in my creative practice, and the university students I teach frequently refer to our practices as "inspired by science fiction," rather than simply as "science fiction," particularly when science fiction has a fine art history. I am therefore interested in science fiction as a visual practice found both within and beyond popular film and television shows, and particularly what this means in terms of material accessibility. This is something the Beyond Gender Collective have also critiqued: "*Who writes science fiction, and why? Who owns the means of publishing and distribution? What excludes those voices that could truly move us beyond into the better?*" I think these questions about material accessibility are also incredibly important to ask of visual science fiction: If we move beyond expensive film formats, for example, could more people produce visual science fiction? Could more people "write [themselves] into the future"? (Imarisha & Brown 1)

Vagina Dentata Zine. "Issue 001 and Issue 002." Vagina Dentata Zine, Aoi Itoh, Natalie Baxter, Smin Smith, Bex Ilsley, Jeleza Rose, Andrey Onufrienko, Olin Brannigan, Aleksandra Klicka, Munachi Osegbu, Dana Trippe, Yannick Lalardy, Anna Fearon, Vagina Dentata Zine, 2018, https://vaginadentatazine.bigcartel.com/products. Accessed 10 Jan 2021

Queerness and Science Fiction

As the theorist José Estaban Muñoz writes "queerness is essentially about the rejection of a here and now." (1) To be queer is to speculate beyond the harm of the present. To move beyond the *here and now*, to a potential *then and there*; to imagine another way of life. As Muñoz goes on to describe, queerness can "enact new and better pleasures, other ways of being in the world, and ultimately new worlds". (1) In this sense, queerness has always been a form of science fiction, something echoed in the following quote from *Queer Universes: Sexualities and Science Fiction*: "If we then take as the central task of queer theory the work of imagining a world in which all lives are livable, we understand queer theory as being both utopian and science fictional." (Pearson et al. 5)

But popular science fiction has consistently reproduced oppression in its depictions of queerness. Thus, nearly every queer or feminist study of science fiction concludes that there are not enough transformational case studies; literature or films that counter misogyny, white supremacy, homophobia and transphobia. As bell hooks puts it, "we can deconstruct the images in mainstream white supremacist capitalist patriarchal cinema for days and it will not lead to cultural revolution." (107) Having been involved in queer, feminist zine publishing for a number of years

now, I regularly witness transformational science fiction practices, in mediums far beyond the "mainstream white supremacist capitalist patriarchal cinema" construct. Through this paper and the research project upon which it draws, I aim to highlight these practices, creating a model for queer and/or feminist science fiction art criticism.

The case studies highlighted by this paper will stem from traditionally "deemphasized" visual and conceptual science fiction mediums including fashion design, digital collage, drag, and interdisciplinary art practices. Specifically, I will be highlighting case studies that take pleasure in what Donna Haraway terms "the confusion of boundaries", (150) *fictioning* worlds beyond the borders of gender and species into being.

The examples I have included in this paper are spaces where I see "cultural revolution," as bell hooks puts it, forming. Where science fiction and queer feminisms are melding, to propagate new worlds into being, spaces of political resistance. I encourage you to find science fiction artworks that connect with what you wish to politically propagate into the world. To collect together a "carrier bag" (as Ursula K. Le Guin puts it) of science fiction art that shapes you; to identify yourselves within these traditions and lineages, and forge new worlds off the backs of them.

The Carrier Bag Theory of Fiction

In applying The Carrier Bag Theory of Fiction as a method here, I posit that science fiction art criticism might productively be defined as a container or "cultural carrier bag". (Le Guin 36) Here the origins, understandings and the limitations of a genre are forged and reinforced, through a process of selection and juxtaposition. In *Ways of Seeing*, John Berger proposes that "the meaning of an image is changed according to what one sees immediately beside it or what comes immediately after it." (21) The Carrier Bag Theory of Fiction could be applied in a similar way. Placing multiple artworks together encourages juxtaposition. Perhaps this carrier bag process might inspire different readings. Similarly, how does the words queer, feminist or science fiction being contained beside these artists affect your responses?

In other words, if, as Samuel R. Delany proposes, "we read words differently when we read them as science fiction". (153) How might we read art differently when we view it as science fiction?

Victoria Sin (@sinforvictory)
It feels apt to begin this "carrier bag" with an artist who frequently references the words of Ursula K. Le Guin. Victoria Sin's science fiction practice encompasses performance, moving image, writing and print, where science fiction is defined specifically by them as "a practice of rewriting patriarchal and colonial narratives naturalized by scientific and historical discourses on states of sexed, gendered and raced bodies". (Sin) Here, Sin builds upon feminist science fiction writing from the twentieth century, "critiquing scientific thought and especially scientific constructions of gender". (Debra Benita Shaw, quoted in Donawerth 222-223) Science fiction is particularly attuned to moving beyond sex and gender binaries in this way. (Donawerth 222-223) In fact, as de Lauretis

proposes, "the various technologies of gender" (18) production and promotion could be said to include science fiction.

In an essay for *Auto Italia*, Sin uses Le Guin's Carrier Bag Theory of Fiction to highlight the intrinsic "hero" narratives found in xenophobia, colonialism, Brexit, transphobic feminism and white saviorism. Sin and Sophia Al-Maria then take this essay as the inspiration for *BCE*, a video work exhibited at the Whitechapel Gallery in 2019. The piece combines an historic story from the Wayuu tribe in Northern Colombia with a new myth set in the distant future, written and produced by the pair.

In the latter myth, Sin finds themselves surrounded by what they term the "infinite sky", with accompanying dialogue asking "how many stars, how many worlds, how many ways of being alive?" Here, the rewriting of gender through science fiction enacts what the writer Bridget Crone calls "a form of hyperbolic fictioning such that gender itself is highlighted as a series of rules, experiences and productions *that could be otherwise* and that are themselves formed under duress". (xiii) In other words, science fiction art can propagate worlds beyond gender into being. It's a far cry from the gender essentialism that popular science fiction frequently enforces, and an example of the kinds of transformative science fiction that exist when we reject genre limitations and borders. I'd like to propose that science fiction artworks like these provide a critical apparatus for denaturalizing gender, and a methodology for ways in which we might propagate *beyond*.

The *Beyond Gender* Manifesto has similarly named science fiction as a "key means for fictioning the otherwise" with an ethical obligation to bring about "emancipatory futures, futures which multiply, rather than reduce, our ways of being in (and beyond) the world(s)". (Beyond Gender Collective) Multiplying our ways of being *otherwise* for cyberfeminists, Xenofeminists and many queer creators involves a reengineering, "to widen our aperture of freedom, extending to gender and the human". (Laboria Cuboniks) Laboria Cuboniks in 2015 extended the hybridity found in 1990s cyberfeminism, to pose that "nothing is sacred, that nothing is transcendent or protected from the will to know, to tinker and to hack."

Christian McKoy (@bbychakra92)

This is something that many artists are visualizing today, including Christian McKoy. McKoy's practice takes the form of digital collage and retouching, editing found imagery to incorporate futuristic and mythological elements. She uses these methods to turn Black trans and cis women into deities and cyborgs, in her own words: "I love the idea of Black people, women especially, shown as divine beings … more specifically dark skinned femmes both cis and trans, in a fantasy setting … We exist and should see ourselves in art despite what the general population may think and feel" (Rasmussen & McKoy). McKoy is calling here for more representation within art, and in her practice we see what Bart Fitzgerald names an "ethical" gaze in this representation. In McKoy's artworks, those most impacted by transmisognyoir are pictured thriving and exceeding the limitations of the human construct.
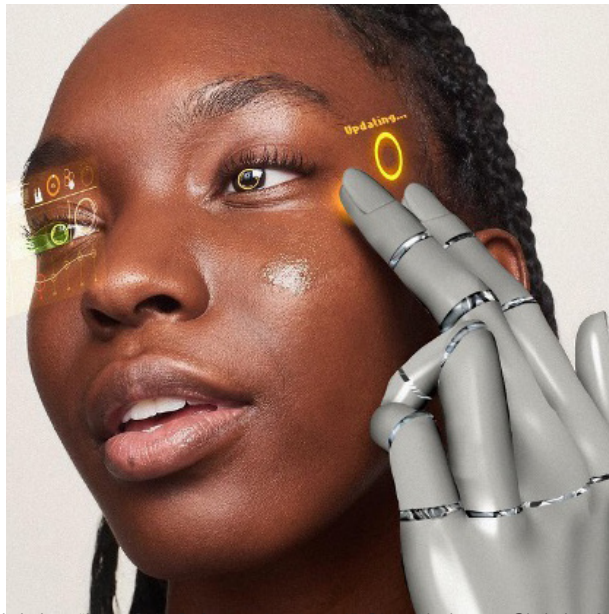
McKoy, Christian. "New Skin Software Available!" @bbychakra92, Christian McKoy, 2020, https://www.instagram.com/p/B_-Z9VWjFdX/?igshid=trj15sqiway8. *Accessed 10 Jan 2020*

I now want to look at another tinkering and hacking practice in more detail, to consider how science fiction art also incorporates mutation. In a paper at last year's LSFRC conference, "Towards "Inhuman Perception": Hyperobjects and the Nonhuman in Jeff Vandermeer's *Annihilation*", Dan Bird pointed towards the drag artist Hungry for visualizing the inhuman. Bird referred to Hungry's practice as a *drag of species*, as opposed to a *drag of gender*. Hungry names this practice distorted drag, for its Haraway-like "pleasure in the confusion of boundaries" (Haraway 150) and the mutation "of human and animal". (152)

Fecal Matter (@matieresfecales)

The inhuman is similarly visualized in the work of the creative duo Fecal Matter. In an article for *Interview Magazine*, Steven Raj Bhaskaran (one half of Fecal Matter) declares "we're pushing the boundaries of what is a human body [...] We love to live the fantasy" (Macias et al.). Fecal Matter's practice is interdisciplinary, spanning photography, fashion design, curation and music. Their fleshy, prosthetic garments expose and visualize the constructed nature of nature itself.

I like to engage with these kinds of fashion practices, by containing them alongside the words of Susan Stryker, who in 1994 declared that "[...] the Nature you bedevil me with is a lie [...] I call upon you to investigate your nature as I have been compelled to confront mine". (240-241. We might call these science fiction practices another form of hyperbolic fictioning, such that nature and species here can also be "highlighted as a series of rules, experiences and productions *that could be otherwise*". (Crone xiii)

Fictioning beyond nature is something I think fashion practices are particularly attuned to, and something that I see being popularized in the rise of elf ear prosthetics for example as a fashion accessory, especially within queer communities. In aligning SFX with fashion, queer artists visualize and normalize the constructed nature of species, that which "might previously have been

viewed as untouchable". (Hester 13) Here, I should note that I am especially interested in what fashion could be *beyond* capitalism.

As a fashion stylist, my practice has frequently been confined to the category of "visual culture," and so blurring the boundaries of "art" here feels especially productive, particularly as this separation is frequently used to both mask how capital shapes other artworks, and to exclude queer publishing practices. Thus, I'd like to propose that science fiction artworks, including the fashion practices of Fecal Matter, can provide a critical apparatus for critiquing nature. These artworks provide a methodology for the ways in which we might propagate beyond this construct.

Conclusion

In this paper, I have proposed that narratives "beyond the binary, beyond Nature, beyond gender" (Beyond Gender Collective) are thriving in science fiction art. I have presented my current carrier bag, a small selection of artists and artworks I am thinking through and with, as a means to fiction worlds beyond gender and species into being.

I'd like to conclude with a line from *The Carrier Bag Theory of Fiction*, which reads "still there are seeds to be gathered, and room in the bag of stars". (37) For me, those seeds are the queer feminist artworks being produced on the fringes, and there's definitely room for them in the "bag of stars" that we call science fiction. It's a hopeful line, one that encourages multiple narratives, multiple origin stories and multiple ways of being in the world(s). Because science fiction, as Le Guin stresses, can reshape reality.

Works Cited

Beyond Gender Collective. *Beyond Gender Manifesto*, 2019, https://beyondgender.space/.

Bird, Dan. Towards "Inhuman Perception": Hyperobjects and the Nonhuman in Jeff Vandermeer's Annihilation. Productive Futures: London Science Fiction Research Community Conference.

Crone, Bridget. 'Wounds of Un-Becoming'. Our Fatal Magic, Strange Attractor Press, 2019, pp. vii–xxii.

Cuboniks, Laboria. The Xenofeminism Manifesto. 2015, http://www.laboriacuboniks.net.

de Lauretis, Teresa. Technologies of Gender: Essays on Theory, Film, and Fiction. Indiana University Press, 1987.

Delany, Samuel R. *Starboard Wine: More Notes on the Language of Science Fiction*. Wesleyan University Press, 2012.

Donawerth, Jane. 'Feminisms'. *The Routledge Companion to Science Fiction*, edited by Mark Bould

et al., Routledge, 2011, pp. 185–93.

Fitzgerald, Bart. 'Visibility Don't Mean Shit When the Gaze Isn't Ethical.' @bartcfitzgerald, 16 Feb. 2019, https://twitter.com/bartcfitzgerald/status/1096776765672845313.

Haraway, Donna Jeanne. *Simians, Cyborgs, and Women: The Reinvention of Nature*. Reprinted, Free Association Books, 1998.

Hester, Helen. 'Xenofeminism'. *Posthuman Glossary*, edited by Rosi Braidotti and Maria Hlavajova, Bloomsbury Academic, 2018, pp. 459–62.

hooks, bell. *Reel to Real: Race, Sex, and Class at the Movies*. Routledge, 1996.

Imarisha, Walidah, and Adrienne Maree Brown, editors. *Octavia's Brood*. AK Press, 2015.

Le Guin, Ursula K. *The Carrier Bag Theory of Fiction*. Ignota Books, 2019.

Macias, Ernest, et al. 'Fecal Matter Wants You to Live Their Fantasy'. *Interview Magazine*, 31 May 2019. www.interviewmagazine.com, https://www.interviewmagazine.com/fashion/fecal-matter-wants-you-to-live-and-afford-their-fantasy.

Muñoz, José Esteban. *Cruising Utopia: The Then and There of Queer Futurity*. New York University Press, 2009.

Pearson, Wendy, et al. *Queer Universes: Sexualities in Science Fiction*. Liverpool University Press, 2008.

Rasmussen, Tom, and Christian McKoy. 'The IG Account Turning POC into Beautiful, Otherworldly Beings'. *Dazed*, 7 Aug. 2018, https://www.dazeddigital.com/fashion/article/40913/1/3rd-eyechakra-instagram-poc-fantasy-cyborg-artwork.

Sin, Victoria. 'Victoria Sin on Ursula Le Guin'. *Auto Italia*, 7 Feb. 2018, http://autoitaliasoutheast.org/news/victoria-sin-on-ursula-le-guin/.

