Foundation

The International Review of Science Fiction

136

In this issue:

Special section on Canadian sf guest-edited by Heather Osborne and featuring articles by Vera Benczik, Kirsten Bussière, Paul Fayter, Isabelle Fournier and Freya Verlander

Peter Nicholls Prize-winner Katie Stone on the making of James Tiptree Jr

Roundtable discussion on Covid-19 and the sf imagination with Gerry Canavan, Jennifer Cooke and Caroline Edwards

Geoff Ryman reflects on life, love and mortality in Thomas Burnett Swann's 'The Manor of Roses'

In addition, there are reviews by:
Jeremy Brett, Bodhisattva Chattopadhyay, Michael Godhe, Katie Heffner, Paul March-Russell, Rob Mayo, Heather Osborne, Kevin Power, Aren Roukema, Peter Sands, Lars Schmeink and Sara Wenger

Of books by:
Edwina Attlee, Phineas Harper and Maria Smith, Margaret Atwood, Jason Barr, Russell Blackford, Mark Bould and Rhys Williams, Jerry Rafiki Jenkins, Isiah Lavender III, Chris Pak, Amy Ransom and Dominick Grace, Conor Reid, John Sladek and Tade Thompson

Cover image: Loncon3 exhibit hall, ExCeL London, 2014 (photographer: Francis Harnit, all rights reserved) and The Nightingale Hospital, ExCeL London, 2020 (photographer: Matt Writtle, all rights reserved).

Foundation 136 Vol. 49 No.2 2020

Foundation

The International Review of Science Fiction

The Lockdown Issue

Foundation is published three times a year by the Science Fiction Foundation (Registered Charity no. 1041052). It is typeset and printed by The Lavenham Press Ltd., 47 Water Street, Lavenham, Suffolk, CO10 9RD.

Foundation is a peer-reviewed journal
Subscription rates for 2020

Individuals (three numbers)

United Kingdom	£25.00
Europe (inc. Eire)	£27.00
Rest of the world	£31.00 / $47.00 (U.S.A.)
Student discount	£15.00 / $25.00 (U.S.A.)

Institutions (three numbers)

Anywhere	£49.00 / $80.00 (U.S.A.)
Airmail surcharge	£8.00 / $13.00 (U.S.A.)

Single issues of *Foundation* can also be bought for £8.00 / $13.00 (U.S.A.).

All cheques should be made payable to **The Science Fiction Foundation**. All subscriptions are for one calendar year; please specify year of commencement. If you are a UK taxpayer, you can Gift Aid your subscription. Please send cheques to The Science Fiction Foundation, c/o 75 Rosslyn Avenue, Harold Wood, Essex, RM3 0RG, UK.

You can also subscribe and/or donate via PayPal on the SF Foundation website: www.sf-foundation.org/membership

All enquiries should be sent to Roger Robinson at sff@beccon.org All messages should include 'SFF' in the subject line.

Back issues can be purchased from Dr Phoenix Alexander, SFF Librarian, Sydney Jones Library, University of Liverpool, L69 4DA (email: phoenix.alexander@liverpool.ac.uk).

Editorial address (for submissions, correspondence, advertising):

Dr Paul March-Russell – paulmarchrussell@gmail.com

Articles should be approx. 6000 words in length, double-spaced and written in accordance with the style sheet available at the SF Foundation website (www.sf-foundation.org/journal).

Books for review:

Please send all titles, clearly marked 'For Review', to: Dr Allen Stroud, 19 Beech Green, Dunstable, Bedfordshire, LU6 1EB, England UK

Reviews (up to 1500 words in length) should be sent to allen.stroud@btinternet.com

All contents copyright © 2020 by the Science Fiction Foundation on behalf of the original contributors
ISSN 0306-4964

Foundation

The International Review of Science Fiction

Editor: Paul March-Russell
Book Reviews Editor: Allen Stroud
Editorial Team: Cait Coker, Andrew Ferguson, Heather Osborne, Will Slocombe, Maureen Speller

Contents

Volume 49.2, number 136, 2020

Paul March-Russell	3	Editorial
Katie Stone	5	Living a Science Fictional Life: The Creation of James Tiptree Jr.

Special Section: Canadian Science Fiction

Heather Osborne	19	Guest Editorial
Vera Benczik	22	‘A heap of broken images’: Objecthood, Apocalypse and Memory in *Station Eleven*
Isabelle Fournier	35	Dehumanizing the Posthuman in Laurent McAllister and Robert J. Sawyer
Kirsten Bussière	47	Beginning at the End: Indigenous Survivance in *Moon of the Crusted Snow*
Paul Fayter	59	‘Some Eden lost in space’: Contextualising Frederick Philip Grove’s ‘The Legend of the Planet Mars’
Freya Verlander	71	*Midnight Robber:* Matriarchy and Accumulation on a Two-World Scale?

Features

Gerry Canavan, Jennifer Cooke & Caroline Edwards	84	Apocalypse Now: Covid-19 and the SF Imaginary
Geoff Ryman	100	The Fourfold Library (11): Thomas Burnett Swann, 'The Manor of Roses'

Reviews

Bodhisattva Chattopadhyay	106	Chris Pak, *Terraforming*
Paul March-Russell	109	Russell Blackford, *Science Fiction and the Moral Imagination*
Rob Mayo	111	Jason Barr, *Video Gaming in Science Fiction*
Heather Osborne	114	Amy Ransom and Dominick Grace, eds. *Canadian Science Fiction, Fantasy, and Horror*
Kevin Power	116	Rhys Williams and Mark Bould, eds. *M. John Harrison: Critical Essays*
Aren Roukema	119	Conor Reid, *The Science and Fiction of Edgar Rice Burroughs*
Lars Schmeink	123	Isiah Lavender III, *Afrofuturism Rising*
Sara Wenger	125	Jerry Rafiki Jenkins, *The Paradox of Blackness in African American Vampire Fiction*
Jeremy Brett	127	John Sladek, *New Maps*
Michael Godhe	129	Edwina Attlee et al, eds. *Gross Ideas*
Katie Heffner	131	Margaret Atwood, *The Testaments*
Peter Sands	133	Tade Thompson, *The Wormwood Trilogy*

Editorial

Paul March-Russell

My previous editorial was written on 19 December 2019. It took as its topic the idea of turning-points. On the other side of the world, not unnoticed but neither fully understood, a turning-point was about to occur. I write this now on 3 July 2020, and in the last seven months none of us have been unaffected by Covid-19. In a demonstrable proof of the science-fictionalisation of reality, the mass media has repeatedly turned to the themes, tropes and imagery of sf to explain the sudden unreality of deserted streets, isolated communities and the return of nature. As lockdowns are eased in some parts of the world (Western Europe, the UK) and other parts edge towards seeming chaos (Brazil, the US), so we turn again to sf to try and second-guess the utopian or dystopian consequences of the pandemic. Intriguingly, New Zealand – a model of responsible liberal democracy – has been a beacon of hope, much as it appears in John Wyndham's *The Chrysalids* (1955). Wyndham's supposedly cosy catastrophes have been a benchmark for understanding this crisis.

Wyndham's fiction grew from the after-effects of World War Two, and thanks to our current Prime Minister, the rhetoric of the Blitz has never been far away from the UK government's management of the disease. But this rhetoric has nothing to do with how the Blitz was *actually* lived; it yearns after a past that never was. For example – in 1941, the anarchist art-critic, Herbert Read, took a walk through central London. Reflecting upon the unhurried behaviour of shopkeepers sweeping up the debris of the previous night's attack, he also reflected upon the inner meaning of the devastation: 'The endless and intricate structures of a civilization were falling down.' As if in a painting by Giorgio de Chirico, 'all our institutions […] had become so many empty forms, structures with their windows blown out, their walls cracked, their reports and memoranda a heap of sodden ashes.' Adam Piette, in his critical study, *Imagination at War* (1995), dismisses Read's account as bizarre; reflecting upon the last four months since the UK lockdown was imposed, we can appreciate what Read was getting at. It suddenly seems that what was presented as fact is now fantasy: vast governmental spending is accepted as expedient; health workers, shop assistants and delivery drivers, once treated as unskilled, are now key workers; the rigid demarcations between home and office are now fluid; the world's most popular fantasy author self-destructs; ultra-conservative provocateurs are dropped by the very institutions that promoted them; and the statue of a slave trader is dunked into the waters where once his ships disembarked.

The Black Lives Matter protests, from police brutality in the US to the legacy of British slave history, are an almost perfect illustration of Read's

phantasmagorical critique. The shadows flicker, reality dances, and nothing appears to be what it once seemed. Whether this revolutionary moment will actually be a turning-point, only time will tell – probably thirty or forty years hence (if climate change hasn't got us before then). Read's essay, reflective of the utopian thinking to be found in the early years of the War, proved to be over-optimistic. Yet, the fact remains that, rather than the nostalgic view of the Blitz in which we all pulled together in common cause, the nightly assaults encouraged individuals to criticize the pre-existing social structures. Similarly, the lockdown has exposed the political and economic relations through which our society is organised. This moment, this estrangement in how we see reality, will not necessarily be lost. Come 1945, the wartime hero Winston Churchill – our current Prime Minister's idol – was replaced by Clement Attlee.

At the heart of this lockdown issue is a fascinating conversation, conducted online, with Gerry Canavan, Jennifer Cooke and Caroline Edwards in which they think through the pandemic via the prism of sf. We have Katie Stone's prize-winning essay and a special section on Canadian sf, guest-edited by our team member Heather Osborne, plus an accompanying feature by Geoff Ryman. Please also note, in light of the discussion above, the call for papers for next summer's issue on 'decolonising science fiction'. In other news, unrelated to the effects of Covid-19, I have left my lectureship at the University of Kent. My change of email address is listed on the SFF website and in the front cover information. We are concerned that during the pandemic no member of the SFF misses out on their copy of the journal, so do please email me if you think your copy has gone astray. Lastly, we send our congratulations to Susan Ang, whose essay on China Miéville's *The City & the City* in *Foundation* 132 has won the SFRA's Award for Innovative Research.

Peter Nicholls Prize Winner 2020

Living a Science Fictional Life: The Creation of James Tiptree Jr.