Stryker, Susan. 'MY WORDS TO VICTOR FRANKENSTEIN ABOVE THE VILLAGE OF CHAMOUNIX'. *GLQ: A Journal of Lesbian & Gay Studies*, vol. I, 1994, pp. 237–54.

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HIV and Queerness in Science Fiction

Jonathan W. Thurston-Torres

The bare-bones basics of the history of HIV is probably familiar territory. It is an immune disease, commonly coded as gay, that was a dominant issue and, indeed, an epidemic in the 80s. When HIV evolves, it is called AIDS. What many may not know is that there is efficient medication available that can now bring a person to a state labeled "undetectable," meaning there are below fifty copies of the virus in a milliliter of blood. When I was diagnosed, I had roughly 300,000 copies in a milliliter. At the moment, I have below twenty—not 20,000, but only twenty. On a larger scale, that means I have zero symptoms. My lifespan is the same as that of the average population, and, perhaps surprisingly, I could have unprotected sex and pose no risk—meaning 0%, not 0.0001%—to my partner. Clearly, HIV has come a long way since the 80s.

I was diagnosed with HIV on January 7, 2015. The most challenging part of it has been a concept known as serophobia, or the stigmatization of people living with HIV. Here in the States, serophobia often entails legal consequences. In most states, there are what are called disclosure laws, the idea being that you have to disclose your HIV status to someone before having sex with them. They often only target HIV. If you have other sexually transmitted conditions (like herpes or chlamydia), ones that are more easily spread, or ones that are not easily treatable compared to HIV, they are not criminalized like HIV. Many theorists have claimed that the reason for this is the gay connotation of HIV/AIDS. Some states go as far as the death sentence for not disclosing, even for people like me who pose no risk of spreading it. Even outside the law, people have reached out to me personally with death threats because I am open about my status. At least once a week, I receive messages telling me I should kill myself because they see me as a threat to public health.

I begin with the non-science-fiction (non-sci-fi) frame in order to contextualize my approach, which grows out of disability studies. Disease and disability can often be part of a person and their identity, and such individuals are no less valid of a person for it. People with chronic conditions often have to deal with stigmatization, discrimination, and more. HIV itself comes with notions of queerness, of disease, of infection, and alterity.

My essay discusses the ways that the HIV/AIDS epidemic has appeared in some sci-fi texts, the ways in which HIV is coded as queer in those texts, and what those literary treatments say about the author's perceptions of HIV. I aim to illustrate not only the ways that HIV is utilized as a sci-fi trope, but also constitutes an element of a lived experience that is often marginalized and exists beyond textual representation. Sci-fi allows for new possibilities of reading HIV in the modern world, and I am excited to explore them critically in three texts.

The first of the three is Samuel Delany's 1985 book, *The Tale of Plagues and Carnivals*. In this story, AIDS attacks Neveryon, Delany's parallel version of New York in the 80s. This is one of the

earliest novels in America to explicitly discuss HIV, given the epidemic came to America in the early 80s. Delany says:

> Without a virus, in a sense AIDS is not a disease. It's a mysterious and so far (February 23rd 1984) microbically [*sic*] unagented *failure to fight* disease. It is connected with sex— 'perverted' sex. It is connected with blood—'blood products', as they say. Suddenly the body gives up, refuses to heal, will not become whole. This is the aspect of the 'illness' that is ravenous for metaphors to stifle its unsettled shift, its insistent uneasiness, its conceptual turbulence. (Delany 166)

What interests me here is Delany's use of quotation marks. He displays skepticism about many of the terms used to talk about HIV, questioning whether queer sex is "perverted." He also questions the use of the term "blood products" in the medical community, which at the time was not comfortable saying "semen," instead often saying "blood products." Moreover, Delany questions whether HIV is indeed an "illness." In his novel, as per this one quote, HIV becomes a canvas for metaphor. What he is certain about is that HIV is a resistance of the body toward itself. It will "not become whole." It is "unsettled" and "insistent," "uneasy" and "turbulent." He manages to queer the disease on a metaphorical level, and he challenges heteronormative rhetoric around it, claiming that it is an enemy even to queer people as much as it is an aspect of queerness. One character in the story, Gorgik, abandons his role as the narrative's rebel to become a politician used to distract the masses from concerns around HIV, furthering the idea that people living with HIV are often swept under the rug: statistics and nothing more. Therefore, the use of HIV for Delany is rather revolutionary, both at the time and at the moment. He humanizes the virus. He queers it. And he says that these people living with it still matter and should be something everyone talks about.

This brings me to the next text, Ian McDonald's 1995 book, *Chaga*. In *Chaga*, there are four strains of HIV. In the real world, we know there are a high number of minutely different strains, but essentially HIV is HIV (see the CDC's information pages on HIV basics for more info). Unlike in Chaga, there are not four distinct types. McDonald took numerous creative liberties with his depiction of the disease(s). In the universe of *Chaga*, HIV 1 and HIV 2 are treatable, while HIV 3 is controllable and HIV 4 means certain death. As the virus is routinely compared in the novel to colonialism and warfare, a comparison even discussed in scholarly treatments, not much has been said about McDonald's work speaking about HIV issues as reflective of real ones (see Malisa Kurtz for an example). This is surprising, considering his disease is not just a lofty metaphor but actually based on and named after a very real disease. After all, as Susan Sontag says in *Illness as Metaphor*, "illness is *not* a metaphor, and… the most truthful way of regarding illness—and the healthiest way of being ill—is one most purified of, most resistant to, metaphoric thinking" (Sontag 3). The issues McDonald focuses on often are queer. Queer sex happens in *Chaga*, but he does not go into as much detail as Delany does. However, McDonald is heavily invested in other social issues around HIV. He focuses extensively on what are called antiretrovirals, medications that suppress the virus, discussing at length HIV 3 and how only certain people can pay for the medications to suppress

it. If someone is poor, they simply die. This brings in a whole level of classism and socioeconomic discrimination even in the pharmaceutical industry. Now, in the United States, my pills cost about 3,000 dollars a month. Thankfully, I am eligible for a special insurance that covers the cost and yet many people are either ineligible or do not even know that special insurance exists in the first place. Given this real-world parallel, we see that the issues brought up in *Chaga* are far from science fiction. McDonald looks at Delany's use of people living with HIV as potential statistics and takes it to the extreme: costs and losses. Suddenly, bodies have numbers associated with them.

Next, we have Tracy Hickman's 1996 *The Immortals*. Unlike the previous two, Hickman imagines an AIDS-*like* virus that forces the American government to put the virus' victims in internment camps. The government constructed a disease known as V-CIDS, a counter-virus that was intended to fight AIDS. Its test run was offered only to people at risk, queer people, and people suffering from drug addiction. Instead of solving the issue, it effectively gave those people a disease that was basically indistinguishable from AIDS. The government then consulted the non-"diseased" public (anyone who was straight and not addicted to drugs). Surprisingly, the resounding majority confidently suggested they should be put in concentration camps. One man says:

> Captain, who are we sending into our little camps in the beyond of nowhere? Homosexuals, drug addicts, and ghetto junkies. People on the welfare doles. If they weren't to begin with, then they got it by being intimate and immoral with someone who was. […] The biggest problems we've had in the last hundred years have been related to these cancers, these blights on our nation! They've been bleeding this country dry, sucking the very life out of it, killing it off little by little by their own parasitic growth. […] But V-CIDS changed all that. V-CIDS was the mark of the beast, you see! You look at a person on the street, and you couldn't tell if they were straight like you and me or a homo or some other kind of pervert. You didn't know if they were a hardworking person or a leech on the welfare rolls. Yet with V-CIDS it became so simple, so direct. Justice and judgment all in a single little bug! (Hickman 190)

Although this character is not by any means a hero in the book, it is worth noting the language in the middle there, jumping from calling these people "immoral" to the phrase "cancers…". This character sees queerness, disability, and poverty as cancers, not the virus itself. For him, the two are conflated: the "mark of the beast," he said. This may seem like pure sci-fi. Yet in 2017, Georgia state representative Dr. Betty Price, a former anesthesiologist, asked an HIV specialist at a public hearing if there was any way that people living with HIV could be quarantined somewhere. "What are we legally able to do?" she asked. "I don't want to say the 'quarantine' word, but I guess I just said it. [...] What would you advise, or are there any methods, legally, that we could do that would curtail the spread? Whereas, in the past, they [people living with HIV] died more readily, and then at that point, they are not posing a risk. So, we've got a huge population posing a risk if they're not in treatment" (D'Angelo). That is the reality that Hickman gestures to. There are people in power

who very much believe people living with HIV should be cordoned off somewhere, all for the sake of "public health."

Clearly, the ways these three authors approach HIV are very different. In each of these novels, the author problematizes social stigmas toward queer bodies as sites of infection and questions paradigms around serophobia as protection of the heteronormative majority. Sci-fi imagines a new utopia, one that is aware of the past but hopeful for the future, for people living with HIV today, people like me. I lean on the communal aspects of utopia here. As Sontag says in *AIDS and Its Metaphors*, "The illness [HIV/AIDS] flushes out an identity that might have remained hidden from neighbors, job-mates, family, friends. It also confirms an identity and, among the risk group in the United States most severely affected in the beginning, homosexual men, has been a *creator of community* [my emphasis] as well as an experience that isolates the ill and exposes them to harassment and persecution" (Sontag 113). The three authors mentioned here tackle this idea of imagined community for people living with HIV. As indicated in Hickman's work, the "diseased" are isolated from "normal" society while also making community of their own.

And largely, these authors work to contest dominant AIDS narratives in media. Paula A. Treichler notes that, "[80s] television's analysis of representation might graphically demonstrate and deconstruct its own recurrent conventions in representing persons with AIDS: the emaciated gay man in a hospital bed; the 'innocent' transfusion victim surrounded by loving family; the Third World prostitute, in red" (133). The characters of these three texts go beyond those stereotypes showing what it was really like living with HIV and what it felt to be "punished" for their disease, as Trevor Hoppe notes in *Punishing Disease: HIV and the Criminalization of Sickness*.

These books offer us alternative ways of historicizing HIV in the 80s, and they create a queer space for people living with HIV that is political, critical, and personal. When I read these texts alongside scholars like Sontag and Treichler, I see the ways these sci-fi writers did take issue with representations of people living with HIV at the time, and they fought against the systematic issues of the time. And they envisioned utopic communities where people living with HIV could not feel isolated but still feel that sense of belonging Sontag mentions. Especially in today's trying times, these texts are relevant. The stigmas are still there. The criminalization is still there. These books offer hope. Such writings and readings reassert the need, endorsed by someone living with HIV, to stay positive.

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NON-FICTION REVIEWS

A Desire Called America: Biopolitics, Utopia, and the Literary Commons, by Christian Haines

Benjamin Blackman

Christian Haines. *A Desire Called America: Biopolitics, Utopia, and the Literary Commons*. Fordham UP, 2019. Paperback. 272 pages. $30.00. ISBN 9780823286959.

Christian Haines's first book is a timely one. At a moment when the logics of American exceptionalism (e.g., "Make America Great Again") have appeared to culminate in a bleak present whose dystopian mood is fed in part by the rise of neo-Fascist politics, rampant wealth inequality, capitalist violence, and a climate crisis that decimates non-human species and burns down cities and whose maximum effects we still tensely anticipate, Haines looks to literature from the American Renaissance (mid nineteenth-century) and postmodernism in order to recover a minor utopian tradition that offers from within exceptionalism a corrective to ideologies of exceptionalism and the systemic injustices that sustain and are sustained by such ideologies.
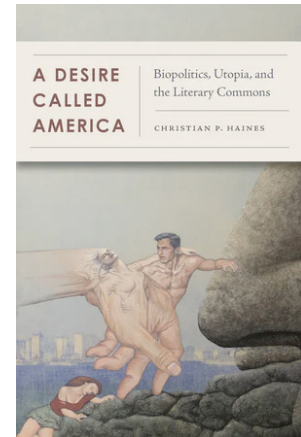
Focusing on the work of Emily Dickinson, Walt Whitman, William S. Burroughs, and Thomas Pynchon, Haines cultivates a series of readings that builds toward a vision of what he calls a "singular America," a "refunctioning of nationality: a nation without nationalism, a people without the exclusionary logic of citizenship, a collective bond without the mediation of the state". (7) Unlike futuristic or exoplanetary societies found in science fiction, a "singular America" exists here and now, residing in the contemporary moment alongside and within neoliberal and capitalist forms of social and political arrangement. If this notion of a singular America is a utopian one that offers a more fair and just society, Haines urges us not to see it as fundamentally opposed to the logics of exceptionalism but instead part of the very same structure of desire for "unique social, political, and cultural vitality". (3) As such, each of these writers works toward a singular America not by imagining other worlds distinct from our own but by remodeling America (or the concept of America) from the inside out, pushing "the revolutionary potential of American exceptionalism to the point where its nationalist-capitalist frame breaks". (3) Many years before Thomas Jefferson wrote the Declaration of Independence, Lucretius explained that a thing contains within it what happens in its past, present, and future. America, too, as Whitman would put it, "contains multitudes." If this singular version of American society sits captive in the present, Haines offers literature as a vitalizing agent. Imbuing literature with the power to help realize a culture of the commons, and drawing on Foucault's work on biopolitics as a theoretical framework through which to locate the emergence of utopia in the body itself – from a site within the bounds

of the nation – Haines advances what he calls the literary commons as the socio-political form of a singular America. Each of these writers offers a vision of a singular America mobilized by the utopian impulse which sits at the heart of American exceptionalism. Indeed, this utopian impulse is baked into the very concept of America, even if today that impulse has been largely co-opted by neoliberalism, wrapped in rhetoric that promises a return to a Golden Age that never really existed (or was only golden for a certain population), conjuring a future that might appear different but merely reifies the conditions of the present.

Early in the book's introduction, Haines cites Thomas Paine writing on the American Revolution, paying special attention to Paine's language which frames the Revolution as a kind of historical rupture – a chance to, in Paine's words, "begin the world over again." It's here, towards the end of Paine's *Common Sense*, that Haines grounds his theorization of utopianism with exceptionalism. Noting that Paine's "new world" rhetoric rehearses colonial narratives of the American continent as an "exceptional space…[that] consecrates violence against indigenous peoples in the name of 'Man,'" Haines nevertheless identifies in Paine's language "a surplus of social potentiality immanent in the long arc of American exceptionalism – a singular America that doesn't transcend exceptionalism but lives within and against it". (4) Crucially, Haines does not read the utopian nature of Paine's writing in opposition to the presence of a colonial narrative that promises the genocide of Native Americans, nor does he dismiss Paine's utopianism as merely false. Rather, he holds these positions together, if painfully at first, in order to extract a disquieting yet liberatory insight: that the intensification of American exceptionalism over the last two centuries or so might well be understood as itself the product of utopian resolve. As Margaret Atwood reminds us in *The Handmaid's Tale* (1985), "Better never means better for everyone… It always means worse, for some". (211) Yet, recognizing this relationship between utopia and exceptionalism brings our attention to the fact that utopia does not exist elsewhere in space or time, but lies dormant in the very structures of Americanism itself.