Katie Stone (Birkbeck College, University of London)

The life of James Tiptree Jr. was one defined by its relationship to sf. Hailed as one of the most successful sf authors of his day, Tiptree was an avowed feminist. He had lengthy, intimate correspondences with the prominent voices of feminist sf – from Joanna Russ to Ursula K. Le Guin, whom he affectionately called 'Starbear' (qtd. Phillips 2006: 311) – and was included in a written symposium on 'Women in Science Fiction' as 'a token "sensitive man"' (3). His stories were filled with characters grappling with gender politics. Whether this was male astronauts transported to the future and faced with a lesbian separatist utopia in 'Houston, Houston, Do You Read?' (1976) or men encouraged to kill the women they desire as part of an alien real estate venture in 'The Screwfly Solution' (1977), the stories of James Tiptree Jr. were at the forefront of feminist sf. However, no one had ever met Tiptree. He was a mysterious presence in the sf scene, never present at awards ceremonies, conventions, or the private dinners which were customary between editors and authors. And then, in 1976, Tiptree was outed after his mother's obituary revealed that she had no sons, only one daughter: Alice Bradley Sheldon.

This moment when, as Gwyneth Jones puts it, 'James Tiptree Jr. was unmasked as a woman' (Jones 2009: 487), is frequently discussed in terms of a revelation of hidden truth. By learning the name and gender which Alice Sheldon was assigned at birth, those whom Gardner Dozois described as being 'wild to know who Tiptree "really" is' (qtd. Phillips 2009: 1), were thought to have finally found what they were looking for. I want to trouble this characterization of Tiptree's identity. It is my contention that the neat division between real and unreal, true and false, which this narrative of unmasking relies upon is untenable when considered in relation to either feminism or science fiction, but particularly when considered in relation to both. I take the title of this article from Sara Ahmed's *Living a Feminist Life* (2017). Here Ahmed argues both for 'building feminist worlds' (Ahmed 2017: 10) and that 'to be feminist is to be in a different world' (40). Living a self-consciously feminist life is thus shown to be a dual project which involves both creating new worlds and existing within them. This is feminism understood not as a critical method deployed in order to unearth hidden truths, but rather as a mode of being intimately connected to the practice of worldmaking, and it provides the context in which I read Tiptree's work. I argue that the novels, short stories and letters in which Sheldon recreates herself as Tiptree constitute attempts to build worlds in which she is able to meaningfully live. Ahmed's contention that feminism allows access to, or

acknowledgement of, different worlds within our own makes possible a reading of Tiptree and Sheldon as existing in mutually constitutive, overlapping realities, neither of which holds primacy over the other.

By reading both Tiptree's autobiographical and fictional output as examples of worldmaking, I follow Donna Haraway in her contention that 'science fiction is political theory' (Haraway 2000: 120). In Haraway's reading, sf doesn't relate to reality as mask to face, but as one mode of being to another. Naming Tiptree as one of feminist sf's 'theorists for cyborgs' (Haraway 2013: 173), Haraway argues that the genre demonstrates that 'the line between science fiction and social reality is an optical illusion' (149). For Haraway, then, it is entirely possible to live a science-fictional life. Indeed, I argue that it is only by extending one's critical lens beyond the boundaries of that which is formally designated as genre sf that one can grasp the radical potential of a science-fictional, cyborg politics. As Justine Larbalestier has noted, feminist sf 'is not a genre exclusively made up of written texts but a community or series of communities' (Larbalestier 2002: xii); a fact which I argue is not merely of historical or sociological interest but which has a significant impact on the relationship between reality and fiction as it is presented and enacted within the genre. In other words, only a reading of feminist sf as something which can be, and is being, lived as well as created and critiqued is capable of properly grappling with the genre's 'epistemological radicalism' which, as China Miéville has argued, is that 'the impossible is true' (Miéville 2002: 42). To conceive of Alice Sheldon as being 'who Tiptree "really" is' is, therefore, to take a decidedly anti-science-fictional approach to her life and work. By reading those autobiographical texts in which Sheldon reimagines herself as Tiptree in conversation with her short stories, I mean to explore the consequences of viewing this literary persona – in which Sheldon invested so much of her time and creative energy – as a science-fictional creation. Rather than a mask under which Sheldon's true identity was hidden, I read Tiptree as an experimental persona whose claim to reality challenges the supposed epistemological security of the cis-normative, heteropatriarchal world which is otherwise presented as 'natural'. In her effort to live a science-fictional life Sheldon 'demands the impossible' (Moylan 2014: 1) and thus taps into sf's utopian potential. Like the cyborgs which fill her stories, the multiplicitous being who is both Tiptree and Sheldon refuses to acknowledge the illusory line between sf and social reality.

Transgender Studies and Science Fiction

My understanding of the concept of living a science-fictional life as it relates to Tiptree's writing is directly informed by the field of transgender studies. Specifically, I find Susan Stryker's groundbreaking article, 'My Words to Victor

Frankenstein Above the Village of Chamounix' (1994), an important point of reference in understanding the relationship between sf and what Caterina Nirta has called 'transgender embodiment' (Nirta 2018: 38). In Stryker's article, which was first delivered as part academic paper, part performance art-piece, she likens her experience as a trans woman to that of Frankenstein's Creature. Both she and the Creature are continually made aware of the 'unnatural' means of their own construction (Stryker 1994: 238), an unnaturalness which Stryker uses to undermine any static understanding of a true, hidden Nature. In making this comparison she is vividly aware that she risks allying herself with those who have weaponized monstrosity against trans people. Indeed, Stryker recounts how one trans woman, named Filisa Vistima, described herself as 'a mutant, Frankenstein's monster' before ending her own life (239), an act Stryker attributes to her repeated exclusion from lesbian communities near her home on the grounds that she was deemed not to be a 'real' woman. Stryker's aim, in alluding to Mary Shelley's *Frankenstein* (1818), is to wrest back the power of the Creature's rage from trans-exclusionary radical feminism. She sets herself against writers like Mary Daly, who suggests that trans women are part of what Daly calls 'the Frankenstein Phenomenon': a 'necrophilic invasion' of female space (qtd. Straker 1994: 238). To claim kinship with Frankenstein's Creature despite this weaponization is, for Stryker, an exercise in laying 'claim to the dark power of [her] monstrous identity without using it as a weapon against others or being wounded by it [herself]' (240). By getting up on stage at an academic conference and standing 'at the podium wearing genderfuck drag' (237), while proclaiming 'I find a deep affinity between myself as a transsexual woman and the monster in Mary Shelley's *Frankenstein*' (238), Stryker refuses to separate out her lived experience from the imagined world of the text. As she puts it, her 'idea was to perform self-consciously a queer gender rather than simply talk about it, thus embodying and enacting the concept simultaneously under discussion' (237). In this, she gestures towards how one might live a science-fictional life.

I argue that this method of interacting with sf – through affinity and embodiment as well as analysis – can be used to realign the critical framework deployed by those working within what Rhys Williams has called 'the Suvinian paradigm' (Williams 2014: 618). Named for Darko Suvin, this mode of criticism is predicated upon an understanding of the sf text as depicting a world 'radically different' from the 'author's empirical environment', while remaining 'not impossible' (Suvin 1979: viii). Here, empirical reality is used as a metric of how science-fictional a given text is. However, in Stryker's analysis the epistemological security granted by this empirical anchoring is rendered unsustainable. Trusting in the stability of one's empirical environment is, for Stryker, tied to an essentialist understanding of gender in which the material

reality of the body in which one is born determines one's gender expression. To value sf in terms of its relationship to such a reality is, in her framework, tantamount to accepting Nature as a guarantor of authenticity. In this light, the moves to denaturalize Nature undertaken by those working with feminist sf can also be read as a means of denaturalizing 'social reality' itself (Haraway 2013: 149). Indeed, when Haraway discusses 'the idea that nature is constructed, not discovered', this leads her directly to the conclusion 'that truth is made, not found' (i). Where Suvinian criticism encourages an estrangement of one's empirical environment, Haraway and Stryker refuse its authority altogether. As Stryker puts it:

> When [writers such as Daly] tell me I war with nature, I find no more reason to mourn my opposition to them or to the order they claim to represent than Frankenstein's monster felt in its enmity to the human race. (Stryker, 1994: 239)

I would argue that this statement involves an underestimation of the complexity of the Creature's ambivalent relationship to humanity as it is explored in Shelley's text. However, the unabashed opposition to Nature expressed here can also be found in Haraway's writing on *Frankenstein*, which clarifies the Creature's position. Differentiating the cyborg from the Creature, she writes: 'Unlike the hopes of Frankenstein's monster, the cyborg does not expect its father to save it through a restoration of the garden; that is, through the fabrication of a heterosexual mate' (Haraway 2013: 151). It is specifically insofar as the Creature wars with nature, or rejects the garden, then, that it is useful in the overlapping projects undertaken here by Stryker and Haraway. By claiming a self-consciously unnatural identity, both the cyborg and Stryker's reading of the transgender woman refuse to accept the terms of any argument which uses proximity to either Nature or reality as a measure of authenticity.

While this rejection of Nature on behalf of both cyborgs and trans women is born of the specificities of these particular modes of subjectivity, it is not exclusive to them. Neither Haraway nor Stryker suggest that transwomen or cyborgs are uniquely unnatural. While both figures are likened to science-fictional and proto-science-fictional monsters, this similarity is not one designed to frame them as exceptionalized outliers to an otherwise stable Nature. Stryker makes this clear when she writes:

> The Nature you bedevil me with is a lie. Do not trust it to protect you from what I represent, for it is a fabrication that cloaks the groundlessness of the privilege you seek to maintain for yourself at my expense. You are as constructed as me; the same anarchic womb has birthed us both. (Stryker 1994: 240)

Here, Stryker uses her own self-conscious unnaturalness to destabilize Nature as a whole. In Stryker's understanding Nature is 'a lie' and thus any birth or rebirth, whether assisted by surgeon, midwife, or mad scientist, is shown to be a culturally determined act involving both scientific knowledge and gestational labour (240). If Stryker feels kinship with Frankenstein's Creature due to the fact that they are both continually made to think about the circumstances of their own creation, she also extends this uncomfortable, unnatural kinship to cisgender people. By highlighting the culturally and technologically specific dependencies of all bodies, Stryker refuses to allow her investment in the specific struggles and beauties of trans identity to lead her to imply that transwomen are an exoticized, unnatural Other whose experiences of birth or embodiment are utterly alien to a cisgender audience. As Haraway puts it: 'We are all chimeras, theorized and fabricated hybrids of machine and organism; in short, we are cyborgs' (Haraway 2013: 150). Both Stryker and Haraway thus use the science-fictional unnaturalness of those whose bodies rely on 'the scientific discourse that produced sex reassignment techniques' (Stryker 1994: 242), along with the many other surgeries involved in making cyborg bodies, to provoke the question: 'Why accept *Nature* as natural[?]' (Lewis 2019: 7). For Stryker and Haraway, as for Paul Preciado, the task of social, cultural and scientific critics 'is no longer about discovering the hidden truth in nature; it is about the necessity to specify the cultural, political and technological processes through which the body as artifact acquires natural status' (Preciado, 2013: 35)