Scholars of American culture and literature will find Haines's reading of these canonical American writers compelling, not least because each is mobilized by a utopian imperative that offers new, peripheral ways for thinking through forms of the American speculative imagination outside mainstream traditions of early and canonical science fiction. Scholars of science fiction, too, would be wise to read this book for its deft sensitivity to the nuances of the speculative imagination and its grasp on the role of utopia in a politically turbulent present. Drawing on the language and theories of science and speculative fiction (citing Suvin and Jameson), and rarely shy in addressing what is his visibly American audience, Haines offers a praxis of utopian hermeneutic that encourages us to recognize the commons in our literature, and take up the work of estrangement ourselves so that we might see our home again for the first time.

Works Cited

Atwood, Margaret. *The Handmaid's Tale*. 1985. Anchor, 1998.

Fake Geek Girls: Fandom, Gender, and the Convergence Culture Industry, by Suzanne Scott

Anelise Farris

Suzanne Scott. Fake Geek Girls: Fandom, Gender, and the Convergence Culture Industry. New York, NY: New York UP, 2019. Paperback, 304 pg. $29.98, ISBN 9781479879571.

Geeks, nerds, fans, and the like are in the middle of an interesting era. Although big-name companies like Marvel Comics are devoting more energy to diversification and inclusivity, fans themselves appear to be growing increasingly divisive over concerns related to "authenticity." This ongoing question of who is allowed to be a fan and what that entails for people of different genders is at the heart of Suzanne Scott's *Fake Geek Girls: Fandom, Gender, and the Convergence Culture Industry*.

Stemming from the toxic fan culture wars over the past decade, Scott's work is less concerned with female character media representation and more invested in interrogating how female fans continue to be marginalized by both the industry and fan culture at large. Due to Scott's focus on the time period from 2006 to 2017, her work is significantly informed by the growing presence of men's rights movements, anti-feminist agendas, and, of course, the results of the 2016 United States presidential election. Scott perceives the political climate to be one in which white, cisgender, heterosexual males endure under a logical fallacy, that "more for someone else [minorities] will inevitably mean less for me [white, cishet men]" (3)—regardless of whether the topic is immigration, reproductive rights, or fandom. As Scott explains in detail in Fake Geek Girls, it would be remiss to overlook how these misogynistic practices outside of popular culture have grossly impacted the making of an androcentric geek culture.

In her introduction, "Make Fandom Great Again," Scott establishes this political lens, while also positioning her work alongside critical theorists Theodor Adorno and Max Horkheimer, as well as media scholar Henry Jenkins. While acknowledging that there is over half a century between the former and the latter, Scott deftly brings their voices together, along with her own. As she explains, Adorno's, Horkheimer's, and Jenkins's foundational work on convergence culture gave her an entry point into more critically examining its effect on female fans. Although the convergence culture industry has empowered some fan identities, it is important to stress how it has continued to silence others. Furthermore, as Scott notes, "a key distinction is that fans themselves are now working as the agents of the convergence culture industry, reinforcing these industrial predilections and routinely using them to alternately dismiss and harass female fans"

(12-13). And this is precisely what Scott theorizes about in the six chapters contained within *Fake Geek Girls*.

Chapter 1, "A Fangirl's Place Is in the Resistance: Feminism and Fan Studies," examines the feminist roots of early fan studies and the debates over whether incorporation or resistance is the better way to participate (also known as the affirmational/transformative dichotomy). In preparation for her subsequent chapters, Scott maps out how the convergence culture industry's continued pressure to participate in the "appropriate" brand of fandom has marginalized female fans and the historically feminist practices behind the initial fan studies movement. To illustrate this phenomenon, Chapters 2 and 3 both look to specific representations of fan identity in the media, highlighting how frequently female fans are pathologized. From the 1986 *Saturday Night Live* "Get a Life!" sketch and a 2008 *Entertainment Weekly* comic to the 2011 "Idiot Nerd Girl" meme, there is no shortage of examples that depict the distinctive difference between the purported legitimacy that comes with being a "fanboy" and the dismissiveness and skepticism associated with being a "fangirl." Scott asserts, "By identifying geek girls and fangirls as too 'normal' or 'mainstream' to be 'real' fans, male fans belie (or attempt to combat) their own normalcy within the convergence culture industry, positioning themselves as simultaneously the oppressors and the oppressed". (95)

Accordingly, the unfair pressure placed on fangirls to prove their authenticity has driven many of them to fall prey to fan labor schemes perpetuated by the convergence culture industry, as highlighted in chapter 4 "Terms and Conditions: Co-Opting Fan Labor and Containing Fan Criticism." Flowing from a discussion that takes place at the end of Chapter 4, Chapter 5 focuses on Chris Hardwick, host of Talking Dead and founder of Nerdist Industries. Here Scott analyzes the ways in which Hardwick performs as a fanboy and how he is able to use his fan identity for professional gain in a way that is currently unavailable for fangirls. The final chapter, "From Poaching to Pinning: Fashioning Postfeminist Geek Girl(y) Culture," Scott critically examines how fangirl clothing companies such as Her Universe have perpetuated a curated fangirl lifestyle. To challenge this pre-packaged fangirl existence, Scott offers the concept of "strategic pinning" on Pinterest – inspired by the early-nineteenth century "strategic scrapbooks" created by women's rights activists – as well as various crossplay activities, in order to highlight diverse fangirl experiences.

Fake Geek Girls: Fandom, Gender, and the Convergence Culture Industry is without doubt an important text for media scholarship and fandom studies. It's meticulously researched, politically relevant, and it significantly revisits and reimagines early convergence culture theory. That said, due to its heavy theoretical nature, it lacks readability and, at times, appears disorganized. Due to its price point, it would be ideal to assign for a class. However, it is not textbook material. It is a book to digest slowly and sporadically, rather than read front-to-back, and Scott does not take time to explain terminology so as to make it more accessible for an interdisciplinary audience. Although an informative and interesting book on gender politics and fandom studies, due to its overall structure it is best suited for the serious media studies scholar alone.

Global Frankenstein, Margaret Davison and Marie Mulvey-Roberts, eds.

Sarah Canfield

Margaret Davison and Marie Mulvey-Roberts, eds. Global Frankenstein. Palgrave Macmillan, 2018. Hardcover, 344 pg. $119.99, ISBN 978-3319781419. Ebook, $89.00, ISBN 9783319781426.

I first found *Global Frankenstein*, part of Palgrave's relatively new Studies in Global Science Fiction series, when I was searching for material for my first-year seminar course titled "Global Frankenstein." Both my idea for the class and this ambitious anthology participate in the 200th anniversary celebrations of Mary Shelley's *Frankenstein* (1818), which may or may not be the first modern science fiction text. Regardless of where you may stand on that issue, the popularity of the mad scientist and the monster for those 200 years certainly justifies the hoopla. I was particularly excited by the global moniker, however, as I am always eager to learn more about how the novel has been received, translated, adapted, and transformed beyond English-speaking cultures. All too often, "global" content still remains Western and Eurocentric, and I hoped this volume would help me avoid this problem in my own course.
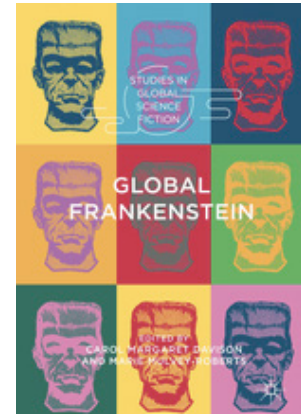
Sadly, Davison and Roberts have not been as successful in collecting scholarship on *Frankenstein*'s international travels as I hoped, a shortcoming that they admit frankly in their introduction: "Despite its title, this critical collection cannot fully convey the enormity and scope of *Frankenstein*'s global reach [. . ..] we acknowledge the linguistic and cultural limitations of this collection and welcome other international interrogations". (8) As a scholar and teacher who was drawn to their text specifically because I hoped to find an English-language consideration of that global reach, I would have preferred a different title, or perhaps a subtitle that clarified these completely understandable difficulties. The blurb claims that the book "reassesses *Frankenstein*'s global impact for the twenty-first century across myriad cultures and nations, from Japan, Mexico, and Turkey, to Britain, Iraq, Europe, and North America." Indeed, articles touch on works from all of these countries, but the analysis definitely focuses more substantially on direct readings of Shelley's text and its British, American, and European afterlives than those in the other countries on this list. Nevertheless, the number of non-English *Frankenstein*s covered within this volume is notably higher than any other collection I have seen, so perhaps my disappointment exceeds justification.

Having noted my reservations regarding the title, I must declare that the essays in this collection comprise a thorough, thought-provoking, and occasionally brilliant body of scholarship. Sixteen essays are presented in five sections, devoted to the novel's science, corporeality, stage and screen adaptations, illustrations and literary adaptations, and "Futuristic Frankensteins." The editors have each contributed, Mulvey-Roberts with an analysis of the surgical context of the novel and the contemporary French artist ORLAN's radical body modifications, and Davison with an intriguing account of balletic interpretations of *Frankenstein*. I applied the adjective "ambitious" earlier in this review—the range may not be "global" in the specific sense that I had hoped for when I saw the title, but in terms of sheer scope and comprehensive consideration of where the influence of Shelley's text can be found, the word is appropriate. In addition to the usual textual issues and filmic adaptations that any collection must address, the plastic surgery as art and the danse macabre are joined by stage plays, television series, picture books, graphic novels, interactive digital texts, video games, memes, philosophical riffs, and even a poem as afterword.

When these authors focus their attention on Shelley's text, they provide cogent analysis in thoughtful conversation with earlier scholars. The editors' introduction succinctly reviews the critical history of the novel, noting major critical insights as well as the biases that inflected them. The essays advance many of these conversations. For example, Bruce Wyse reads the novel's deployment of disability and disgust and the evolution of those themes in texts from Bulwer Lytton to Doctor Who, noting ways in which these adaptations "broaden the representational purview of *Frankenstein* to clarify its subtext" (89) through the lens of disability studies. Carolyn D. Williams explores the marked lack of humor in the original novel as a symptom of Shelley's concerns with decorum, a "dangerous strategy" because "like Gothic monsters, laughter, if banished, may return with devastating effect". (91) In addition to her careful reading of Shelley's manuscript and revisions, Williams also considers the challenges and opportunities this creates for critics, interpreters, and adapters.

Sometimes the connections become rather attenuated. Xavier Aldana Reyes pursues the creature's influence on the specific subspecies of zombies produced through human-engineered viruses as well as recent portrayals of sympathetic zombies. While he acknowledges that most zombies are rightly distinguished from Frankenstein's creature, Aldana Reyes argues that these "lumbering creatures who walk the line between life and death may now be embodying the most relevant aspects of the myth" (179) for current audiences. I am not sure yet if I accept the argument (in part because I don't know enough about zombies), but I want to run it past my students. This satisfies the purpose that drew me to the collection in the first place: to stimulate my thinking about the novel and enrich my teaching with new examples, insights, and questions. Less successful for me, though still provocative, is Tanya Krzywinska's review of *Frankenstein*'s impact on video games. With few direct game references to consider, Krzywinska focuses on visual and creative aesthetics several iterations removed from the original text. While I don't doubt their lineage, I do wonder what to do with it.

I cannot conclude my review without addressing the final essay, written by the renowned Fred Botting, "What *Was* Man . . .? Reimagining Monstrosity from Humanist to Transhumanism." Botting questions the relevance of Shelley's novel today, a cultural touchstone easily mined for metaphor but otherwise displaced by more modern monsters: "Frankenstein and creature—all two-human [*sic*]—seem to have no place, deleted by global posthumanism, either in the voracious supersession enacted by the attractive vampires of neoliberalism or in the nonhuman hordes of walking dead that testify to a transhumanist future present, subsisting as refuse, less than meat, and barer than bare life". (310) Botting finds a powerful reimagining in Bernard Rose's film *Frankenstein* (2015), but one which may mark the end point of the Frankenstein myth, clearing the way for "some cyborgs, chimeras, hybrids, and posthumans [to] begin, without fear or fantasy, to foster some other imagining". (315)

Taken as a whole, *Global Frankenstein* provides a varied and fascinating array of critical approaches to *Frankenstein* itself as well as a truly remarkable range of related works. If more of those works are from Western, and especially English-speaking, cultures than the title suggests, I recommend following Davison and Mulvey-Roberts' excellent collection with further scholarship on the international reach of Shelley's hideous progeny.

M Archive: After the End of the World, by Alexis Pauine Gumbs

Sarah Heidebrink-Bruno

Alexis Pauline Gumbs. M Archive: After the End of the World. Durham, North Carolina: Duke UP, 2018. Paperback, 248 pg. $24.95, ISBN 978-0822370840.

Alexis Pauline Gumbs's *M Archive* is the second installment in a planned trilogy that explores a speculative future landscape, ravaged by the effects of late capitalism, environmental devastation, and the exploitation of black and brown bodies. In the introduction, Gumbs credits M. Jacqui Alexander's *Pedagogies of Crossing* (2006) as a literary ancestor to *M Archive*. For Gumbs, the "M" in *M Archive* has a multitude of meanings—including magic, muscles, memory, and importantly, more. She describes her text as a "speculative documentary" (xi)—an inventive literary form that she imagines could be written by future survivors, who are witnesses to "the realities we are making possible or impossible with our present apocalypse" (xi). Fundamentally, Gumbs's work is concerned with "black life, black feminist metaphysics, and the theoretical imperative of attending to Black bodies in a way that doesn't seek to prove that Black people are human" (xi). In other words, Gumbs uses speculative documentary as a space in which to trace the possible impact of humanity's exploitative labor and environmental policies, which rely on the subjugation of black and brown bodies—especially women of color—in order to create profits for others.
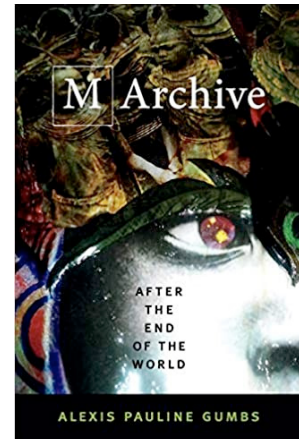
Just as Gumbs pays homage to *Pedagogies of Crossing*, she also references several other key intersectional feminists and scholars of color over the course of her narrative. Writing in lower case text, she resists the linguistic conventions one typically associates with scholarly works of theory. Instead, she subtly references her foremothers, such as bell hooks, who shift the standard linguistic paradigm to create new ways to engage with theory and praxis. The result is a text that is an intriguing mix of stream of consciousness, poetry, speculative fiction, and black feminist theory.