The claim variously advanced here that we are all cyborgs ought not, however, to be used to erase the physical, cultural and medicalized abuse which trans people and disabled people – among other marginalized cyborgs – face when their bodies are read as unnatural. Jillian Weise warns against precisely this ubiquitous usage of the term 'cyborg' in her work on what she calls 'the tryborg' (Weise 2018): the able-bodied person who is unable to distinguish their voluntary use of technology from that of the person with, for example, a prosthetic leg. However, the arguments made by both Haraway and Stryker that focus on the abolition of Nature as a category referring to any body are not predicated on a naive understanding that all bodies have been subject to equal medical intervention, trauma or violence. For example, Haraway draws extensively on Audre Lorde's 'sister outsider' (Lorde 2007: 1) in her theorization of the cyborg and specifically highlights the ways in which 'women of colour' could be thought of as 'a cyborg identity, a potent subjectivity synthesized from fusions of outsider identities' (Haraway 2013: 174). For her, the racism which determines whose body is Natural and whose is unnatural and thus expendable is a crucial part of determining what a cyborg is and might be. Similarly, when Preciado compares ciswomen taking contraceptive pills to transpeople on hormone therapy, or when

Sophie Lewis argues that ‘a “surro-baby” is no more or less natural(ized) than any other’ (Lewis 2019: 118), their purpose is not to disappear the oppression faced by those whose bodies are deemed to be unnatural. Rather, they mean to show that no one is untouched by the ‘militarism and patriarchal capitalism’ which Haraway identifies as the parent of the cyborg (Haraway 2013: 151). In applying their work to sf, therefore, I do not mean to replace Nature with an equally unified, universalized Unnature which erases the difference between bodies. Instead, I endeavour to demonstrate that the fact that some bodies are self-consciously unnatural necessarily undermines Nature – and the implied binary distinction between it and Unnature – as a meaningful category.

In this way Stryker troubles the boundaries between sf and social reality, revealing that ‘“real” life under capitalism is a *fantasy*’ (Miéville 2002: 42). Although she does not significantly engage with race in ‘My Words to Victor Frankenstein’ – an elision addressed in a recent keynote speech given at *Beyond Binary: Trans and Queer as Disruptive Technologies* (Stryker 2019) – her commitment to acknowledging what Istvan Csiscery-Ronay has called ‘science-fictionality’ (Csiscery-Ronay 2008: 3) as a mode of embodiment as well as a form of expression or critique is reminiscent of much work by sf scholars of colour. From Kodwo Eshun’s claim that ‘Afrodiasporic subjects live the estrangement that science-fiction writers envision’ (Eshun 2003: 298) to Grace Dillon’s understanding of apocalypse as ‘having already taken place’ (Dillon 2012: 8) if viewed from the perspective of Native peoples, decolonial scholars of sf have continually highlighted the overlaps between sf and lived reality. Moreover, these overlaps are frequently thought of not in terms of how they can be analyzed but rather in how they can be contested or manipulated. As poet, musician and citizen of Saturn, Sun Ra, remarked in a poem written in response to the Apollo moon landings: ‘when you’ve achieved one impossible the others / Come together to be with their brother’ (qtd. Edwards 2017: 120-1). Here the boundary between impossibility and possibility, much like that between Nature and the unnatural in Stryker’s understanding, is shown to be culturally determined and potentially resisted. This complicates any definition of sf which is predicated on whether it is ‘not impossible’, as impossibility becomes a subject which can be fought over rather than neatly separated from ‘the author’s empirical environment’ (Suvin 1979: viii). This expansion of sf’s scope in relation to empirical reality can also be felt at what Samuel R. Delany calls ‘the subjunctive level’ of sf (Delany 2017: 113). In ‘My Words to Victor Frankenstein’, Stryker discusses ‘the inability of language to represent the transgendered subject’s movement over time between stably gendered positions in a linguistic structure’ (Stryker 1994: 241). ‘He used to be a woman’ or ‘at the time she lived as a man’ are sentences which rupture syntactical expectation in much the

same way that Delany has argued is true of the science-fictional sentence. For Stryker, language is not only insufficient when faced with events which '*have not happened*' (Delany 2017: 112). Rather, she makes it clear that gender as it is being and has been experienced in this, our world, similarly disrupts syntactic cohesion. It is in this way that she can be thought of as a writer whose work brings sf theory off the page by recognizing the genre as a mode of embodiment as well as a selection of texts.

The Many Lives of James Tiptree Jr.

Thus far I have argued that the abolition of Nature advanced by these various 'theorists for cyborgs' is of relevance to sf studies in general, in terms of the way it encourages one to think about the genre's relationship to, and potential destabilization of, the boundaries of possibility. However, it is of particular significance to the writing of James Tiptree Jr. I am by no means the first person to suggest that a reading of Tiptree's work informed by trans scholarship might be of interest. As Cheryl Morgan has persuasively argued, although 'it is still by no means clear how she identified', the feelings Tiptree expressed when it was revealed that 'she wasn't "really" a man' would be 'familiar to any trans person who has just been unwillingly outed' (Morgan 2015). Tiptree's unpublished autobiographical writing further supports this claim. In letters and diaries, she continually returns to her dissatisfaction with what would now be referred to as cis-womanhood. For example, Sheldon notes in an early journal: 'I do not "fit" my body' (qtd. Phillips 2006: 68). It is not the role of the literary critic to posthumously reassign the gender of a person who only referred to themselves using masculine pronouns when they were writing under a pen name. Moreover, such a project could very easily fall back into the framework of unearthing who Tiptree 'really' was. For this reason, I continue to use feminine pronouns to refer to Tiptree and I intend to keep my speculations into Sheldon's private feelings about her body to a minimum. However, it is important to consider the possibility that Tiptree may have been not merely a literary persona but a means of expressing Sheldon's conflicted feelings about gender. To attempt to neatly separate off Sheldon's science-fictional writing from her autobiographical writing is to adhere to precisely the kind of fallacious division of real and unreal which I have argued that trans studies, as it is manifested in Stryker's work, renders unthinkable. While Sheldon's dissatisfaction with cis-womanhood has conventionally been read as frustration with misogyny coupled with an expression of her repressed homosexuality, such readings tend to be predicated on the narrative of unmasking one's 'true' self. For example, Julie Phillips begins her biography of Sheldon with an epigraph from Joanna Russ: 'To learn to write at all, I had to begin by thinking of myself as a sort of fake man' (qtd. Phillips 2006:

xi). This idea – that one's writerly, science-fictional self is in some way 'fake' – fails to adequately represent the scope or strength of Sheldon's investment in Tiptree as a significant element of her daily life. Indeed, in an early journal entry Sheldon wrote:

> All I want is man's life […] my damned oh my damned body how can I escape it I play woman woman I cannot live or breathe I cannot even make things. I am no damned woman wasteful god not to have made me a man. (qtd. Phillips 2006: 99)

Here it is Sheldon's supposedly natural womanhood which is something she must 'play' at and, perhaps disingenuously, perform. In contrast, her imagined manhood is associated with survival, with breathing, indeed with life itself. Statements like this demonstrate that life and play, reality and unreality are intimately intertwined in Tiptree's writing, which is always science-fictional, even when it is also autobiographical.

Indeed, Tiptree at one point began an autobiography – tentatively titled *Tiptree's Dead Birds* – in which 'a man who does not exist', as Phillips refers to him, would be endowed with an imagined life (Phillips 2006: 1). This project never came to fruition. However, Tiptree did write a travel column in which his imagined life overlaid the many trips which Sheldon and her husband took to Mexico (Tiptree 2000: 191–205). Along with these experiments in fictional autobiography, Sheldon also integrated Tiptree into her private life, making decisions clearly not aimed to deceive an external readership. For example, Phillips describes how Sheldon would spend 'Tiptree's minuscule earnings on *his* expenses' which included the purchase of a typewriter with a signature blue ribbon which was reserved for his exclusive use (Phillips 2006: 271). This is the kind of overlaid, intermingling of identities which Stryker suggests resists legibility and which connects to Delany's understanding of the linguistic structures underpinning sf. In Phillips' description of the 'man who does not exist' but who nevertheless 'sits down at a typewriter' (1), she provides an example of the 'impossible-but-true' which Miéville describes as the foundation of the genre's 'epistemological radicalism' (Miéville 2002: 42–3). This impossibility is true, not because Sheldon wrote it down or imagined it, but because she enacted it. Nor did this overlap of the impossibilities of fiction and the realities of everyday life begin, for Sheldon, with the creation of Tiptree. In much the same way that I have argued Stryker and Haraway work to denaturalize Nature in toto, rather than setting up either transwomen or cyborgs as exceptional, unnatural Others, so Tiptree is by no means an outlier in Sheldon's life in terms of his lived unreality. For example, as a small child Sheldon was taken by her parents to West Africa where they hunted big game and her mother wrote travel narratives

in which 'Alice' was the main character (Phillips 2006: 16). By the time she was six years old, Sheldon had already experienced herself as someone who could be fictionalized in a way she actively collaborated in: she was the illustrator for her mother's book, *Alice in Jungleland* (1927). The child who was hailed by *The New York Times* as the 'Youngest Explorer of Darkest Africa' (qtd. Phillips 2006: 26) and used to give a benevolent face to ongoing colonial exploitation was, if not 'a [child] who does not exist', at least one who existed primarily in fiction (1). And yet, as her work as a child illustrator demonstrates, it was one which young Alice identified with and collaborated on. Long before her seeming gender dysphoria, and her interest in the science-fictional cyborgs Haraway would later associate her with, Sheldon was living at least a fictional life – a fact which once again demonstrates that the unrealness of the cyborg is best thought of in terms of the unrealities of all life, however seemingly Natural.