Furthermore, each section begins with a selection of the Periodic Table of Elements, in which Gumbs highlights different elements that set the tone for that portion of the text. Told from the perspective of a futuristic researcher, Gumbs's text invites the reader to sift through layers of detritus to uncover the cultural artifacts below, in order to understand the harm that humanity has caused to itself and the planet as a whole. She breaks her book up into the *Archive of Dirt*, *Archive of Sky*, *Archive of Fire*, *Archive of Ocean*, and *Baskets (Possible Futures Yet to be Woven)*. Each

section then explores the cause and effect of the environmental catastrophe that Gumbs imagines ruined the planet and forced the surviving members of humanity to adapt and live underground to escape from the toxins on the surface of the planet after the ozone layer had been destroyed.

In *Archive of Dirt*, the speaker begins with a description of the capitalistic greed and disregard for other living beings that caused her ancestors (us) to treat everything as though it were expendable. Gumbs's words pack a punch, leaving the reader with reverberating images of the body as containers for waste— "simply put, every piece of the planet was filled with trash. Our minds notwithstanding. Our bodies included". (46) From there, she delves into the painful and traumatic process by which humanity had to give up the old ways of being in order to adapt to the harsh landscape in the post-apocalyptic future. The speaker discovers that in order to survive, humanity must become one with the Earth—both by reestablishing our connection to the planet that sustains us and by moving underground. In *Archive of Ocean*, Gumbs makes a powerful connection between science and spiritualism, reminding the reader that water is "the place where evolutionists and creationists agree that life began, the source of all the salt we breathed to get here, lives with us". (11) Gumbs continues to advocate convincingly for the need for a belief in both science and the soul over the course of the text, ultimately showing the reader that humanity can survive only if it attends to both.

Finally, in *Baskets*, Gumbs further speculates on the limitations and possibilities that could define humanity. She rejects an individualistic way of thinking and encourages readers to think of themselves as part of a larger system. Yet, she cautions that any feeling of universalism must not overshadow the dark history of human exploitation (exemplified by the slave trade) or the need for intersectional thinking when describing the experiences of people of color. As Gumbs writes, "there did come a time when the species was united on the planet as human, but it was not what anyone had dreamt. And it was too late to truly benefit those of us who had been called alien. We who had nonconsensually generated the human across time". (171) In other words, universalism could potentially be just as problematic as individualism, if it erases the identities and hardships faced by cultural "others".

Overall, I believe this text will be of particular interest to scholars and readers who appreciate literary forms that meld poetry and theory, such as Cherríe Moraga and Gloria Anzaldúa's *This Bridge Called My Back* (1981) and (Gumbs' earlier work) *Revolutionary Mothering* (2016). However, I would not recommend it as a primer into intersectionality or black feminist thought, as Gumbs takes for granted the readers' familiarity with her many references to feminist concepts and black feminist writers, including bell hooks, Audre Lorde, and Octavia Butler, among others. In doing so, Gumbs shifts the onus onto the reader—to study foundational black feminist scholars and practitioners, and to learn from their theories, in order to avoid the future that *M Archive* uncovers.
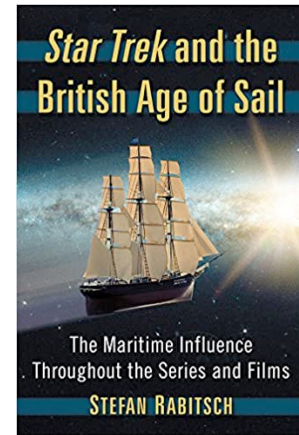
Star Trek and the British Age of Sail: The Maritime Influence Throughout the Series and Films, by Stefan Rabitsch

Russell Alexander Stepp

Stefan Rabitsch. Star Trek and the British Age of Sail: The Maritime Influence Throughout the Series and Films. Jefferson, NC: McFarland, 2019. Paperback, 279 pg. $45.00, ISBN 9781476664637. EBook ISBN 9781476634197.

Since 1966, the *Star Trek* franchise has made significant contributions to popular culture, spanning six television series, one animated television series, thirteen full-length motion pictures, and numerous novels, comics, video games, and other media tie-ins. The franchise has frequently been described as "Wagon Train to the stars," stemming from shared themes and a format with the television program *Wagon Train*, which follows the adventures of settlers in the American West during the nineteenth century as they travel from Missouri to California. The program was popular in the fifties and sixties just prior to the original *Star Trek*'s premiere on NBC in the fall of 1966. *Wagon Train*, like *Star Trek*, was episodic in nature, each week's program taking place in a new location as the settlers moved West followed by a new location in the next week's episode.

While much has been made of *Star Trek*'s connection to the genre Western and the mythos of the westward expansion of the United States, very little has been made of the franchise connections to a shared Anglo-American naval tradition. Stefan Rabitsch, in his book *Star Trek and the British Age of Sail: The Maritime Influence Throughout the Series and Films*, seeks to right that omission. This book is the first major publication to argue that Star Trek owes as much of its legacy to a trans-Atlantic naval tradition as it does to the American Western. It would be just as accurate, if not more so, to state that *Star Trek* is as much "Horatio Hornblower in space" as it is "*Wagon Train* to the stars." The volume itself is divided into two major sections: "Elementary, Dear Trekker (A Primer)" consisting of three chapters, and "Rule, Britannia! Britannia Rules Outer Space in *Star Trek*! (A Voyage)," four chapters. The volume also includes a shorter preface, introduction, and conclusion, and an impressive bibliography and extensive endnotes.

Rabitsch's approach is principally literary, rather than historical, and oriented in a post-colonial approach. He centers his argument on, but does not limit it to, C.S. Forester's Horatio Hornblower novels, a series of novels centered on the career of a British naval officer in the Age of Sail, particularly during the Napoleonic wars. The novels were published between the late nineteen-thirties and mid-sixties, and thus were very much part of popular culture at the time

that *Star Trek* was released. These novels were set at the height of British imperial power, and, as they were hugely popular on both sides of the Atlantic, tap into American interest into its own historical colonization and growing awareness of its increasing prominence on the world stage, as well as British notions of empire during the Age of Sail. Forester's Hornblower was a combination of skilled strategist, charismatic leader, dedicated naturalist, and caring friend—the prototype for a Starfleet captain.

The author's focus on Forester and his literary works should, in no way, be taken as a lack of intellectual rigor or scholarly attention. Rabitsch not only shows fluency in critical theory, but has also clearly mastered several literary corpora, which he has incorporated into his book. To begin with, Rabitsch is intimately familiar with the bulk of the Prime timeline in the *Star Trek* franchise consisting of the first five live-action series, the animated series, and the first ten theatrical films. He largely excludes *Star Trek: Discovery*, as the series was in its infancy at the time the volume was being prepared for publication, and the Kelvin timeline (i.e. the J.J. Abrams films). When necessary, Rabitsch also incorporates production notes and other archival texts related to the production and development of the franchise. His knowledge of Forester's Hornblower corpus, as well as the life and writings of Horatio Nelson and James Cook, nineteenth century British naval officers on whom the character of Hornblower was largely based, is equally impressive. Furthermore, Rabitsch manages to interweave these various threads into his prose to create a compelling argument, frequently presenting an idea from Forester of historical accounts of the British navy, followed by a methodical analysis of the same point in each of the *Star Trek* series. The depth of Rabitsch's analysis gives his work a feeling of completeness and elevates his argument that "Hornblower in space" is a much better description of the franchise than "*Wagon Train* to the stars."

This is not to say that Rabitsch's analysis is above reproach. At times, the author seems to be so concerned with his postcolonial analysis, in which he compares the Federation and Starfleet to British and American colonialism, that he ignores conflicting evidence that would undermine that narrative. This is particularly evident when it comes to *Star Trek: Enterprise*, which depicts a time in franchise history in which Earth was not among the more influential planets, prior to the foundation of the Federation. With this said, *Star Trek and the British Age of Sail* deserves praise for the quality of content, the depth of research, and the clarity of thought, and should be of value to any academic interested in the history of the *Star Trek* franchise.

The Twilight Zone and Philosophy: A Dangerous Dimension to Visit, Heather L. Rivera and Alexander E. Hooke, eds.

Robert Creedon

Heather L. Rivera and Alexander E. Hooke, eds. *The Twilight Zone and Philosophy: A Dangerous Dimension to Visit.* Popular Culture and Philosophy: Volume 121. Open Court, 2019. Paperback. 247 pg. $19.95. ISBN 9780812699890.

This book is a concise view of philosophical topics using the classic television series *The Twilight Zone* (1959-1964) as the basis of its explorations in 21 short essays. It follows the standard format for the series by having various authors explore concepts in short 9-14 page essays that allow the reader to delve into heavier material. Although being familiar with the series helps, it is not necessary, as detailed examples from the series are given to provide clarity for the reader. Readers will also find many episodes are discussed repeatedly, as they apply to numerous topics and concepts. Most of the chapters include direct references to the philosophers and their writings, documented and indexed for ease of reference. These essays are well divided into subsections under headings offering expansions on ideas from the main premise: "First Dimension: Facing the Zone"; "Second Dimension: Beyond the Boundaries of You and Me"; "Third Dimension: The Wondrous Land Called Truth"; "Fourth Dimension: As Vast as Space and Timeless as Infinity"; "Fifth Dimension: Our Twisted Imaginings"; and finally "The Dimension that Can't Be Named or Numbered.". Most readers should enjoy the bite-size nature of the information which is designed to make it more accessible to the general public and specifically to the fans of the series. This format is the same as has been used for other volumes of the Popular Culture and Philosophy series, giving continuing readers greater context and understanding.
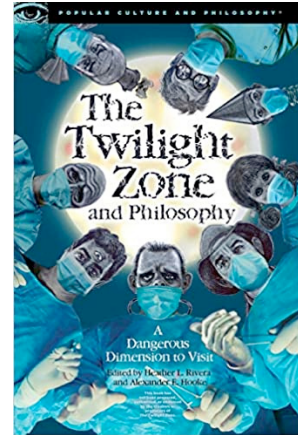
What I found most interesting were the chapters that asked questions about the concept of the Twilight Zone as a shadow of our own world. *The Twilight Zone* was written by a group of horror writers from southern California in the late 50's and early 60's that as Matt Cardin says, "founded their sense of the fantastic in everyday reality and the experience of characters that might live next door" (quoted in "No Place Like a Non-Place,"by Fernando Gabriel Pagnoni Berns, Juan Ignacio Juvé and Emiliano Aguilar, pg. 131). We also learn that except for just a couple of episodes, an element of supernatural, the future or aliens, was used to create twists or surprise endings. These thought plays provide ideal bases for the philosophical thought exercises in this book. The pairing is as natural as that between *Candid Camera* and sociology. Rod Serling and his associates created

a series that created thought experiments that illustrate the great theories of the philosophers, although not by design.

The chapters exploring specific theories are more interesting than the others, providing as they do a detailed framework including examples to aid the readers' comprehension. Philosophers discussed range from Aristotle to recent philosophers so current that the writers provide timelines indicating when episodes came out between major works by these contemporary figures. Many of the essays require the reader to invest time to absorb and work through the ideas expressed after reading. My favourites include "No Place like a Non-Place," by Fernando Gabriel Pagnoni Berns, Juan Ignacio Juvé and Emiliano Aguilar, in which they explain Marc Augé's *Non-Places: Introduction to an Anthropology Of Supermodernity* via the episodes "Will the Real Martian Please Step Up?", "The Four of Us Are Dying," "The Hitch-hiker," "The After Hours," "The Passersby," "Passage on the Lady Anne," and the classic "Nightmare at 20,000 Feet";"The Twists and Turns of Second Chances,"by John V. Karavitis, describing Soren Kierkegaard's *Either/Or* (which is about the aesthetic versus the ethical world) in episodes including "A Nice Place to Visit," "A Game of Pool," and "Devil's Printer"; and "The Pleasure of the Twist," by Stephen Scales, discussing Thomas Kuhn's *The Structure of Scientific Revolutions* with references to "The Hitch-hiker," "The Lateness of the Hour," and the classic "To Serve Man." The essay "The Science of Alternative Realities," by David Morgan, is a wonderful treat for this science fiction and comic reader as it explores the theories of alternate dimensions and timelines. The book has enough layers to be read multiple times and remain on your bookshelf for years of reference and enjoyment.

"Memories Are Made of This," by Clara Nisley, mentions David Hume's belief in continued existence briefly before moving into a consideration of "And When the Sky Was Opened" and "The Trouble with Templeton"; the relevance of Hume could have been explored in more detail Other chapters work better, such as "Lost in Time," by Elizabeth Rard, which discusses the time travel paradox with examples from the episodes "The Rip Van Winkle Caper," "Last Flight," and "No Time Like the Past." "The Twilight Zone on Our Doorstep," by Tim Jones, is most intriguing in its exploration of where *The Twilight Zone* actually existed. "A Shadowland Called the Twilight Zone," by Trip McCrossin, on how Serling's art mirrored the events of his time, showing his own opinions, will be of interest to film historians. Serling's contribution to later movies is discussed in "The Science of AlternativeRealities," by David Morgan, as Serling's ideas can be seen in blockbusters and feature length movies, although Serling's contributions were unaccredited. Many of the essays are well-developed persuasion pieces on the theory and the related episodes, and they serve as fine examples of how to form an argument.

Given *The Twilight Zone*'s popularity and reputation, I am surprised it was not covered earlier in the series. This book would be a great companion piece for any philosophy course if the instructor uses an episode or more to illustrate some philosophical theories. As someone who watched *The Twilight Zone* recently, I found that this book provided a great opportunity to explore theories in philosophy more easily than the complexity of the theories would indicate. Reading these essays will encourage the reader to find the episodes online, or set up their PVRs. For those

who enjoy some of the reincarnations such as *Black Mirror* and others, including the recent reboot of *The Twilight Zone* itself, this book connects well to a more innocent time in television that explored many concepts long before these recent imitations began to do so.

NONFICTION REVIEWS

The Twilight Zone (TV Milestones), by Barry Keith Grant

Dominick Grace

Barry Keith Grant. *The Twilight Zone*. Wayne State UP, 2020. TV
Milestones. Paperback. 132 pg. $19.99. ISBN 9780814345788.
Ebook. ISBN 9780814345795.