However, this is not to say that sf did not play a significant role in Sheldon's understanding of her life as in part lived out through self-consciously unreal narratives. Indeed, her only acknowledgement of the fictionalization of her childhood undertaken in collaboration with her mother is made in reference to sf. Watching *Star Trek* for the first time, Sheldon 'recognized it at once as a story about her childhood' (Phillips 2006: 43). It was not, then, exclusively in the stories that were literally about her childhood, written by her mother, that she identified a fictional version of herself. Instead it was in sf television, in which colonial expansionism is reframed as exploration, that she saw her life reimagined. Sheldon's relationship to sf also reveals the proliferation of multiple identities which the dissolution of boundaries between possibility and impossibility, Nature and the unnatural, provokes. Writing of her first experience with the genre, Sheldon describes how her uncle arrived home one day with a bundle of literary magazines out of which fell a magazine with 'a large green octopus removing a young lady's golden brassiere [...] the title was *Weird Tales*' (Tiptree 2000: 309). She then recounts the following interchange:

> 'Ah,' said Uncle Harry. 'Oh. Oh yes. I, ah, picked this up for the child.'
> 'Uncle Harry,' I said, my eyes bulging, '*I* am the child. May I have it please?' (309)

Here, one can see the complicated beginnings of what Phillips refers to as Sheldon's 'performance as Tiptree' (Phillips 2006: 7). In one sense her identity seems clear. Indeed, she explicitly affirms it in her statement: '*I* am the child' (Tiptree 2000: 309). And yet, the fact that it has to be stated, as in Judith Butler's analysis of Aretha Franklin's '(You Make Me Feel Like) A Natural Woman' (1967), undermines the certainty of her statement and places her claim to a Natural identity into the category of that which 'is never guaranteed' (Butler

1993: 317). Sheldon *is* the child, but she is also connected to the other readers of this magazine, in this case Uncle Harry. By standing in for her uncle she identifies with the obvious fiction he has created about whom he has purchased this magazine for. The child she identifies herself with is a useful fiction and, like Tiptree, a cover identity which she and her uncle later refer to as ‘Our Secret’ (Tiptree 2000: 309). There is also the image on the magazine cover to consider. Do Sheldon’s eyes bulge because she desires the woman, or the alien, or does she identify with one or either of them? And are these possibilities mutually exclusive? In much the same way that she identified *Star Trek* as being about her own childhood, I would contend that Sheldon saw multiple versions of herself in this eroticized interchange between woman and alien. She is both the woman, in her role as ‘hopeless xenophile’ (qtd. Phillips 2006: 124), and the alien who, one might infer, wants, as the twenty-year old Sheldon wrote in an early journal, to ‘ram [herself] into a crazy soft woman’ (qtd. Phillips 2006: 303). These multiple points of identification are further complicated by the fact that this story is recounted in Tiptree’s autobiographical essay ‘Everything But the Signature Is Me’ (1978). Written in response to the revelation of what Phillips calls her ‘double life’, the person who was both Sheldon and Tiptree wrote an origin story for both of her identities’ relationships to sf (Phillips 2006: 1). Whether she would more naturally identify with the female child or the adult man, the woman or the alien, is shown therefore not to be a question dictated by her body or innate identity but rather by the perspective she is taking, the role she is playing, the voice she is writing in. It may appear natural for Sheldon to claim that she is the child, but when it is Tiptree – a person who came into being middle aged and semi-retired – retrospectively doing so, the inevitability of that identification is undermined.

The idea that sf’s radical potential is tied to its ability to create new modes of identification is crucial to John Rieder’s understanding of the genre. Writing against Suvin, Rieder advances a theory of sf as an ‘historical and mutable’ process which ‘has no essence, no single unifying characteristic’ (Rieder 2017: 76). However, in his monograph *Colonialism and the Emergence of Science Fiction* (2008), he identifies one of the genre’s many, changeable characteristics as being the fact that sf encourages ‘a reversal of perspective’ (Rieder 2008: 5). Writing of H.G. Wells’s *The War of the Worlds* (1898), Rieder notes that Wells compares the Martian invasion of Earth to the European invasion of Tasmania, thus ‘demanding that the colonizers imagine themselves as the colonized’ (5). Rieder argues that this reversal of perspective ought not to be taken as a provocation to consider colonialism as ‘the reality that science fiction mystifies’ (15). Rather than framing the sf critic within a narrative of ‘truth unmasking falsehood’, Rieder suggests that the genre allows one to exploit colonialism’s

internal divisions, which are laid bare by the science-fictional devices of exaggeration and narrative doubling (14). This definition is in many ways allied to the discourse surrounding the abolition of Nature and distrust of reality which I have associated with feminist sf criticism. Moreover, if one pushes his analysis of a transformed perspective further and connects it to, for example, Stryker's embodied kinship with Frankenstein's Creature, one can see that his reading of the genre's critical potential can be extended into the lived realities of everyday existence. This is particularly evident in Tiptree's writing in which she not only makes possible identification with the alien, she suggests that this identification is no more unnatural than the modes of identification required by cis-normative heteropatriarchy. For example, in 'The Women Men Don't See' (1973), Tiptree tells the story of two women who choose to leave Earth when confronted with unknown aliens. They believe that any change from the world they live in will be preferable, partly because they desire radical change but also because they do not fear unnatural or unreal beings. Their male companion seems to think that the fact that the people they meet are aliens will deter the women from leaving with them but as one of the women states: 'I'm used to it' (Tiptree 2004: 140). For them, the aliens do not offer an unnatural, science-fictional world utterly dissimilar from their own Natural one. Rather, their world is also alien to them, and these new aliens simply offer the possibility of change which comes with the unknown. This is made clear when the male narrator states, 'Mrs Ruth Parsons isn't even living in the same world with me' (135), a comment he makes before he has even registered the arrival of the aliens. To identify with the aliens is not, then, for Mrs Parsons and her daughter, a 'reversal of perspective', but rather an acknowledgement that she was always an alien as well as a human – always living a science-fictional life.

It is this simultaneous identification with alien and human, both in the text and in the material world, which Tiptree gestures towards when she writes, in 'Everything But The Signature Is Me': 'All I write is really from life' (Tiptree 2000: 309). Here, what is 'real' is the connection between life and writing, even when the writing is science-fictional and the life is fabricated. It is in this sense that we can read her statement, written in a journal after she had first created Tiptree: 'At last I have what every child wants, a real secret life' (qtd. Phillips, 2006: 1). Science fiction is for her a genre accessible only through living in a way both real and secret. This has profound consequences in terms of how we read Tiptree's writing. For example, Tiptree's well-known short story 'The Girl Who Was Plugged In' (1973) has frequently been read in terms of a division between the one's true identity and an artificially constructed outer appearance. As Phillips puts it, this is 'a horror story about performing the feminine: the beautiful, numb outer self, the female impersonator, houses the unacceptable

true self' (Phillips 2006: 301). And yet the text itself belies this characterization, with the narrator clearly stating that Delphi – the 'beautiful, numb outer self' whom the protagonist, P. Burke, is plugged into and controls remotely – is 'in no sense a robot. Call her a waldo if you must. The fact is she's just a girl, a real-live girl with her brain in an unusual place' (Tiptree 2004: 54). Here the narrator rejects the terminology of Golden Age science-fiction in favour of an understanding of the genre as, as Sasha Myerson puts it, 'a writing practice that incorporates multiplicity into its form' (Myerson 2018). P. Burke is both herself and Delphi with neither taking priority in terms of their relative claims to Natural identity. Like Stryker's understanding of herself as a 'transgendered subject' whose shifting subject position cannot be mapped using contemporary English linguistic structures, the multiplicitous P. Burke defies understanding as a singular entity (Stryker 1994: 241). She demonstrates that one effect of thinking of the self in the science-fictional terms of body and waldo is the way this framing permits an understanding of the material, writerly self as a series of overlapping, interlocking and variously fictitious personae.

From this mind with two bodies to the bodies with two minds depicted in her story of alien symbiotes, 'Come Live with Me' (1988), Tiptree uses sf to explore the multiple selves produced by a Harawayan dissolution of Nature. And, as I have argued, she does so, not in order to set up sf as a space uniquely suited to strangeness, or unnaturalness, but rather as an expression of the multiplicity she identified in her own life, at least as it is expressed in her autobiographical writing. The person who signed her name 'Alli/Tip' is no less engaged in the practice of what I have called living a science-fictional life than P. Burke and Delphi are (Tiptree 2004: 1). Read in conversation with one another they demonstrate that both the material world and the worlds created and inhabited by Tiptree are subject to what Wendy Trevino has described as the 'cruel fiction' which is life under white supremacist, heteropatriarchal capital (Trevino 2018: 1). Tiptree's lives and work thus acts as an example of sf's permeation into material reality while simultaneously refusing that reality's supposedly greater claim to authenticity. In so doing, it opens up the material world to the kind of strange interventions and acts of creation one associates with the sf text. The concept of living a science-fictional life is intimately tied to the fact that, as Walidah Imarisha has argued, 'all organizing is science fiction' (Imarisha 2015: 3). To think of sf as something one can do and be, as well as create and critique is to more fully acknowledge the political possibilities which the genre offers to those who refuse to accept our current reality as inevitable – who will not acknowledge Nature as natural.

Endnote

[1]This article does not discuss the recent renaming of the James Tiptree Jr. Award, now the Otherwise Award. I am fully in support of this renaming understood as an effort to hear and express solidarity with the concerns of the disabled sf community. However, the personal and only partially known facts surrounding Tiptree's own mental illness, her husband's disabilities and their violent deaths fall outside of the scope of this piece. For a nuanced overview of the renaming of the Award, see Alexis Lothian's 'From Tiptree to Otherwise' (Lothian, 2019).

Works Cited

Ahmed, Sara. 2017. *Living a Feminist Life*. Durham NC: Duke University Press.

Butler, Judith. 1993 (1990). 'Imitation and Gender Insubordination'. In *The Lesbian and Gay Studies Reader*. Eds. Henry Abelove et al. New York: Routledge, 307–20.

Csicsery-Ronay, Istvan. 2008. *The Seven Beauties of Science Fiction*. Middletown CT: Wesleyan University Press.

Delany, Samuel R. 2017 (1968). 'About 5,750 Words'. In *Science Fiction Criticism: An Anthology of Essential Writings*. Ed. Rob Latham. London: Bloomsbury Academic, 104–15.

Dillon, Grace. 2012. 'Imagining Indigenous Futurisms'. In *Walking the Clouds: An Anthology of Indigenous Science Fiction*. Ed. Grace Dillon. Tucson: University of Arizona Press, 1–12.

Edwards, Brent Hayes. 2017. *Epistrophies: Jazz and the Literary Imagination*. Cambridge MA: Harvard University Press.

Eshun, Kodwo. 2003. 'Further Considerations on Afrofuturism'. *The New Centennial Review* 3.2: 287–302.