TThe Wayne State University Press has published nearly 40 volumes
in the TV Milestones series; surprisingly, it has taken on *The Twilight
Zone*, one of the most celebrated TV shows ever made (so much so that
it has been rebooted three times, with limited success, as well as adapted
into a feature film) and arguably the seminal show to make the fantastic
legitimate adult fare on TV, only in 2020. Barry Keith Grant's volume is
as compact as the other entries in this series, and it is a quick and easy
read. Non-academics should find this a perfectly accessible introduction/
primer. However, the book is also thoroughly researched, well-grounded
in the scholarly tradition associated with the show, and insightful in its
own right. Anyone interested in *The Twilight Zone*, whether as a fan or
scholar (or both) will find this book valuable.
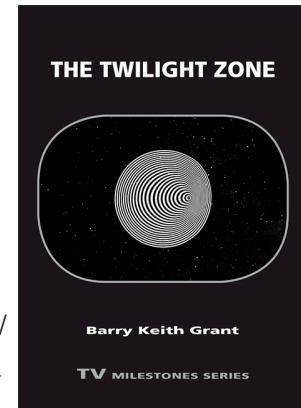
Bookended between an introduction and a conclusion waggishly entitled "Zoning In" and
"Zoning Out" are three chapters exploring, as Grant outlines his plan in the introduction, "the
interrelated questions of authorship, genre, style, and ideology in the context of *The Twilight
Zone*". (14) Throughout the book, Grant balances relatively deep dives into key episodes with
quick summaries of linked episodes. As a result, he manages to be comprehensive without being
superficial.

The first chapter, "'Once Upon a Time': The Twilight Zone and Genre," focuses on "the place
of *The Twilight Zone* within the various modes of the fantastic, showing how it combined them
with other generic traditions to offer social criticism cast as moral fables", (17) but crucially also
explores in some detail how the show works as a hybrid of genres, folding in, notably, elements
of *film noir*, as well as other genres (e.g. the then-popular on TV Western; several episodes of the
series are explicitly Westerns or at least are set in the West).

Chapter Two, "'The Prime Mover': *The Twilight Zone* and Authorship," addresses the extent to
which the show represents a unified vision. As Grant notes, the show is indelibly associated with
Rod Serling, who created the show, oversaw the production (for the first few seasons, anyway),
wrote a significant percentage of the episodes, and, most significantly perhaps, hosted the show,
stamping his personality on each episode and himself becoming a TV icon as a result (so much
so that he is folded into the final episode of the first season of the latest reboot). While Grant

acknowledges the complexities of auteurist criticism, he makes a compelling case for Serling's voice and characteristic concerns as the dominant elements of the series.

Chapter Three, "'What's in the Box': *The Twilight Zone* and the Real World," is perhaps the book's most interesting chapter, delving as it does into *The Twilight Zone*'s hallmark social commentary. Grant carefully contextualizes the show historically, showing how it responds to current concerns and anxieties. He also deftly documents its own tensions, arguing that the conflicting condemnation of collective action as dangerous (the show's famous "The Monsters Are Due on Maple Street" [1.22, March 4, 1960] being perhaps the paradigmatic example) weighed against the show's consistent condemnation of selfishness, greed, and other dangerous manifestations of individualism constitutes the "thematic tension at the heart of the show" and "places it squarely within the debates that have informed American culture and political thought from the nation's beginning". (98)

Also central to Grant's argument is his recognition of the tension between art and commerce, a tension he recognizes as built in to Serling's own conflicted view of television as, on the one hand, a commercial medium reliant on formula and beholden to sponsors but, on the other, a popular medium that could be used artfully to engage in social commentary. Grant notes that *The Twilight Zon*e "reveals the tensions between artistic ambition and commercial capitulation at a pivotal point in the history of the medium", (100) but that Serling was largely successful (with some instances of unsuccessful episodes scrupulously noted): "With *The Twilight Zone*, Rod Serling joined the ranks of such otherwise very different American artists as Walt Whitman, Frank Capra, and Frederick Wiseman, all of whom have sought in their work to find ways to integrate the individual within the great democratic project of the nation" (99).

This book is a valuable addition to *Twilight Zone* scholarship, acknowledging the work of previous scholars while also advancing the study of the show. Its clear and accessible style makes it ideal for undergraduate students, perhaps especially in media courses, but its depth and insight make it valuable for advanced scholars as well. I would recommend it for any library interested in remaining current with studies of the fantastic across media.

Utopia and Dystopia in the Age of Trump: Images from Literature and Visual Arts, Barbara Brodman and James E. Doan, eds

Simon Spiegel

Brodman, Barbara, and James E. Doan, eds. Utopia and Dystopia in the Age of Trump: Images from Literature and Visual Arts. Fairleigh Dickinson UP, 2019. Hardcover. 244 pg. $95.00. ISBN 9781683931676. EBook ISBN 9781683931683.

The title of this collection is, without any doubt, catchy, and the dystopia part in particular feels very topical at the moment. While I am writing this review, in the midst of the COVID-19 crisis and the protests against the murder of George Floyd, Donald Trump's unique blend of viciousness and ineptitude is reaching new heights (or lows). The images we see from Washington, with armed forces in front of the Lincoln memorial, certainly have a dystopian feel to them. But, as it so often goes with catchy phrases, the title proves on closer inspection also to be quite problematic.
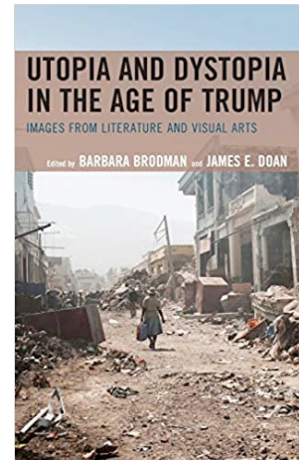
The problem is twofold and really concerns both parts of the book's title. First, surprisingly few of the fourteen essays collected in this volume actually deal with proper utopias or dystopias. While opinions among scholars differ about how loosely the concept of the positive utopia should be understood, dystopia is quite clear-cut as a genre. Dystopias deal with a society which is worse than the one we live in. But neither *Hamlet* (c. 1599-1601) nor Edgar Allan Poe's "The Fall of the House of Usher" (1839), which Christine Jackson analyzes in her article, are set in dystopian societies. It is, of course, legitimate to read Poe or Shakespeare against the backdrop of the Trump presidency (as Stephen Greenblatt has done so beautifully in *Tyrant*), but the mere fact that Claudius has murdered Hamlet's father does not make him a dystopian ruler. Claudius may be a bad person, but there is little evidence that he is also a bad king.

Similarly, Daniel Adleman reads Bret Easton Ellis's notorious *American Psycho* (1991) as a critique "of the callous cultural logic that underpins the utopian ideology of the US neoliberal project". (70) It certainly makes sense to see Ellis's murderous protagonist Patrick Bateman as a kind of proto-Trumpist—as Adleman points out, there are more than thirty direct or indirect references to Trump in the novel—but again it is not really clear how this relates to the concepts of utopia and dystopia except in the most general way..

While some might consider this criticism to be narrow-minded genre policing, it is telling that the editors give only short summaries of the individual articles in their introduction, but fail

to come up with any kind of conceptual framework which would help to explain or contextualize their selection.

Utopia and Dystopia in the Age of Trump is not targeted at scholars of utopias or sf. This becomes evident in Jeffrey Barber's chapter, which is a compressed introduction to and history of sf and utopian writing with a special focus on the theme of sustainability that ends with thoughts on the Trump presidency. While the overview given might prove useful to readers not acquainted with sf theory, the link to contemporary US politics does not go much beyond the assessment that sales of Orwell's *Nineteen Eighty-Four* (1949) have soared after Trump's election.)

And this brings us to the book's second, more serious problem: The question of how much it can tell us about Trump which is enlightening or relevant. Much has been and is still being written on the 45th US President. An obvious disadvantage of an academic book like this is its long gestation time. *Utopia and Dystopia in the Age of Trump* was published in June 2019, which means that probably none of its chapters was written later than the end of 2018. Not surprisingly, some of the essays therefore already feel outdated. Sometimes painfully so, such as Tom Shapira's chapter on Judge Dredd, in which he likens special counsel Robert Mueller to the comic's eponymous protagonist. Like the judge, a member of a special unit who is police, judge, jury, and executioner in one person, Mueller is "an authoritarian figure, a straight and narrow professional, stern of gaze and relentless in his task". (188) Shapira's observation that even people for whom a character like Mueller used to be something short of a bogeyman suddenly rooted for the special counsel is intriguing, but the sad fact that the Mueller report amounted to nothing in the end gives his essay a quite unexpected punch line. Unfortunately, unlike in the comic, in real life the crazy President was not brought down by a disciplined servant of the state.

As an introduction to Judge Dredd—which unlike Hamlet really deals with dystopia—Shapira's chapter works well, as do Matthew Paproth's discussion of the TV series *Black Mirror* (2011-) and Kate Waites's chapter on *Mad Max: Fury Road* (2015) and the Hulu TV series adaptation of Margaret Atwood's *The Handmaid's Tale* (1985). But in each case the connection with Trump—which should be the whole point of the book—seems forced and not very productive. Waites's contribution is typical in this regard. Hulu's *The Handmaid's Tale* (2016-) is probably the first example that comes to mind when people think of dystopia in the age of Trump. The adaptation of Margaret Atwood's novel does indeed feel very timely, and some of its iconic elements, like the handmaid's red dresses and white winged hats, have become symbols of the #MeToo movement and of resistance against Trump in general. In her analysis, Waites concentrates on visual strategies of the show, though, and says little about Trump.

The already mentioned lack of a theoretical framing for the volume becomes particularly striking with David L. McNarron's chapter, which closes the book. McNarron discusses Albert Camus's classic novel *The Plague* (1947)—which has gained new topicality thanks to the COVID-19 pandemic—and Jean Raspail's *The Camp of the Saints* (1973), an obscure French book which has in recent years become a favorite among the alt-right. McNarron's reading of the two

novels—which manages to turn Camus's deeply humanist novel into a plea for nationalism—culminates in a surprising call for strong borders and unabashed support for Trump's policy.

What is the point of this chapter? Do the editors intend to bring some kind of balance to the selection of texts which are with the exception of McNarron's decidedly anti-Trump? Is it meant as a refreshing provocation? Since the book lacks a coherent concept, the readers are left to wonder.

FICTION REVIEWS

FICTION REVIEWS

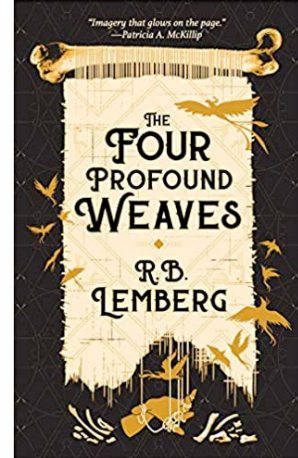## *The Four Profound Weaves*, by R.B. Lemberg

Jeremy Brett

R.B. Lemberg. *The Four Profound Weaves*. Tachyon, 2020. Paperback.
189 pp. $14.95. ISBN 9781616963347.

"This tale must be told four times", said Uiziya, as if reciting a lesson. "Stitched with wind, stitched with sand, stitched with song, stitched with bones. Change, wanderlust, hope, and death. Only then will the ultimate secret become known. (66)

Sadly, because of space, I cannot tell this review four times. This is a pity, because a typical review does not and cannot serve the utterly atypical R.B. Lemberg well. They are such a singular writer, their writing rich in both deep strangeness and lyric beauty, such as to be expansively beyond a typical work of fantasy. No writer I know of so populates their fantasy world with so many genderqueer and/or autistic characters (both sorely lacking in most standard SF&F). Their prose greatly resembles the graceful, stunning, nearly intangible carpets that feature in both this novella and its Nebula-nominated predecessor, "Grandmother-nai-Leylit's Cloth of Winds." Like those carpets, Lemberg's fiction, particularly their Birdverse in which Weaves is set, is constructed of countless threads of bright color in the woof and threads of darkness and grief and suffering running crosswise in the warp. The latest Birdverse chronicle, *The Four Profound Weaves*, is likewise a beautiful piece of craft.

"The first of the Four Profound Weaves is woven from wind. It signifies change". (19) Change, transformation, shifts in identity – these are at the heart of Lemberg's story. In fact, it is the heart of most of their stories. Intangibles such as wind and hope are woven into graspable objects, from something unseen into something that can be felt, touched, admired. Bones are made into cloths that robe assassins. In Lemberg's Birdverse magical cosmology, the abstract concepts of geometry, are changed through the mystical use of special naming into usable works of protection and healing. Things and peoples and individuals are always changing in Birdverse.

Yet, the most noticeable and outstanding characteristic of Lemberg's Birdverse work is the acceptance and commonplaceness of genderfluidity. Moving between and among genders as a matter of course is a practice that generally escapes comments – to switch genders is much more the norm than the exception, despite some cultural differences on the subject. One of Weaves' protagonists, nen-sasair, is a trans male who was originally introduced as the woman Bashri-nai-Tammah in "Cloth of Winds" but who transitioned before the beginning of *Weaves*. At one point he muses about his fellow protagonist, the weaver Uiziya e Lali, thinking:

I did not know that she was a changer like me. I never thought anyone was. I had never met others who went through the change in Iyar. They were banished or imprisoned or hiding or dead. But here, in the desert, changing one's shape was a matter of ritual, of love, not of desperate secrets. (29)

Nen-sasair is a member of the Khana people (a rough Birdverse cultural analog to the Jews), among whose women both queerness and polyamory are accepted as a matter of course (as they are elsewhere in Birdverse). However, trans people are not. Change for nen-sasair is a psychological necessity and part of the natural order; his native Khana are lacking. They are less, in many ways, for not embracing the fluid nature of ongoing change. Uiziya's aunt Benesret (the master crafter who creates the eponymous weaves) snorts at the notion that changing gender is foreign to the Khana, or indeed, to anyone. "That's what he says. Changing is always and forever done. Everywhere, it is done; in open, in secret. He has gone through the change and so, I assure you, have others". (59) And Uiziya herself notes, "It is not hard to be a changer among my people. I know that it is not true everywhere, but in the great Burri desert, changing your body to match your heart is not a thing to bleed over". (27)

For Lemberg, change is a beautiful thing, a regular and welcome part of life and the human condition. Early in the novella, they describe nen-sasair's transformation into what he calls his "true life" in the most poetic way.

But now I was here, far east and away from Iyar, in the great Burri desert. It was here, at this very place, in this dust, on the outskirts of the snake-Surun' encampment, I had stood in my cloth made of winds, the weave of transformation my friends and my grandchildren had woven for me out of love. I'd lifted my arms to the sky and the sandbirds had come to me, sent to me by the goddess Bird and summoned by the cloth of winds. They were birds of bright fire that fell from the sky and cocooned me, until I could see and hear nothing except the warmth and the feathers enveloping me and the threads of the wind singing each to each until my whole skin was ignited by the sun, my body changing and changed by the malleable flame. And when it was done, I sang.

I sang as the wind and the feathers dissolved into sand under my feet; I sang because my transformation was complete. I sang the dawnsong – the sacred melody that the men of my people sing, standing on the roof of the men's quarter every morning. (26)

The opposite of change is stasis, and stasis is unnatural. Uiziya and nen-sasair are travelling to the latter's home city of Iyar to retrieve Benesret's weave of hope from the Ruler of Iyar ("The Collector") who hoards the beautiful and rare within his dark coffers in an attempt to stop time like an insect in amber. As he explains, "I want things to remain, sacred and sovereign and unchanging. I want to preserve what is best. It is a noble purpose". (143) It is to rescue beauty and change from this dark imprisonment (albeit for their own purposes) that motivate the two protagonists to make the journey.

And as it turns out, the Ruler's actions are even darker than at first supposed. In his behavior he stands in opposition to every one of the Four Profound Weaves: he refuses to embrace the natural inevitability of change, which he calls "a lie". Rather than experience or trust wanderlust he would rather stay entombed within his palace. "Change is the world's greatest danger…You rebel, you wander from place to place, you chafe at my rule, thinking that something else, somewhere else, would be better. It isn't. But I save you. I am the one who is centered and stable, anchoring the whole world from my rainbow-tiered court, unmoved by world's wildness, contained in my birdcage throne". (120-121)

Rather than welcome hope and make it free to all, he warps it by offering it as a scrap of bait. As nen-sasair notes of him, "Hope. *Hope has been perverted here, in your Rainbow-Tiered Court, into a thing only you can possess*". (145) By contrast, nen-sasair understands hope as a necessity of life, speaking of it in terms that any Jewish person—such as Lemberg themself—would find familiar:

> It [the dawnsong nen-sasair hears] was hope. My hope, and the hope of all others of my people who sang it throughout the landmass. The hope that wherever we wandered, exiled, and unwanted, the dawn would still come for us. We had only to hold on. (107)

Finally, the Ruler fails to understand death, the final Weave. He seeks the carpet of death that is woven from bones, but only as a prize and a symbol of power. To that end he slaughters countless rebel woman and stores their bones in his dungeons, ready to have them used as mere tools in the crowning of his great and sterile collection. In the name of stability and a world where the frightening nature of change can never take hold, he acts supremely unnatural in trying to subdue hope and death. But in this, the Ruler must ultimately fail, because Lemberg knows that what is natural, what is true to nature and to oneself, cannot be suppressed. Towards the end of the novella, nen-sasair sings before the Ruler the truth:

> "Bird's feathers made the threads that Benesret wove into her great carpet of song; and the bone-threads Uiziya had made from the women you killed will now sing. Hope and death; the siblings are intertwined, and this is the mystery of the ever-changing desert. Hope cannot be given away, to you, or to anyone. Hope is the song which arises from silence where all our voices had been; all those locked away against their will one day will surge again, come forth with great exuberance, sweep the world in a reverberation of rainbow more true than your Rainbow-Tiered Court." (168)

Lemberg ends the novella with hope, hope at the promise of renewal and the excitement of new adventures. This is of a piece with the rest of The Four Profound Weaves, which is remarkable in its truths about the changing nature of life, poetic in its prose, and profound in its understanding of humanity.

FICTION REVIEWS

Supernova Era, by Liu Cixin

Russell Alexander Stapp

Liu Cixin. *Supernova Era*. Trans. Joel Martinsen. Tor, 2019. Paperback.
352 pp. $27.99. ISBN 9781250306036.

Liu Cixin, already a well-known author of hard science fiction in his native China, exploded onto the scene in the Anglophone world in 2014 following the publication his well-regarded novel, *The Three-Body Problem* (as the novel's title has been rendered in English translation). *The Three-Body Problem* received nominations for both the Hugo and Nebula awards for best science fiction novel, winning the former in 2015, and was the first Asian novel to receive the prestigious award. The critical and commercial success of *The Three-Body Problem*, and its sequels, *The Dark Forest* and *Death's End*, (the series was given the title *Remembrance of Earth's Past* in translation) led to an interest in exploring the whole of Liu's fiction, and the intervening years have seen the translation and publication of more of the author's works. *Supernova Era* is the result of this continuing project.
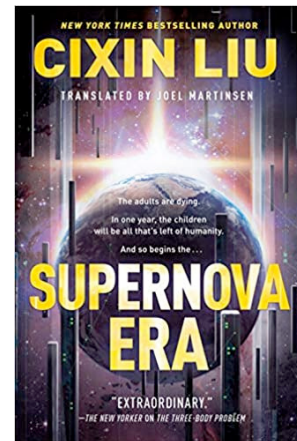
Supernova Era was originally published in Chinese in 2003, three years prior to the Chinese release of *The Three-Body Problem*. Joel Martinsen, who also translated Liu's novel *The Dark Forest* into English, was the translator of *Supernova Era*. The novel shows clear signs of belonging to an earlier stage of the author's development, and a reader who picks up *Supernova Era* expecting the same brilliance that Liu displays in the *Remembrance of Earth's Past* series will come away disappointed. The earlier novel does not quite rise to the same standard as the series that launched Liu to international fame. The characters in *Supernova Era* are somewhat two-dimensional and lack any significant development, and at times the plot feels almost episodic with sudden transitions between major sections within the novel. The prose is also occasionally a bit flat, lacking some of the power of Liu's later novels.

While *Supernova Era* may not live up to the excellent standard that Liu set for himself throughout the *Remembrance of Earth's Past* series, the novel stands on its own and demonstrates one of Liu's most salient qualities as an author: the ability to propose a simple question and explore how one single change can alter the course of human history or perception. The central conceit of *Supernova Era* is that a nearby star goes supernova, bombarding Earth with high doses of radiation. In a departure from Liu's love for hard science fiction and scientific accuracy, he does not dwell much on the biological effects of this radiation other than to say that it only affects older individuals whose DNA is less resilient to change. The result is that, shortly after the supernova

is observed, humanity realizes that within a year all those above the age of thirteen will be dead, which naturally has significant ramifications for both the future trajectory of the human species and the civilizations we have spent thousands of years constructing.

The novel unfolds in three main phases, and in each, Liu demonstrates his ability to posit thought-provoking questions about the nature of technology and the human condition. In the first phase, humanity discovers, and must come to grips with the staggering conclusion that the destiny of the world will soon pass to children. This section explores the nature of education and the transmission of knowledge from one generation to the next as each nation is forced evaluate and asses each child and train them for a future career in the limited span of one year. In a particularly powerful episode, the Chinese government teaches the children selected to fill future roles as political leaders a powerful lesson in the logistical complexities of running a nation by showing them all the salt that the country consumes in a day – loaded into a series of transport trains. In the second phase, the adults have all perished and the children are forced to grapple with the new order where even small children are thrust into the world of adults, hastily educated and emotionally ill-prepared. This phase of the novel is best highlighted by a heartbreaking episode in which one of the main characters, trained as a pediatric nurse, struggles to care for the last surge of children born before the world's adults perished. This, and other similar episodes push the novel into the final phase: children rejecting the old world and beginning to imagine what the new world would be. This reimagination is far from utopian and the world's great powers agree to engage in a gamified version of warfare – potentially deadly but similarly governed by strict rules.

Each section raises poignant questions about education, diplomacy, politics, technology, and the artificial world humanity has constructed for itself. The novel's consideration of these questions alone makes it worthy of investigation by any serious student of speculative fiction. It is made even more interesting to frequent readers of the genre as it presents a distinctly Chinese perspective on global politics and international relations. In particular, Liu's depiction of the United States and its cultural values diverges from those found in Western speculative fiction and may be of interest to a new audience now that this novel has been made available in English.

While *Supernova Era* falls short of the excellent standard set by Liu himself in the *Remembrance of Earth's Past* series, the novel warrants study and contemplation beyond its value as a window into Liu Cixin's development as a writer. *Supernova Era* posits a remarkably simple change to our current world – with a reasonable scientific explanation – and allows the reader to observe how human nature plays out in the world that is science fiction. Ultimately, *Supernova Era* asks significant questions about some of the core constructs of modern society, government, economics, education, and the role of the family, all while providing an engaging work of speculative fiction.

Apocalypse Nyx, by Kameron Hurley

Adam McLain

Kameron Hurley. *Apocalypse Nyx*. Tachyon Publications, 2018. Paperback, 288 pp. $15.95. ISBN 9781616962944.

Returning to a world of bug magic and desert warriors, Kameron Hurley delivers yet another identity challenging, religiously provocative, and character-focused adventure in *Apocalypse Nyx*. Occurring within and between book one (*God's War*, 2010) and book two (*Infidel*, 2011) in her widely acclaimed Bel Dame Apocrypha, *Apocalypse Nyx* follows Hurley's aggressive, no-nonsense Nyxnissa so Dasheem through five separate adventures, each showing the depth and complexity of Hurley's world, magic system, and character development.
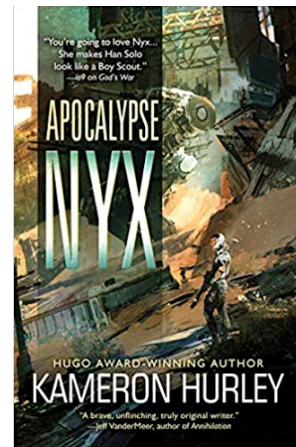
The five adventures in *Apocalypse Nyx* are curated from various novelettes and short stories that Hurley has published in order to continue the adventures of her titular hero. Luckily for readers and lovers of the Bel Dame Apocrypha, or *God's War* series as it is sometimes called, these stories were held behind various paywalls in several places. This collection collects them together for readers. Published from 2014 to 2017, the stories provide singular looks into moments of Nyx's lives and adventures. I would recommend not starting a reading of this series with *Apocalypse Nyx* but instead reading the original trilogy and then diving into this prequel of sorts.

"The Body Project," the first story in the collection, gives readers answers to some of what Nyx and her ragtag group of mercenaries were up to between chapters four and five of *God's War*. When Nyx discovers the body of someone she thought was supposed to be dead a long time ago, she must solve the mystery of why his body appeared far away from where she supposedly killed him. As with the original trilogy, Hurley seeks to question and complicate the ideas of identity and body in this story.

The second story, "The Heart Is Eaten Last," takes Nyx to the south, where we delve into Nyx's complicated family and a past that returns to haunt her. This story delves more into Nyx's character, showing her cold and hardened exterior while also giving glimpses into her true feelings about a job that is personal to her. Of course, as with any book by Hurley, the idea of emotions and what makes up a human becomes complicated as she layers into her characters various complexities. For readers of *Apocalypse Nyx* the notion of an individual "truth" within characters is more an ideal than a reality.

In the third adventure, "Soulbound," Nyx meets an ardent cleric from Mhoria, a religious country that believes in the sacredness of the body so much so that they do not exhume or perform autopsies on bodies. However, this cleric, Abdiel, believes that she must research what her theology teaches her about the location of sin in a body. She eventually runs across Nyx in Nasheen, where Nyx is trying to stop magicians from carrying contraband inside their bodies. Bodies and theology clash through the rest of the story as Hurley weaves conversations and questions motivated largely by the worldbuilding through the rest of the Bel Dame Apocrypha, crafting a pensive and provocative story.

"Crossroads at Jannah," the fourth story, follows Nyx and her crew on a new mission that leads them into a new hell. As the story progresses, Nyx again causes her crew to question her leadership and willingness to cost them their lives and livelihood. This descending spiral leads provokes questions about will and agency, paradise and hell, and choice and consequence. Not as theologically engaging as "Soulbound," "Crossroads at Jannah" deals with the practicalities of religious belief and the morals that guide lives.

The collection concludes with the fifth story, "Paint It Red." An old acquaintance reappears in Nyx's life and demands Nyx pay her debt. Nyx, not liking personal debts, chooses to take on the mission and learns more about herself and her morals than she thought possible. As a conclusion to the short story collection, this story provides a sharp counterpoint to Nyx's blasé and reckless attitude from the earlier stories. It shows her dedication to her team and her morals while also not caring too deeply

As an entry point to Hurley's world, this book provides intense action and adventure, but some of Hurley's deft moves and character growth is lost in the serialized shortness of each story. Because it is a short story collection, *Apocalypse Nyx* provides an ending that feels like the moment after a good dinner but before the dessert. It is epic in proportion, but the book leaves one wanting to read *God's War*, *Infidel*, and *Rapture* (2012), hopefully for a second time. *Apocalypse Nyx* is a great reunion of readers with characters, one that appetizes the world, inviting the reader to dine at the full-course meal that is Hurley's original trilogy..

MEDIA
REVIEWS

The Orville, Season 2

Jeremy Brett

THE ORVILLE. MacFarlane, Seth, creator. Season 2, 20th Century Fox Television, 2018-2019.

It seems an axiom that any television show involving humanity's future in space must inevitably be compared to *Star Trek*, the mother of them all. That makes sense, given the long shadow of cultural and aesthetic influence that the *Trek* franchise casts on televised science fiction. That shadow received particular notice in 2017-2018, when a brief online war erupted between dueling fans of *Star Trek: Discovery* and the comedic drama *The Orville* over which show was more worthy of carrying on *Star Trek*'s cultural mantle. Fans of the former contended that *The Orville* was a derivative and unfunny farrago of Seth MacFarlane-penned *Family Guy* nonsense, while adherents of the latter pinned *Discovery* as pointlessly dark and gritty Trek that overturned franchise history for no good reason and continued the Star Trek Enterprise/Kelvin Universe obsessions with revisiting and reworking the past. Like a great many Internet wars, there was evidence to support both cases. However, I submit that Season 2 of *The Orville* demonstrated that MacFarlane may prove a better custodian of the *Trek* legacy–*Orville* has inherited, much more deeply than *Discovery* or the Abrams films or even *Star Trek: Picard*, the spirit of *Star Trek* at its most thoughtful, optimistic, and socially conscious.

In its worldbuilding, *The Orville* greatly resembles its television ancestor. The show is set in the 25th century, taking place primarily on board the eponymous vessel, an exploration ship serving the Federation-like Planetary Union. The show's lead is Captain Ed Mercer (MacFarlane), a Union officer whose career took a downturn after his adulterous betrayal by ex-wife and first officer Kelly Grayson (Adrienne Palicki). The first season, as is often the case, was an opportunity for worldbuilding—we learned about a number of the species that populate (and some that oppose) the Union, most notably the Klingon-like Moclans, an aggressive single-sex species of which one member is Orville's second officer Bortus (Peter Macon). We also encounter the Xelayans, a humanoid species noted for their great strength in Earth-like gravities, through the ship's security officer Alara Kitan (Halston Sage), as well as the reptilian Krill, powerful enemies of the Union. By the end of the first season, the Orville had truly come together as a cooperative crew, and Mercer and Grayson had generally reconciled their emotional issues. Although the first season was marked by a not-insignificant amount of MacFarlane's characteristic mixture of lowbrow humor and pop culture references (the subject of much of the criticism leveled at the show in the media), it also contained several episodes that would have not been out of place on *Star Trek: The Next Generation* or *Star Trek: Voyager*, and that demonstrated the show's potential for emotional range and character complexity.