Haraway, Donna J. 2000. *How Like a Leaf: An Interview with Thyrza Nichols Goodeve*. Hove: Psychology Press.

----- 2013 (1991). *Simians, Cyborgs and Women: The Reinvention of Nature*. London: Routledge.

Imarisha, Walidah. 2015. 'Introduction'. In *Octavia's Brood: Science Fiction Studies from Social Justice Movements*. Eds. Walidah Imarisha and adrienne maree brown. Oakland: AK Press, 3–6.

Jones, Gwyneth. 2009. 'Feminist SF'. In *The Routledge Companion to Science Fiction*. Eds. Mark Bould et al. London: Routledge, 484–8.

Larbalestier, Justine. 2002. *The Battle of the Sexes in Science Fiction*. Middletown CT: Wesleyan University Press.

Lewis, Sophie. 2019. *Full Surrogacy Now: Feminism Against Family*. London: Verso.

Lorde, Audre. 2007 (1984) *Sister Outsider: Essays and Speeches*. Berkeley: Ten Speed Press.

Lothian, Alexis. 2019. 'From Tiptree to Otherwise'. *James Tiptree Jr. Literary Award*. URL: https://tiptree.org/2019/10/from-tiptree-to-otherwise (accessed 2 December 2019).

Miéville, China. 2002. 'Editorial Introduction: Marxism and Fantasy'. *Historical Materialism* 10.4: 39–49.

Morgan, Cheryl. 2015. 'Their-stories: Interrogating gender identities from the past'. *Academia.* URL: https://www.academia.edu/11231216/Their-stories_Interrogating_gender_identities_from_the_past (accessed 3 September 2019).

Moylan, Tom. 2014 (1986). *Demand the Impossible: Science Fiction and the Utopian Imagination*. Ed. Raffaella Baccolini. Bern: Peter Lang.

Myerson, Sasha. 2018. 'Multiplicity Beyond Dissociative Identity Disorder'. Unpublished paper, Work in Progress Conference 2018. Birkbeck College, University of London. 2 June.

Nirta, Caterina. 2018. *Marginal Bodies, Trans Utopias*. Abingdon: Routledge.

Phillips, Julie. 2006. *James Tiptree, Jr.: The Double Life of Alice B. Sheldon*. New York: Picador.

Preciado, Paul. 2013. *Testo Junkie: Sex, Drugs and Biopolitics in the Pharmacopornographic Era*. New York: The Feminist Press.

Rieder, John. 2008. *Colonialism and the Emergence of Science Fiction*. Middletown CT: Wesleyan University Press.

----- 2017. 'On defining sf, or not: Genre theory, sf, and history'. In *Science Fiction Criticism: An Anthology of Essential Writings*. Ed. Rob Latham. London: Bloomsbury Academic, 74–93.

Stryker, Susan. 1994. 'My Words to Victor Frankenstein Above the Village of Chamounix: Performing Transgender Rage'. *GLQ: A Journal of Lesbian and Gay Studies* 1.3: 237–54.

----- 2019. 'Transgeneration: Or, Becoming-With My Monstrous Kin'. Unpublished keynote, *Beyond Binary: Trans and Queer as Disruptive Technologies*. University of Cambridge, 1 March.

Suvin, Darko. 1979. *Metamorphoses of Science Fiction: On the Poetics and History of a Literary Genre*. New Haven: Yale University Press.

Tiptree Jr., James. 2000. *Meet Me at Infinity*. New York, Tor.

----- 2004. *Her Smoke Rose Up Forever*. London: Gollancz.

Trevino, Wendy. 2018. *Cruel Fiction*. Oakland: Commune Editions.

Weise, Jillian. 2018. 'Common Cyborg'. *Granta* 144. URL: https://granta.com/common-cyborg/ (accessed 1 December 2019).

Williams, Rhys. 2014. 'Recognizing Cognition: On Suvin, Miéville, and the Utopian Impulse in the Contemporary Fantastic'. *Science Fiction Studies* 41.3: 617–33.

Guest Editorial: Canadian Science Fiction

Heather Osborne (University of Calgary)

In 1972, Peter Gzowski, a celebrated radio presenter for the Canadian Broadcasting Corporation, went in search of a national metaphor. Whereas people from the United States could consider themselves 'as American as apple pie', Gzowski felt that Canadians lacked a distinct identity that could be rounded up in a simple simile. Gzowski asked Canadians to submit their answers in the form of the phrase 'As Canadian as ...' It's perhaps a comment on the entire exercise that Gzowski's process involved copying – yet, crucially, rejecting! – the American form of the aphorism. The winning entry, by Heather Scott, proved enduring: 'As Canadian as possible, under the circumstances' (Barnett 2013).

What, then, are the 'circumstances' that Canadian science fiction finds itself in? Is there a national sf literature distinct from other countries (perhaps especially the U.S.)? What themes and narrative concerns are necessary and sufficient to receive the label 'Canadian science fiction'? What influences can be detected in Canadian sf that will allow critics to trace its ancestry? Douglas Barbour's overview of the genre concludes that the cultural 'impurity' of Canadian sf derives from a lack of home-grown Canadian markets and readerships (Barbour 2005: 310). In these instances, the different influences – British, French, North American – are characterized as ingredients, distinct on their own, which blend more or less into the uncomfortable and heterogeneous category 'Canadian'.

Within Canadian science fiction, the most identifiable subsets are *Québécois* and Indigenous sf. In outlining the common 'parables' that link 'la fantastique', Amy Ransom argues that 'the contemporary SFQ [science fiction q*uébécoise]* movement evolved out of a period of national anxiety and ferment in Québec' (Ransom 2013: 105). This included the 'Quiet Revolution' of the 1960s in which French Canada turned towards secularism and a core identity centred on French language and Francophone culture; as Ransom points out, in this formulation, writing in French in North America is itself an 'oppositional act' (90). Neal Baker, working in the aftermath of the 1995 referendum on *Québécois* separatism, notes that most scholarship on Canadian sf to that date assumed 'a Francophone vs. Anglophone dynamic' (Baker 2001: 219). Yet, as Baker further notes, this characterization diminishes or erases voices from other traditions.

One of these traditions that tend to be overlooked, although it is an area currently gaining more prominence, is Indigenous science fiction. As sf, Indigenous futurisms are important because their survival narratives challenge

‘hegemonic futures’ (Higgins 2016: 70), and insist not only on the present (and presence) of First Nations people and communities, but on a place also for these stories and texts in the future. Authors including Waubgeshig Rice and Cherie Dimaline use settings in post-apocalyptic Canada to re-position Indigenous ways of knowing as valuable and necessary.

To use a recent metaphor from Ransom and Dominick Grace, science fiction acts as a bridge among authors from Indigenous and diasporic communities. Canadian sf ‘writes back to empire’ (Ransom and Grace 2019: 1) from a multiplicity of perspectives, as signified by Larissa Lai’s *Salt Fish Girl* (2002), Nalo Hopkinson’s *Brown Girl in the Ring* (1998) and Hiromi Goto’s *The Kappa Child* (2001). Canada is ‘a nation of nations’ (15) in which federalism – what Baker calls ‘syncretism’ (Baker 2001: 220) – allows for metaphors of connection, such as bridges and conversations.

This special section has the ambitious goal of touching on several – though by no means all – of these disparate strands of Canadian sf. Kristin Bussiėre begins by exploring ideas of Indigenous survivance in Waubgeshig Rice’s *Moon of the Crusted Snow* (2018). Bussiėre shows how Indigenous peoples’ assertion of thriving presence deepens the importance of centring Indigenous voices, communities and futurity in science fiction. Isabelle Fournier examines how themes of self-dehumanization resonate across both Francophone and Anglophone sf texts. In reading Laurent McAllister’s ‘Driftplast’ (2000) and Robert J. Sawyer’s *Mindscan* (2005) in concert, Fournier creates a link across languages and traditions. Freya Verlander extends the analysis of Afro-Canadian diasporas and the power structures of (bio)colonialism in Nalo Hopkinson’s *Midnight Robber* (2000). She examines the reversal and refusal of Granny Nanny’s nurturing and control in Hopkinson’s creation of the posthuman. Vera Benczik traces the creation and breakdown of memory in Emily St John Mandel’s *Station Eleven* (2014) through the deterioration of ‘object’ into ‘thing’ and ‘space’ into ‘place’. Finally, Paul Fayter returns to an earlier point in Canadian sf. He historicizes Frederick Phillip Grove’s ‘The Legend of the Planet Mars’ (c. 1915) in its moment suspended between the late Victorian creation of Martian narratives and the death of the utopic with the First World War.

These five essays offer five very different windows into Canadian sf. The different theoretical approaches show the richness of the available literary readings, but even more importantly, the texts themselves display an incredible breadth of speculative practices. While this special issue may come no closer to a categorization of Canadian science fiction, it is my hope that readers will come away with a wider view of what the field can claim.

Works Cited

Baker, Neal. 2001. 'Syncretism: A Federalist Approach to Canadian Science Fiction'. *Extrapolation* 42.3: 218–231.

Barbour, Douglas. 2005. 'Canadian Science Fiction'. In *A Companion To Science Fiction*. Ed. David Seed. Oxford: Blackwell, 309–22.

Barnett, Bob. 2013. 'As Canadian as possible under the circumstances'. *Pique*, 23 May. URL: https://www.piquenewsmagazine.com/whistler/as-canadian-as-possible-under-the-circumstances/ (accessed 12 May 2020).

Higgins, David M. 2016. 'Survivance in Indigenous Science Fictions: Vizenor, Silko, Glancy, and the Rejection of Imperial Victimry'. *Extrapolation* 57.1–2: 51–72.

Ransom, Amy. 2013. 'Parabolas of SFQ: Canadian Science Fiction in French and the Making of a "National" Subgenre'. In *Parabolas of Science Fiction*. Eds. Brian Attebery and Veronica Hollinger. Middletown CT: Wesleyan University Press, 89–105.

----- and Dominick Grace, eds. 2019. *Canadian Science Fiction, Fantasy, and Horror: Bridging the Solitudes*. Basingstoke: Palgrave.

‘A heap of broken images’: Objecthood, Apocalypse and Memory in *Station Eleven*

Vera Benczik (Eötvös Loránd University, Budapest)

The apocalypse occupies a special place in our cultural production. Tales of catastrophe give particular emphasis to the environment and the object world, reaching beyond the confines of the immediate narrative to engage the audience on an affective level. This emphasis achieves its effect by linking the plot to the prehistory of the characters and the pre-apocalyptic world through the remnants that survive. The existence of objects and the network of relationships they engender are often built on the tensions between functionality and dysfunctionality, between forgetting and remembering. They may become triggers and sites of nostalgia, and also function to anchor the characters within the stories to their lost pasts.