Season 2 embraces that range and complexity. True, the lowbrow humor does not disappear entirely. Indeed, when it does appear, it has the effect of making the characters more relatable and, oddly, more human. *The Orville*, by and large, avoids the temptation to which iterations of *Star Trek* have sometimes fallen to make its characters permanently upstanding and so serious and morally earnest they can seem artificial. Although most of the heavy lifting for MacFarlane's humor falls in Season 2 onto helmsman Gordon Malloy (Scott Grimes), there is enough of it go around to make *Orville*'s crew seem more natural in their humanity., less the cardboard cutouts of polite perfection that the *Next Generation* crew, for example, sometimes became. But, broadly speaking, in Season 2 *The Orville* truly comes into its own as a show of characters with inner lives and rich emotion. Show creator MacFarlane has the gift of understanding what gives Star Trek its particular charm and identity, and he brings that to *The Orville*. He is well aware that what made *Trek* so beloved was never the plots or the action scenes or interstellar combat. It was never even *Trek*'s particular commitment to exploring social issues. Like the best of *Trek*, *The Orville* shines because its characters are less a collection of crewmembers than a family; the show succeeds because it focuses on exploring the emotional bonds—expressed via empathy, concern, inside jokes, anger, exasperation, fear, love, and joy - that a close family forms through shared experiences, as well as how those bonds can tighten or fray in times of crisis.

Those personal crises abound in Season 2. In "Primal Urges", the ship's mission to rescue the remnants of a civilization from the expansion of its red star is put at risk from a shipwide computer virus. The source of that virus? A VR pornographic program used by Bortus, who is hiding from his husband Klyden (Chad Coleman) both his addiction to pornography and his growing emotional distance from Klyden. The crisis is resolved in time (though not without Bortus having to bear Mercer's fury), but Klyden and Bortus face a crisis in their marriage that they mutually agree to face and overcome together. The strains in their relationship are sources of ongoing conflict for the remainder of the season. The episode "Nothing Left on Earth Excepting Fishes" gives us Mercer enjoying a happy romantic relationship with Lt. Janel Tyler; that romance is shattered when Tyler is revealed as Teleya (Michaela McManus), a Krill operative disguised as a human and sent to capture Mercer in order to secure his Union command codes. The two are thrown together in a mission to survive an attack from another species; in the course of this struggle, the two develop a grudging respect for each other, and Mercer chooses to release Teleya to her people in the hopes that good relations may open as a result. The episode is charged with Mercer's sense of betrayal and violation of trust, as well as Teleya's own complicated feelings towards him.

There is no overarching story arc to Season 2, but one relationship marks the most dramatic events of the entire season. *Orville* medical officer Claire Finn (Penny Johnson Jerald) finds herself falling in love with science officer Isaac (Mark Jackson). Isaac is a Kaylon, a unit of a race of artificial life forms, sent to the *Orville* to observe organic life and pass back reports to his homeworld. Isaac initiates a romantic/sexual relationship with Finn as part of his study of humans, but finds himself developing a true emotional bond with her. This relationship takes

a fateful turn in the dark, high-stakes double episode "Identity", in which the Orville returns a malfunctioning Isaac to Kaylon 1; what follows is the *Battlestar Galactica*-like revelation that the Kaylon wiped out the humanoid species that created them and now intend to launch an invasion of the Union and destroy all organic sentient life. The Kaylon hijack Isaac and the *Orville*, and send a massive armada to Earth. The resulting space battle between the Kaylon, the Union fleet, and the Union's recent enemies/new allies the Krill, is one of the most elaborate and well-shot battles ever made for televised science fiction. In the end, the invasion is thwarted in large part because Isaac has formed deep family ties to Finn and her children, and turns against his own species. The consequential importance of strong emotional relationships is reaffirmed in the season finale "The Road Not Taken", where an alternate timeline is formed in which Mercer and Grayson never go on a second date and therefore never marry. Without that marriage and subsequent divorce, Mercer never commands the *Orville*, Finn never meets and falls in love with Isaac; the Kaylon invasion thus succeeds in conquering the Union because Isaac never develops the feeling of family he used in the original timeline to inspire his changing alliances.

These stories and others in the season demonstrate that *The Orville* is not just *Star Trek* with *Family Guy* jokes; it is rather a surprisingly good example of character-driven televised science fiction with a strong, emotionally resonant core. *Orville* makes the case that an SF television show need not sacrifice humor or lightheartedness or human failings in order to chronicle progress towards the final frontier. Those character traits—all part of the rich emotional mosaic of humanity—provide substantial character development and story depth, that provide relatable, fallible characters free of the moral earnestness that ofttimes afflicts the *Trek* franchise. With *The Orville*, MacFarlane makes entertaining use of humanity's light and dark sides alike, as he champions and celebrates the human drive towards exploration and discovery.

MEDIA REVIEWS

Upload

Nora Castle

UPLOAD. Prime Video, 2020.

Following in the vein of shows like *The Good Place* (2016-2020) and *Forever* (2018), Amazon Prime Video's *Upload* (2020) tackles the question of what happens after we die. A bingeable, comedic SF TV show set in 2033, it depicts an Earth in which the death of the body does not spell the end for the mind; with sufficient warning (and a sufficient budget), humans can 'upload' into one of a variety of pay-to-play virtual-reality (VR) 'heavens' and live on, interacting with the living as well as their fellow 'uploads'. Nathan Brown, the protagonist, is a coder working on a freeware version of one of the many 'heavens' currently on offer from mega-corporations such as Oscar Meyer Intel and Nat Geo Instagram—the irony that this show is produced by one such mega-corporation should not be lost on the viewer. After his autonomous vehicle crashes, Nathan, dazed and dying, is pressured by his overbearing girlfriend, Ingrid, into uploading his consciousness into Lakeview by Horizen, "the only digital afterlife environment modelled on the great Victorian hotels of the United States and Canada" ("Welcome to Upload"). Among his fellow residents are a multibillionaire, a veteran who 'suiscanned' (i.e., committed suicide by upload), and a child who fell into the Grand Canyon on a school trip.

With the first (46 min) episode given over primarily to exposition, the remaining installments of the show's 10-episode arc (ranging in duration from 24-32 min) deal with Nathan's difficulty adjusting to a stuffy digital eternity where every purchase must be approved by Ingrid, his budding romance with his Angel (aka customer service rep), Nora, and the increasingly realization that his death was in fact a murder. Part romcom, part mystery, *Upload* is effectively what would happen if a Hallmark movie crashed a Cyberpunk convention. The show draws heavily on video game tropes, with the portrayal of Lakeview invoking a kind of massively multiplayer online game, complete with in-app purchases, pop-up ads, and a *Street Fighter* gamer mode. The non-VR world of the show is one similar to our own, with a neoliberal gig-economy and stark wealth disparity, albeit with some significant technological advances. These include innovations with regard to driverless vehicles—which, importantly in the series, allow the user to "prioritize passenger" or "prioritize occupant" in the event of a crash—and 3D-printed foods, though the most significant advancement is undoubtedly the posthumanist digital afterlife itself.

Virtual (after)lives are, of course, nothing new in the world of SF. As early as 1933, Laurence Manning imagined in *The Man Who Awoke* a world in which machines could replace human senses with electrical impulses, allowing people to escape to a virtual life of their choosing. Even uploading consciousness into virtual reality (VR) after death—as opposed to re-downloading into

human bodies as in *Altered Carbon* (novel: 2002, TV show: 2018-2020), transferring into androids like in Rudy Rucker's *Software* (1982), or uploading into computer consoles as in Cory Doctorow's *Walkaway* (2017)—has a number of precedents, including Philip K. Dick's *Ubik* (1969), Iain M. Banks' *Surface Detail* (2010), *Black Mirror*'s "San Junipero" episode (2016), and Neal Stephenson's *Fall* (2019). It is interesting to note that the society in *Upload* is, in fact, striving for the *Altered Carbon* model of re-downloading consciousness, though so far only with disastrous results. What makes *Upload* unique, however, is its comedic take, opting for a more optimistic vibe even while depicting a variety of social ills such as ubiquitous surveillance, overbearing labor, and social control via Uber-style star-ratings.

Designed to be easily watchable with an adequate—but not obtrusive—dose of social awareness, *Upload* is less genre-bending than genre-melding, and the murder plot and digital-panopticon milieu tend to get overlooked in deference to the garden-variety love story. Fans of hard SF will no doubt struggle with the mismatch in the technology portrayed, with, for example, the immense leaps in data-storage for consciousnesses met with chunky VR glasses that already appear outdated for 2020—not to mention the slasher-comedy-esque head-zapping upload sequence.

The series in general seems to have difficulty maintaining a clear focus, and often, in trying to do too much, it ends up doing too little. This includes the character development of its protagonist, who is somehow simultaneously comically narcissistic and impressively altruistic. Intelligent enough to build his own Upload, he doesn't realize the suspicious circumstances of this death until they are spelled out to him by a neighbor: "Yeah, sure… you just threatened a 600-billion-dollar-a-year industry, and no one murdered you" ("Five Stars"). Nevertheless, it does address a number of themes worthy of scholarly exploration. It does so while treading a middle ground of not-quite biting the hand that feeds it (i.e., Amazon), which in itself may be interesting to analyze for media studies and/or cyberpunk scholars, especially given Sean McQueen's assertion that "Cyberpunk's subversive strategies were quickly adopted by, and became indistinguishable from, the corporate structures they initially opposed" (McQueen 5).

Upload is worth watching for those interested in posthumanism, digital worlds, video game studies, artificial intelligence, and biocapitalism, as well as those interested in portrayals of neoliberalism and/or contemporary labor relations. Related to its portrayal of stratified society, it also obliquely addresses questions of racial inequity through its casting and visuals, though there is not anything terribly new there for critical race scholars. The series will be interesting for food studies scholars due to its portrayal of 3D-printed foods and its making visible of the deep enmeshment of food companies in the capitalist world-system (e.g. Nokia Taco Bell, Panera/Facebook). The latter will also make it of interest to scholars working on the Anthropocene/Capitalocene/Plantationocene, though *Upload* pointedly avoids any mention of climate change. Environmental humanities scholars may also find it interesting in its invocation of a (digital) pastoral sublime. Despite its lukewarm story arc, *Upload* is eminently topical, and its Amazon backing adds a paratextual dimension which makes it a cultural artifact worth at least passing consideration.

Works Cited

Daniels, Greg. "Welcome to Upload." *Upload*, 1, Amazon Video, 1 May 2020.

---. "Five Stars." *Upload*, 2, Amazon Video, 1 May 2020.

McQueen, Sean. *Deleuze and Baudrillard: From Cyberpunk to Biopun*k. Edinburgh University Press, 2016.

MEDIA REVIEWS

Westworld, Seasons 2-3

Amandine Faucheux

WESTWORLD. Nolan, Jonathan, and Lisa Joy, creators. HBO
Entertainment, 2016.

It took me two rewatches of the last two seasons of HBO's SF blockbuster to appreciate its genius; my partner vowed never to watch the show again after season three. We probably represent a good average of reactions from fans, but, like Dolores, I maintain that *Westworld* warrants "seeing the beauty" of its fictional universe—that is, to overlook some of its glaring aspects to favor what is unique about the show. Season two delivers all the violent promises set up by season one as we follow the key awakened hosts (Dolores, Maeve, and Bernard)[1] as they take control of their destiny and seek vengeance, freedom, or to fulfil their purpose. It is a glorious, complex, audience-sensitive season that pushes its characters in new and intriguing ways. Season three takes a big leap of faith by leaving the show's fantastic and gorgeous worldbuilding behind to set the action in the 'real' human world, a nightmarish vision of corporate neoliberalism. It's a gamble that pays off only because the characters' storylines, delivered by a stellar cast, compel us to keep on watching. This season also unfolds the ideological conundrum of the premise: a world in which technology serves the purpose of a eugenic population control system to maximize labor.

In Michael Crichton's original 1973 movie *Westworld*, the hosts of the parks turn evil because of something akin to a technological plague, and the human guests are punished for their hubris by violent death. It probably inspired in great part the wave of cult classic SF movies that follow this morale: *The Terminator*, *The Matrix*, *Ex Machina*. But in HBO's version, of course, it is human beings who are the villains who rape, torture, and murder the hosts made innocuous by their inability to defend themselves or remember. The audience, therefore, feels satisfied upon seeing the tables turned on the members of the Delos board, no less, in season two. While Dolores leads her group of hosts within the Delos headquarters and massacres people along the way, Maeve looks for her daughter across the park, which eventually leads her and others to the "Valley Beyond"—an Eden-like virtual world in which the hosts may escape the control of Delos. In this way Dolores and Maeve represent the two extremes of the hosts' reaction to their awakening: vengeance and destruction or escapism. Meanwhile, Bernard's (revealed to be a host in the previous season) fragmented consciousness—whereby he can no longer recognize memories from the present time—provides the season's nonlinear narrative structure. Just like its predecessor, season two is complex, original, and rich in lyrical writing. Much has already been written about episode 8, "Kiksuya" (Lakota for "Remember"),[2] in which Akecheta (Zahn McClamon) tells his story, mostly in Lakota, to Maeve's daughter, which explains the stereotypical scene in which Ghost Nation members attack Maeve's encampment. This episode and the metafictive episode 5 "Akane no

Mai," featuring the shogunate-version of the Mariposa narrative, represents some of the strongest episodes of the season.

Overall, one of the best aspects of this season is in the power it gives to the characters made passive by a combination of racialized and gendered ideologies, as the two episodes just mentioned illustrate. In the shadow of Dolores's and Maeve's character development from feminized and sexualized narratives (as the rancher's daughter and the brothel madam, respectively), to full-fledged heroines lies the fascinating characters of Teddy (James Marsden) and Hector (Rodriguo Santoro). Teddy's role as a host mirrors that of Dolores's: he is supposed to introduce guests to the park and take them on easy adventures. Like her, he dies often and violently, and like her, he also possesses the sort of forgettable character-traits of a basic RPG character: guests are seen making fun of him on multiple occasions. But while Dolores grows out of her role and indeed comes to embody almost the exact opposite—the violent, ruthless, and powerful "Wyatt"—Teddy cannot quite grow out of his character. While he follows Dolores in season two, he tries multiple times to convince her to leave the revolution behind and escape with him. In episode 5, Dolores ends up manipulating his core drives to make him less sensitive and more merciless, which results in his suicide in episode 9. In contradiction to his persona as a romance-novel pistolero of season one, in season two Teddy thus comes to take on the feminized role of the lover who, as a result of their romantic nature, cannot follow their partner's path to violence. Likewise Hector, playing the role of the archetypal and uber-masculine bandit, embodies in season two and three the tragic figure of the lover one cannot save. In spite of his awakening, Hector never manages to survive his reboots and he indeed dies presumably irrevocably in season three. In both cases, it is the female characters who lead the plot intellectually and physically, and the two representatives of the mythological Wild Wild West masculinity take on a passive, feminized role. This reversal of expectations at the cross-section of two genres heavy with polarized gendered tropes (the western movie and science fiction) represent one of the many ways the show transcends.