The present study explores objecthood after the apocalypse, in particular the manifold use of objects, their relationship to memory and the peculiarities of thingness in Emily St John Mandel’s *Station Eleven* (2014). Set in a post-apocalyptic, near-future North America, where 99.9% of humanity has died as a result of a virus called the Georgia Flu, the novel oscillates between various events of the past and the narrative present, nineteen years after the outbreak of the pandemic. We follow the fates of a number of people connected through the focal point of Arthur Leander, a Canadian actor, whose death during a production of *King Lear* on the eve of the pandemic opens the novel. Some characters die before or during the Georgia Flu outbreak – Arthur and his first wife Miranda Carroll, creator of the *Dr Eleven* comics – and others survive – Kirsten Raymonde, one of the child actors in the *Lear* production; Clark Thompson, Arthur’s best friend; and Jeevan Chaudhary, whose life has intersected Arthur’s career at various points, in his capacity as a paparazzo, and later as an aspiring medic trying to save Arthur’s life after his fatal heart attack.

Their individual stories unfold in fragments, alternating between past and present, as the narrative ‘encircles the moment of humanity’s fall and imagines the apocalypse as a catalyst for regression’ (Smith 2016: 291). The post-apocalyptic reality transpires through the journey of Kirsten with the Travelling Symphony, a theatre troupe cum symphony orchestra that traverses what used to be Northern Michigan and performs Shakespeare and classical music in the post-catastrophe settlements. Their motto – ‘Survival is insufficient’ – references an episode of *Star Trek: Voyager*, and reflects on their mission to maintain entertainment, to sustain a notion of ‘beauty […] [which] only emerges when we acknowledge the finitude of things’ in a traumatized world reduced to day-to-day survival (Vermeulen 2018: 17). The fates of the characters in the

novel are closely intertwined with certain objects that establish a visible nexus between them, which provides a constructive force that helps pull together the fragments of a traumatized world.

The article first takes a wider look at theories of place and objecthood, the tensions between functional and dysfunctional objects, objecthood versus thingness, then continues with the peculiar use of the environment and object world in post-apocalyptic narratives. I examine how in *Station Eleven* notions of archaeology, memory, trauma, nostalgia and objects intertwine, and finish by examining Kirsten's compilation of things and their relationship to personal trauma, memory and identity, briefly touching upon the Museum of Civilization curated by Clark, and its correspondence to collective trauma.

Objects and things in a post-apocalyptic world

Philosophers concerned with the object environment have long been fascinated by the relationships between the environment and its human inhabitants, how people orient themselves within the world around them, and what effect they have on their surroundings: 'body and world are intertwined making place integral to body and vice versa' (Donohoe 2014: 5). Theoreticians like Martin Heidegger, Gaston Bachélard, Michel Foucault, Marc Augé, Michel de Certeau and Edward S. Casey are particularly interested in how the interaction between the human element and the object world around them affects the construction of both. Other theorists, like Alison Landsberg, Svetlana Boym, E. Ann Kaplan or Bill Brown, develop their theories based on how the object world interacts with phenomena related to memory, nostalgia and trauma. Relevant to this study will be Bachelard's thoughts on the concepts of *home* interacting with perceptions of safety and comfort; Foucault's notion of heterotopia; de Certeau's theories on spatial practice and memory; Brown's 'thing theory'; Landsberg's term 'prosthetic memory'; Boym's work on nostalgia, and Kaplan's thoughts on 'pretrauma narratives'.

Despite the varying approaches and diverging conclusions, most theorists on spatial configurations agree that humans and environment interact in ways that change both. De Certeau goes as far as asserting that in order to turn the abstraction he defines as *place* into the specificity of *space*, it needs 'practice', that is, it needs to be inhabited, walked through, observed and remembered. He also comments on the notion of what he calls 'haunted places', which bear the imprint of the personal memories of the observer, and suggests that the layer of memories projected upon a certain location or object is the prerequisite for habitation: 'there is no place that is not haunted by many different spirits hidden there in silence [...] Haunted places are the only places people can live in' (de Certeau 1988: 108). In de Certeau's framework 'space' is constructed

by participating in it, yet also constructs identity by triggering memories, being the vessel of 'pasts that others are not allowed to read' (108). In *The Poetics of Space* (1958), Bachelard approaches the object world from the vantage point of (nostalgic) childhood memories and explores the importance of the childhood home, especially as a 'felicitous space' (Bachelard 1994: xxxv). In his analysis, the house one grows up in will have a lasting imprint on the self-construction of the individual: 'the house we were born in has engraved within us the hierarchy of the various functions of inhabiting' (14). He obliquely comments on the nostalgic projections upon the childhood home when he acknowledges that 'beyond all the positive values of protection, the house we were born in becomes imbued with dream values which remain after the house is gone' (17).

Brown's thing theory focuses on the interdependence between a person and the environment, and how the object environment is used to construct the self. Working from a theoretical background rooted in the ideas of Roland Barthes, Walter Benjamin, Martin Heidegger, de Certeau and Igor Kopytoff, Brown advocates a distinction between 'object' and 'thing', reminiscent of the distinctions between place and space in spatial theory. The difference is that Brown draws the line between objecthood and thingness based on the criteria of functionality, stating that it is defamiliarization that transforms an object into a thing:

> A *thing*, in contrast, can hardly function as a window. We begin to confront the thingness of objects when they stop working for us: when the drill breaks, when the car stalls, when the windows get filthy, when their flow within the circuits of production and distribution, consumption and exhibition, has been arrested, however momentarily. (Brown 2001: 4)

When we look at the narrative mechanisms post-apocalyptic texts employ, and how they defamiliarize their chosen terrain, it is the disruption of normative spatial practice, the dysfunctionality of the home and the rendering the object world as things, which underlies these texts. Places and objects have affective value beyond their physical presence and take an important part in the construction of individual and collective selves. This study looks at how *Station Eleven* defamiliarizes the object world, and what effects such a transformation has on both the characters and the audience.

Described by Warren Wagar as 'terminal visions', post-apocalyptic narratives involve some form of catastrophe which brings about the destruction of humanity and the collapse of human civilization on a large, often global scale, much as Gothic, post-apocalyptic tales depend on the emotional involvement of their audience to convey the implications of global destruction. In her recent book

Climate Trauma: Foreseeing the Future in Dystopian Film and Fiction (2015), Kaplan calls them 'pretrauma narratives', drawing attention to the audience positioned *before* the world's end – as indicated by her use of 'pretrauma', that is, before the traumatic event happens – which is especially important in view of the intricate relationship between the fictive environment and the object world surrounding the audience. Kaplan investigates the ways in which these narratives may cause what she calls 'vicarious trauma … [where] people suffer effects similar to those from trauma, caused by watching or experiencing the trauma of others' (Kaplan 2015: 24). In Kaplan's analysis of Jeff Nichols' film, *Take Shelter* (2011), she points out that the experience of the protagonist, who suffers from PTSD in connection with a cataclysm not yet manifest, may be regarded as a commentary on the position the audience occupies while watching the movie: 'Curtis is in a similar position to that of the pretrauma film's viewers: his fantasies of catastrophic climate change are similar to the fantasies viewers watch in the genre' (36).

Post-apocalyptic narratives often remain within sight of our present to maximize their affective proximity to their audience. They build on the familiarity that manifests itself in shared spatial surroundings and the object world pre- and post-collapse, a temporal oscillation which Philip Smith calls the 'forward-backwardness of the post-apocalyptic tale' (Smith 2016: 291-2). This comparative duality, the juxtaposition of the familiar with the (recognizable) defamiliarized environment is achieved by dismantling the normative relationships that govern our object world and our surroundings. H.G. Wells's *The War of the Worlds* (1898) already builds on the effect the ruination of a familiar milieu has on the readership when he sets his story in his contemporary late Victorian London and Woking. The reader of the day, following the story published in successive instalments in *Pearson's Magazine* (Pintér 2012: 135), would not only encounter the aliens as a distant threat, but as a tangible danger brought close by the text's use of the familiar landscape. This familiarity was retained in later film versions, updating the setting to contemporary surroundings to allow for the inconvenient closeness of the end.

Identifiability plays an important part in maintaining affective proximity. Uncanniness lies in the familiarity that the post-apocalyptic world retains: the audience has to be able to recognize their surroundings with its familiar objects, and supply the untransformed version from their experience in juxtaposition to the transformed environment of the aftermath. The metamorphosis that produces the post-apocalyptic landscape often involves dysfunctionality: landmarks and cities are ruined, rendered uninhabited or uninhabitable: 'unpracticed' or 'unpracticable' in de Certeau's framework. The concept of the home – Bachelard's embodiment of the essence of safety and childhood

nostalgia – is transformed into a site of horror and danger. Everyday objects that are so intrinsically part of our life that we do not even notice them are turned into Brownian *things*, marked by their dysfunctionality, and retain no use beyond emanating the tragedy of the void left by the disruption of humanity.

The palpable absence of humans, excised from the Earth in various abrupt ways, as well as the ruined object world pulled to the forefront of these narratives, constructs the texts as eulogy to the end of humanity and its cultural continuum. The temporal interdependence – the 'forward-backwardness' – and the affective ties between audience and text can simultaneously produce an abstract enjoyment of a narrative of destruction, and a specific experience of 'pretrauma', as we grieve for a catastrophe not yet come about which most certainly includes our own death. Hence it is not only humanity's possible demise we are called upon to mourn, but our own, as well.

Station Eleven is no exception to the rule, as the narrative displays all the commonplace tropes of the post-apocalypse: the pandemic extinguishes almost all human life, yet there are survivors trying to cope with both the trauma of losing everyone and everything in the catastrophe, and remaining alive in the transformed world. Existence after the Georgia Flu involves technological regression, another stock motif of the post-apocalypse, as the lack of electricity and the degradation of gasoline renders the object world of devices that surround us today in our western existence utterly useless. This dystopia of dysfunctionality nevertheless contains a utopian layer, which is also characteristic of a number of post-apocalyptic texts. The socio-technological regression is deeply saturated with a Rousseau-like embrace of a more natural way of life. Smith aptly remarks that 'the destruction of the apocalypse, in certain incarnations of the genre, offers the promise of reconfiguration, of resetting and rebuilding a society unencumbered by the problems of the world that was destroyed' (2016: 291). Many post-apocalyptic narratives display this trace of utopian possibility deeply rooted in a nostalgic longing for a pre-industrial, pre-capitalist era saturated with quasi-paradisal qualities. This is 'restorative nostalgia' at work, which 'attempts a transhistorical reconstruction of the lost home' (Boym 2007: 13), and reaches beyond the present into an illusory golden age past – when things were simpler, and hence better – but in reality is 'a mourning for the impossibility of mythical return' (12). Post-apocalyptic works that display a nostalgic longing for a better past offer a critique of the present often rooted in anxieties in the face of techno-cultural developments that are perceived as possible threats.