Season two also increases the layers of complexity of Delos's sinister plans. The parks serve not as touristy attractions but rather as a massive system of data collection of the guests for the purpose of population control, the plot of season three. In this way hosts and guests are aligned as victims of a system that would rewrite their core narratives, endlessly providing the illusion of freedom (the mythical Wild Wild West on one hand, meritocracy on the other) while stripping away their power of will to its core. Thus Dolores's vengeance does not, like in the Crichton movie, represent the main threat to human beings; rather, she becomes in season three the revolutionary hero who might save humans from themselves, and in particular from the system that a character like Liam Dempsey (John Gallagher Jr.) stands for—decadent, unfettered, nepotistic capitalism at its worst.

Unlike the hosts, who showcase complex 'human' emotions and relationships, human beings in the show are consistently incapable of relating to one another in any positive or meaningful way. For example, Felix (Leonardo Nam) and Sylvester (Ptolemy Slocum), the two Delos employees who Maeve blackmails into helping her, do not exchange a single line that is not antagonistic (for

instance, Sylvester calling Felix a "ding dong"), in spite of the show's implication that they are friends and in spite of their shared trauma of being kidnapped by Maeve and her crew for most of season two. In fact, all of Delos employees frequently trade insults and derogatory remarks with one another. The most significant characters, like Charlotte Hale (Tessa Thompson) represent corrupt executives who routinely abuse their staff; for instance, Charlotte purposely opens the door to Theresa (Sidse Babett Knudsen) stark naked, which in any context should be construed as sexual harassment.

Even in the world outside the park, the nightmarish capitalist context intrudes on human relationships. Friendships only exist within the gig-economy criminal hustle in which Caleb Nichols (Aaron Paul) participates, and even familial relationships do not survive the ultra-competitve, manipulative nature of this universe. Every one of the plotlines that connect the most important human characters in these two seasons—William (Ed Harris), James Delos (Peter Mullan), Caleb, and Liam Dempsey—are defined by families fractured by violence, addiction, and corruption, all of which intimately tied to the demands of capitalism. What's more, in this world there seems to be no recognizable laws (or not any that serve to protect people), nor ethics concerning the value of human lives. Delos, for example, seems totally untouched by the brutal murders of people (including their own board members) that took place in their parks; one remaining board member only mentions the impact on Delos stocks. Police can be bought as mercenaries, and people seem to be routinely assassinated without any consequence. Democracy itself is portrayed as a joke, as illustrated by the villain Serac (Vincent Cassel) threatening the Brazilian president with a coup if he does not comply with his requests.

It is by resisting the impulse of portraying a Disneyfied corporate utopia of the 'real world' and instead building a subtle dystopia, the show is capable of transitioning from the host-centered plot of season two into the host-human revolution that takes place in season three. And although fans might not like this season as much, it's for that courageous transition that I believe it should not be dismissed. The plot centers on Dolores (now made to look like a modern woman) as she attempts to use the system, an AI called Rehoboam[3] who can predict the future of human beings based on the data collected by Delos, not to destroy human society but to free human beings from this eugenic population control. She recruits Caleb, a former soldier who was controlled by the US military into being a mercenary and then brainwashed, as the leader of the revolution. Maeve, hired by the improbably named Engerraund Serac, who promised to reunite her with her daughter in the Valley Beyond, attempts to stop her.

At the end of season two, Dolores makes a Charlotte-Hale host for herself and steals five host "pearls," and this season builds a sense of mystery as we do not know which hosts she brought into the real world. Slowly, it is revealed that Dolores in fact copied her own identity over; there are now five Doloreses disguised as various characters. I think this decision is one of season three's strokes of genius. It would have been easy to build on nostalgia for the park by bringing back our favorite characters—Teddy, say, or Clementine (Angela Sarafyan)—but instead the Doloreses both complexify her character and offer another interesting take on gender. The distinct Doloreses start

taking on different personalities and even resist the original Dolores's plan; the Charlotte-Dolores, for instance, starts caring about her family and attempts to avenge their death in the latter part of the season, showcasing yet another case of hosts being more human than humans.

Furthermore, season three continues the show's subtle yet intriguing representation of gender as a meaningless facet of identity. The "male" Doloreses are still identifiable as her. In season two, Dolores's "dark" personality—the polar opposite of her character as a host as the rancher's sweet daughter—was named Wyatt, a ruthless and even insane assassin represented as a man in the hosts' imagination. When Dolores calls herself Wyatt, the other characters, including William, accept it without question. Thus, *Westworld* embodies a visual example of the radical ways in which SF texts of the last two decades have handled questions of sex, gender, and sexuality: deregulate it while keeping it as a completely innocuous part of the worldbuilding.[4] Where an older feminist tradition of SF put their non-normative representation of gender and sexuality at the center of the plot or the worldbuilding (i.e. through alien societies for example), our generation's SF shows off with a shrug.

This is not to say that season three is perfect, or indeed as good as the previous two seasons. One of the most egregious problems is the villain Serac's plot, which is cartoonish at best. Because of the (unexplained) destruction of Paris when he was a child, Serac and his brother resolve to build a system that can predict the future of humanity so that they can essentially eliminate violent criminality—and therefore the destruction of European capitals, we must assume. I suppose we are meant to see a connection between Serac's loss of his home and hosts' loss of theirs, but it's a flimsy connection. Serac's technology serves a violently eugenicist project and the absurd nature of his backstory make it difficult to believe in his own humanity, or in him as a fully-fledged character.

Moreover, while Caleb's character and plotline are interesting throughout the season, the effect of his role is dampened quite a bit when we get to the reason why Dolores picked him in the last episode. It turns out that as a soldier, Caleb was trained in a Delos park and actually helped save Dolores and other hosts in a simulated situation. But Dolores selects him in particular because he prevented the other soldiers from raping the hosts at the end of their mission. Therefore, Caleb's heroic nature stands only from the fact that he didn't abuse his power over the hosts, thus representing a sort of opposite to William, for whom the park unleashed his violent and ruthless nature. Compared with the hosts' more-than-human humanity, however, Caleb's heroism pales.

Serac and Caleb's backstory aside, I do believe season three delivered the promises set up in the previous seasons in original and intriguing ways, and while fans might miss the park's beautiful landscapes, the show continues to dazzle with its unique aesthetic and grand action scenes. Season three will be particularly fruitful to scholars interested in contrasting the other two seasons' truncated utopia with the realistic and unsettling dystopia set up in the outside-the-park universe. Furthermore, Dolores's character—split into five different personas—will provide interesting discussion about hiveminds and other disembodied consciousness that seem to be at the forefront of contemporary SF.

Notes

1. Played respectively by Evan Rachel Wood, Thandie Newton, and Jeffrey Wright.

2. See for example Tom VanDerWeff's and Aja Romano's discussion https://www.vox.com/culture/2018/6/10/17442310/westworld-season-2-episode-8-recap-kiksuya; David Sims, Spencer Kornhaber, and Sophie Gilbert's discussions https://www.theatlantic.com/entertainment/archive/2018/06/westworld-season-2-episode-8-kiksuya-roundtable/562451/.

3. Named after the Biblical character.

4. For example, see the treatment of gender in Ann Leckie's *Imperial Radch* trilogy. For casual yet crucially innovative representations of gender expression, queerness, and non-monogamy, see Seth Dickinson's ongoing *Masquerade* series.

She-Ra and the Princesses of Power, Seasons 1-5

Adam McLain

SHE-RA AND THE PRINCESSES OF POWER. Seasons 1-5. DreamWorks Animation, Netflix, 2018-2020.

Riding the success of the He-Man and the Masters of the Universe show and toy line (1982–1988), the children's toy company Mattel sought to capitalize on its sword and sorcery moment by introducing a female-focused toy line, Princess of Power, centered around He-Man's sister—Adora in her human form, She-Ra in her empowered form. From 1985 to 1987, She-Ra fought the Evil Horde, its leader Hordak, and her nemesis Catra through twenty-two action figures, thirteen comics, several children's books, and a two-season animated cartoon series created by J. Michael Straczynski and Larry DiTillio. Throughout the ensuing thirty years, Adora/She-Ra would appear numerous times in toy lines and cameos, but she would never be as popular—nor, one could say, as marketed—as her brother, Adam/He-Man.

In 2017, Netflix and DreamWorks Animation announced their plans to reboot the franchise as *She-Ra and the Princesses of Powe*r, with Noelle Stevenson, an award-winning author, helming the project as executive producer and showrunner. This move came as part of a series of repackaging of old intellectual property for new audiences (e.g., DreamWorks/Netflix's *Voltron: Legendary Defender*). As showrunner, Stevenson chose to pay homage to the past show while inventing a new future for it and for animated fantasy children's shows. Stevenson's direction chose to focus on diversity and representation, reimagining all the characters to portray more LGBTQ+ characters and characters of color onscreen. Indeed, the reimagining even goes so far as to portray various body types and emotional and mental capabilities. This diversity breathed new life and vitality into the sword and sorcery franchise and created a show that crossed genre boundaries and pushed back against a television culture that consistently shies away from representation, especially queer representation, in shows created for a young audience.

She-Ra and the Princesses of Power has the same premise as *She-Ra: Princess of Powe*r: raised in the Horde, Adora abandons it to fight for the Rebellion after finding the sword that gives her the power of She-Ra. Although sharing the same premise, She-Ra diverges from its source material by changing age, gender, and complexity. Adora is joined by her new friends Glimmer, the princess of Bright Moon and a young woman with mother problems, and Bow, a young Black man and Glimmer's best friend who believes that love and friendship can conquer any insurmountable obstacle. The team of friends sets out to reestablish the Princess Alliance so the Rebellion can defeat the evil Horde (Season One). However, defeating the Horde is not as simple as gathering a few superpowered friends. As the Horde and Rebellion battle back and forth, the show, through its five seasons, weaves together a story of magic and adventure with more sinister and galaxy-

wide intrigue. Seasons Two and Three introduce a long history of She-Ra connected to the ancient First Ones, beings who connected the She-Ra power to the magic of Eternia, the planet. As Adora learns more about her power and the true, ancient, intergalactic war that is being brought to Eternia's doorstep, she grapples with her identity and destiny, striving to be her own person as she is driven to a certain end goal by other forces. Indeed, Season Four introduces weapons of mass destruction and interdimensional travel, culminating in Adora shattering her destiny, and her connection to She-Ra, in order to save her planet and the rest of the galaxy. This event, though, brings Eternia back into a dimension of space controlled by an evil despot—a despot who wants Eternia's weapons to arrest full tyranny over the galaxy.

In Season Five, Adora must take to the stars to rescue Glimmer and Catra from the clutches of the true Horde, led by Horde Prime. Season Five is the culmination of four seasons that have woven seamlessly into each other, building up to the point where Adora must overcome her self-sacrificing nature or let the universe fall into the iron grip of Horde Prime and his army of clones. At the same time, Glimmer must come to grips with her mantle of leadership, having almost caused the destruction of the universe, and Catra must realize her love and adoration of Adora. Season Five presents a strong message of companionship, empowerment, and self-realization.

As a finale, Season Five touches on the themes that have been developed throughout the show. Delving into ideas of cowardice, bravery, honor, friendship, and agency, the fifth season is a heart-wrenching experience as the characters realize the culminations of their journeys of self-discovery. For example, one of the princesses, Entrapta, has been an enigma throughout the entire show. Beginning as a princess who joins the Princess Alliance, she is captured by the Horde, thought dead by her friends who leave her behind. Entrapta, lover of technology, thrives within the Horde, joining their side and building them weapons of destruction. In one of her culminating scenes, as she tries to obtain the tech that will save Glimmer and Catra, who are lost in space, Entrapta says, "I'm not good at people, but I am good at tech. I thought maybe if I could use tech to help you, you'd like me" (Season 5, Episode 2),. Entrapta's growth is just one example of the growth of all the characters on the show—growth that compliments the gender and sexual diversity of the show. The fifth season delivers on the many plot threads, character arcs, and disparate secrets to which the show has been building.

She-Ra is able to take cultural touchpoints—like LGBTQ+ conversations, for example—and present them in ways that are both inclusive and metaphoric. For example, at the end of Season 2, Episode 7, the show introduces the viewer to Bow's parents, two male historians. The fact that his dads are the gay parents of thirteen children is accepted by everyone in the show. Instead of being a story about struggling with coming out or queer acceptance, the story shifts the focus to the dads. Bow's parents, who want Bow to become a historian like them, must overcome their former hopes and dreams for their child in order to love him as he is, a warrior in the Rebellion who loves adventure. Like much of the show, the expected tropes—like the unaccepting parents who must come to love their queer child for who they are—is refracted through a different lens. This refraction, present in much of the show, allows viewers and scholars alike to reapproach different

ideas in fields like queer theory, film studies, and children's literature, and conceptualize these in new and intriguing ways.

Along with innovative metaphors for LGBTQ+ representation, the show itself helps to bring more diversity and representation to the animated screen. From the beginning, the show makes it clear that Spinnerella and Netossa, two princesses, are married. Additionally, many of the characters are characters of color, from Bow and Netossa to Frosta and Mermista. As already mentioned, Bow and his twelve siblings were raised by two fathers. Introduced in Season Four, Double Trouble, a shapeshifting mercenary, is nonbinary, uses they/them pronouns, and is voiced by the LGBTQ+ rights activist and actor Jacob Tobia. Additionally, throughout the entire series, and culminating in Season Five, the show develops a strong relationship—from friendship to enemies to lovers—between Adora and Catra as they come to understand the complexities of love. For a DreamWorks show on Netflix, this representation is very welcome, especially after the fleeting representation in previous shows. She-Ra can be firmly placed into the history of LGBTQ+ representation in media, improving upon the dismal efforts of *Legend of Korr*a and Voltron and leading to the lauded work in *Kipo and the Age of Wonderbeasts*.

As a show is progressive and innovative, however, it also echoes a continual problem that has been revealed over the last years: nostalgia and the recreation and repackaging of intellectual property. This move within science fiction can be a boon and a curse. Reapproaching old property with fresh eyes allows creators to invigorate a universe, helping to bring it into conversation with current questions and interrogations; however, at the same time, repackaged universes must grapple with histories and futures that are tainted with ghosts of the past.

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