Mandel's novel contains this plotline as well: the dysfunctional object world, while most often viewed with a nostalgic longing for the pre-collapse functionality, is also presented as a world that is reduced to simplicity, decluttered

of the excess of technology that complicates our lives today. What remains is a post-cataclysmic summer idyll, as Paul Legatt – based on the work of Emily Allen – remarks, ‘while the novel romanticizes the lost objects of our world, it imagines that, with them, economic inequality and racism have also been displaced’ (Legatt 2018: 3), and the novel holds onto the pastoral flow despite the disturbing events that take place.

The arc of the story is strung between the Elgin Theater in wintertime Toronto and the Museum of Civilization in a summertime Severn City Airport, a movement from firm emplacement – the theatre is real and identifiable – to uncertainty, as Severn City is fictitious and cannot be located precisely. Both of these locales are embodiments of the Foucauldean *heterotopia*: the theatre with its connections to the manifold planes of reality contained and displayed within, and the museum with its disruptive accumulation of objects connecting to a variety of places and times. In our contemporary world both of them are ‘non-places’ in Marc Augé’s framework, denoting ‘spaces formed in relation to certain ends (transport, transit, commerce, leisure), and the relations that individuals have with these spaces’ (Augé 1997: 94). The difference is that in the subverted landscape of *Station Eleven* the liminal non-places – ‘those places that aren’t definitely in one town or another – a gas station and a few chain restaurants strung out along a road with a motel and a Walmart’ (Mandel 2015: 43) – have become the normative residential areas, while the empty city – Toronto and Chicago in particular – has become too uncanny, too haunted to allow habitation, although it retains ‘a stark and unexpected beauty, silent metropolis, no movement’ (182). The urban sphere is degraded into abstraction by the lack of spatial practice, inhabited by objects fallen out of use.

These are the sites that Kirsten and August, both members of the Symphony, visit to search for useful objects, but also ‘looking for the former world, before all traces of the former world are gone’ (130). Another member of the Symphony, Charlie, likens them to archaeologists, summoning the past from deserted sites of habitation not only by collecting the things they find but also by cataloguing, by bearing witness to all the things that are there. *Station Eleven* falls in line with other notable examples of post-apocalyptic texts that use lists of things to make sense of the transformed world.

Margaret Atwood’s *The Handmaid’s Tale* (1985) famously starts with a catalogue of a gymnasium, recounting the lost object world and its affective dimension, drifting from past into narrative present, and the narrator returns to overlaying the dystopian landscape of Gilead with the pre-Gilead spaces throughout the story. The Man in Cormac McCarthy’s *The Road* (2006) frequently assesses his environment as long, monotonous lists of objects, as if the catalogue, reinvesting the things with traces of their objecthood, is

a performative mantra that somehow helps in constructing a coherent reality in the post-collapse chaos. Kirsten remarks something similar after raiding an intact family house with August:

> If not for the physical evidence, the suitcases filled with towels and shampoo and that box of salt they'd found in the kitchen, the blue silk dress she wore and the bulge of the Starship Enterprise in August's vest pocket, she might have thought they'd imagined the house. (199)

The house Kirsten wants to remember is a family house, as yet untouched by looters, that they find on their way to Severn City Airport. Containing the corpses of the family – father, mother and child – who lived and died there during the pandemic, it is turned into a shrine, and bears the imprints of the abjection of death, utterly subverting Bachelard's notion of the family home as a harbour of safety and comfort. Having become dysfunctional to the extreme, the house simultaneously also emanates an aura of ultimate thingness that is very similar to Ray Bradbury's 'There Will Come Soft Rains' (1950). That text chronicles the last days of a fully automated suburban house after the nuclear cataclysm. Its inhabitants, a model family of four, have fallen victim to the bomb, and only their shadows remain as spectral traces inscribed on one of the house's walls. The House exhibits the symptoms of trauma, and is stuck in a daily routine of feeding, cleaning and entertaining the absent family.

In *Station Eleven*, the house is an atavistic apparition that not only becomes a shrine to the specific family entombed in its bedrooms, but also stands as a memorial to the way of life that was lost in the pandemic. Not all of it remains in a state of thingness, though, as Kirsten and August take certain things and repurpose them from grave offerings into objects – Q-tips, towels, dresses, a wedding gown and a suit as costumes for the Symphony's theatre productions. These join a number of things from the old world which are returned to objecthood: the caravans of the Symphony are converted pickup trucks 'now […] pulled by teams of horses on wheels of steel and wood' (36), and the airplanes become containers, 'ideal for food storage' during winter, and 'in summer […] the ones near orchards were filled with trays of fruit that dehydrated in the heat' (32). 'Practising' these things in de Certeau's sense of the word pulls them out of their abstraction to help reconstitute the world anew.

The archaeological expeditions of Kirsten and August not only serve the goal of cataloguing and repurposing the abstracted object world, they also enrich their own private collections of things. August hunts for old TV Guides and books of poetry, while Kirsten searches for copies of the comic *Dr Eleven*, the book *Dear V.* and celebrity magazines, which she scours for news and pictures connected to the figure of Arthur. While August remains a marginal figure to

the narrative, and it is only hinted at that his fondness of TV Guides serves purposes of 'restorative nostalgia' in an attempt to reconstruct 'the lost home' (Boym 2007: 13), Kirsten's memorabilia not only have importance in terms of her own self-construction, but also function as the connective glue between the narrative fragments of the novel.

'The more you remember, the more you've lost'

Kirsten carries her collection in a backpack, 'child-size, red canvas with a cracked and faded image of Spider-Man'. It includes objects and things alike: 'two glass bottles of water that in a previous civilization had held Lipton Iced Tea, a sweater, a rag she tied over her face in dusty houses, a twist of wire for picking locks, the ziplock bag that held her tabloid collection and the *Dr Eleven* comics, and a paperweight' (Mandel 2015: 66). The objects maintain practical value in the post-collapse world and are firmly emplaced in it. More interesting are the things Kirsten keeps with her for their seeming sentimental value: the two *Dr Eleven* comic books, the glass paperweight and the magazine clippings closely connected to the figure of Arthur. There is also a missing thing, a copy of the book *Dear V.*, a collection of Arthur's private letters published by a childhood 'friend' without his authorization. This is the only thing Kirsten took with her from their apartment when she left Toronto with her brother, 'because her mother had told her she wasn't allowed to read it' (152).

The paperweight is given to eight-year old Kirsten by Tanya, her minder, with the words, 'I'm going to try to reach your parents, and you just try to stop crying and look at this pretty thing' (15). It functions as a comfort object not only in the immediate aftermath of Arthur's death, but also as transitional object in the continued absence of her parents. We could say that Arthur's witnessed death stands in for the unexplained absence that Kirsten's parents leave behind; their fate remains unaccounted for beyond Kirsten's speculations that they fell ill and died during the first wave of the disease. These two traumatic losses are conflated into one in the paperweight, the 'lump of glass with a storm cloud trapped inside' (15), the eternal winter within bringing comfort to Kirsten in the pre- and post-collapse worlds.

The paperweight as symbolic artefact collapses the pre-catastrophe world into one object. As Pieter Vermeulen notes, snow functions as the linking element between different narrative layers (Vermeulen 2018: 16): it first appears as artificial stage snow in the production of *King Lear*, then as real snow falling in winter Toronto immediately before the outbreak of the disease, and finally as the contained miniature snow storm within the paperweight. There is actually another related object, the snow globe of an imaginary Severn City skyline in the Museum of Civilization, which triggers nostalgic reminiscences of

the creative minds, the manual manpower, and the industrial process involved in manufacturing the artefact, encapsulating the essence of technological development (Mandel 2015: 255). Both the paperweight and the snow globe encase the once-upon-a-winter moment, and by extension the world never to come again, very much like the pre-Christmas news recordings Robert Neville – lone survivor of a pandemic – watches in post-apocalyptic Manhattan in the 2007 remake of *I Am Legend*. Like the film, *Station Eleven* utilizes two distinct oppositional seasons, summer and winter, for the two main timelines, and snow manifests as marking 'the divide between a *before* and an *after*' (20). The miniature cityscape, the trapped snow storm – imaginary renditions of the past – are extreme abstractions and utterly uninhabitable spaces and stand for the inaccessibility of the pre-collapse world. Their signification is meaningless, as the object they stand for has receded beyond existence, has become a ghost in the future world.

The *Dr Eleven* comics are even more complex presences within the novel. Creations of Arthur's first wife, Miranda, they manifest as an ekhphrastic presence in various forms throughout the narrative: first as a creative project in Miranda's unhappy pre-Arthur relationship, then the blossoming art enterprise filled with newly-married happiness, even later as the site that functions as the outlet of marital problems, then the printed comic books given to Arthur by Miranda years after the marriage ends, two of which are passed on to Kirsten as a present, and other two are sent to Arthur's son, Tyler. Beyond their appearance as object/thing, the novel also contains fragments of the *Dr Eleven* stories, which seem to comment on the events of the narrative. Thus the *Dr Eleven* comics function both as pre-collapse object and post-catastrophe thing, as ekhphrastic presence, and as meta-narrative device reflecting on both the personal and collective traumas in the novel.

The paperweight and the *Dr Eleven* comics weave a web of connecting threads between pre- and post-collapse world, between the people whose entangled lives the narrative follows. We see the paperweight's journey from a housewarming gift to Arthur and Miranda, from Miranda to Arthur, then to Tanya, and finally to Kirsten's backpack. The *Dr Eleven* comics appear as Miranda's creative idea, then sketches, and finally a gift to Arthur, who passes them on to Tyler and Kirsten on the eve of his death. Both of them are in a state of simultaneous objecthood and thingness, as their dysfunctionality produces new meanings in the meta-narrative realm. They are established as 'boundary objects […] that inhabit several communities of practice and satisfy the informational requirements of each of them' (Bowker and Starr 1999: 297), and when Kirsten discovers the page from Tyler's *Dr Eleven* copies in his Bible, she affirms their connectedness through the shared object microcosm.

When we look at these things in terms of the role they fulfil in Kirsten's post-collapse life, I propose that her archival endeavours are essential in the construction of selfhood. Her collection comments on what we know about her personal history and emphasizes the elliptical nature of her narrative. All items in her collection not pertaining to practical aspects of her post-collapse life point towards Arthur, while her real family – her parents and her brother who died from an infected wound some time after they escaped Toronto together – constitutes itself as a void. It is as if the objects – the paperweight, the comics, the magazine clippings – carefully delineate the areas of the past Kirsten is willing or able to access. As she herself acknowledges, there are 'countless' things she 'couldn't remember—her street address, her mother's face, the TV shows that August never stopped talking about—but she did remember Arthur Leander' (Mandel 2015: 40); this lacuna of remembering does not only include her pre-pandemic life but also extends to post-collapse events, especially the 'first unremembered year', willingly suppressed lest she become like the prophet who 'perhaps […] had had the misfortune of remembering everything' (304).

Instead of directly accessing events or memories that are either too far back, or too painful to recall, she uses the personal items in her collection as a shield, as building blocks to what Landsberg refers to as 'prosthetic memory', 'not strictly derived from a person's lived experience':

> Prosthetic memories circulate publicly, and although they are not organically based, they are nevertheless experienced with a person's body as a result of an engagement with a wide range of cultural technologies. Prosthetic memories thus become part of one's personal archive of experience, informing one's subjectivity as well as one's relationship to the present and future tenses. (Landsberg 2004: 25-6)

Landsberg illustrates how technoculture and prosthetic memories are entwined in the 1982 film *Blade Runner,* in which the most advanced androids, in order to increase their humanity, are supplied with false memories and artefacts supporting those recollections:

> Rachel's photograph *does* correspond to the memories she has. And those memories are what allow her to go forward and exist as she does. We could say that even though the photograph has no relationship to her 'real' past, it does help her produce her own narrative, construct the contours of her existence. (40)

Similarly, Kirsten is in dire need of her collection to help her assemble her identity. They are on the one hand connected to Arthur's nostalgically constructed image of the positive father-figure, since his changing room in the theatre was the

haven Kirsten escaped to when she wanted to be alone and loved. The battered red Spider Man backpack may be read as symbolic of her childhood, and the things contained therein the only items she wishes to include. The obsession with the Leander memorabilia points towards Kirsten's denial of certain parts of the past, as expressed through her inability to remember the first post-collapse year spent on the road, and her unwillingness to talk about either her pre-Symphony experiences or the stories behind her knife tattoos (Mandel 2015: 132). On the other hand, they are instrumental in re-appropriating her life as arbitrary markers of an illusory identity construction to mask the deep trauma of loss.

When talking about the interconnectedness of the object world and personal trauma in Shawn Wong's 1979 novel *Homebase*, Brown remarks that 'psychic survival depends on saturating the object world with significance. […] Artifacts and the artifactual serve as the mode of keeping the past proximate, and of keeping it distant, of turning the imagoes of the psychic life into physical objects' (Brown 1998: 941). Just like the post-apocalyptic lists mentioned earlier, Kirsten's objects constitute an archive, a list that enables her to assemble herself into a semblance of wholeness. Kirsten is aware of the role these things play in her life:

> One of the few things that August didn't know about her was that sometimes when she looked at her collection of pictures she tried to imagine and place herself in that other, shadow life. You walk into a room and flip a switch and the room fills with light. You leave your garbage in bags on the curb, and a truck comes and transports it to some invisible place. When you're in danger, you call for the police. Hot water pours from faucets. Lift a receiver or press a button on a telephone, and you can speak to anyone. All of the information in the world is on the Internet, and the Internet is all around you, drifting through the air like pollen on a summer breeze. There is money, slips of paper that can be traded for anything: houses, boats, perfect teeth. There are dentists. She tried to imagine this life playing out somewhere at the present moment. Some parallel Kirsten in an air-conditioned room, waking from an unsettling dream of walking through an empty landscape. (Mandel 2015: 201–2)

Arthur and 'his things' thus function as transitional objects and therapeutic buffers, which enable Kirsten to make sense of her life as it is. There is one instance which points to the possibility that the Leander collection may also become the bridge to events Kirsten is yet unable to access, and that is the aforementioned book *Dear V.*, significantly missing from her backpack and the only thing connected to her mother in any way. Kirsten's search for it may signal

a readiness to finally engage with the suppressed traumatic absences in her life and reintroduce her real past into her backpack again.

Another effort to reconstitute the past through remembering involves the compilation of random things into the Museum of Civilization. Located in the Severn City airport, the Museum is exclusively made up of things in Brown's sense of the word, artefacts that have become dysfunctional and cannot be repurposed to find their objecthood in the post-collapse world. Vermeulen acknowledges the correspondence between the Museum and the novel as object, stating that they 'share an archival function' (Vermeulen 2018: 18). I would add that like Kirsten's collection, the impetus for its founding roots deeply in personal trauma – the absence of Clark's partner, Robert: 'If Robert were here – Christ, if only – if Robert were here, he'd probably fill the shelves with artefacts and start an impromptu museum. Clark placed his useless iPhone on the top shelf' (Mandel 2015: 254). Thus, the Museum, while undoubtedly dedicated to a nostalgic recollection of the technoculture of the twenty-first century, also functions as a monument to Robert. Like Kirsten, Clark tries to reassemble his pre-collapse life from arbitrary fragments by 'turning the imagoes of the psychic life into physical objects' (Brown 1998: 941). And the Museum grows beyond personal trauma to acknowledge all those lost through their dysfunctional objects: credit cards, passports and other object markers of identity. What the Museum does on a small scale is mirrored in the novel on a larger scale, as the man Kirsten and August meet on their way to Severn City Airport suggests: 'the entire world is a place where artefacts from the old world are preserved' (Mandel 2015: 146).

Conclusion

The secondary world of the post-apocalypse is often constructed as a landscape of loss echoing the disruption of life as we know it. The elliptic manifestation of the dysfunctional object world, and the recoding into things all produce a landscape of dysfunctionality that emanates from loss, absence and trauma, and echo in the projected future as sites of nostalgia for a past that is not yet past. *Station Eleven* teems with objects turned into things, some of which are excavated and assembled to underline trauma and help the reconstruction of identity, like the personal micro-collection in Kirsten's backpack, or the much larger communal compilation of things in Clark's Museum of Civilization. The employment of these significant things, especially the paperweight, the *Dr Eleven* comics and the newspaper clippings, points beyond their intranarrative use, since they also function as connective tissue between the shards of narrative. Their forward-backwardness, their liminality and simultaneous objecthood / thingness all work to bring meaning into an otherwise incoherent story, which signals deep trauma

in its fragmentedness, and manage to pull the scattered narrative into an almost functional coherent whole.

Note: This study was completed with the help of funding by the Erasmus+ staff mobility grant. I would also like to thank David Campbell and Kirsten Hanke Campbell for introducing me to the novel.

Works Cited

Augé, Marc. 1997. *Non-Places: Introduction to an Anthropology of Supermodernity*. Trans. John Howe. London: Verso.

Bachelard, Gaston. 1994. *The Poetics of Space: The Classic Look at How We Experience Intimate Places*. Trans. Maria Jolas. Boston: Beacon Press.

Bowker, Geoffrey C. and Susan Leigh Starr. 1999. *Sorting Things Out: Classification and Its Consequences*. Cambridge MA: MIT Press.

Boym, Svetlana. 2007. 'Nostalgia and Its Discontents'. *The Hedgehog Review* 9.2: 7–18.

Brown, Bill. 1998. 'How to Do Things with Things (A Toy Story)'. *Critical Inquiry* 24.4: 935–64.

----- 2001. 'Thing Theory'. *Critical Inquiry* 28.1: 1–22.

de Certeau, Michel. 1988. *The Practice of Everyday Life*. Trans. Steven F. Rendall. 2nd ed. Berkeley: University of California Press.

Donohoe, Janet. 2014. *Remembering Places: A Phenomenological Study of the Relationship between Memory and Place*. Lanham MD: Lexington Books.

Kaplan, E. Ann. 2015. *Climate Trauma: Foreseeing the Future in Dystopian Film and Fiction*. New Brunswick NJ: Rutgers University Press.

Landsberg, Alison. 2004. *Prosthetic Memory: The Transformation of American Remembrance in the Age of Mass Culture*. New York: Columbia University Press.

Legatt, Matthew. 2018. '"Another World Just out of Sight": Remembering or Imagining Utopia in Emily St. John Mandel's *Station Eleven*'. *Open Library of Humanities* 4.2: 1–23.

Mandel, Emily St John. 2015 (2014). *Station Eleven*. New York: Vintage.

Pintér, Károly. 2012. 'The Analogical Alien: Constructing and Construing Extraterrestrial Invasion in Wells's *The War of the Worlds*'. *Hungarian Journal of English and American Studies* 18.1/2: 133–49.

Smith, Philip. 2016. 'Shakespeare, Survival, and the Seeds of Civilization in Emily St John Mandel's *Station Eleven*'. *Extrapolation* 57.3: 289–303.

Vermeulen, Pieter. 2018. 'Beauty That Must Die: *Station Eleven*, Climate Change Fiction, and the Life of Form'. *Studies in the Novel* 50.1: 9–25.

Wagar, W. Warren. 1982. *Terminal Visions: The Literature of Last Things*. Bloomington: Indiana University Press.

Dehumanizing the Posthuman in Laurent McAllister and Robert J. Sawyer

Isabelle Fournier (Trent University)

Imagine the feeling of waking up and never having to worry about pain, sickness or ever losing any of your physical abilities. The universes of science fiction are populated with beings that are enhanced to be physically stronger and more resistant than any traditional human. In Robert J. Sawyer's *Mindscan* (2005), a newly created process allows people to transfer a scanned copy of the entire contents of their brains into an 'infinitely maintainable, infinitely repairable, and infinitely upgradeable' (Sawyer 2005: 21) robotic body made to look similar to their own. The process duplicates exactly the intelligence, memories, emotions and personality of their original owners – all mental and psychological aspects that define who we are as human beings, as well as our exceptionalism. While we may believe that these physically enhanced characters should be treated as any other person – after all, only their appearance has changed – they are often depicted as being dehumanized by more traditional humans (cf. Fournier 2015/16). Yet, the perception of others is not the only source of dehumanization, and looking at the self-perception of technologically enhanced characters portrayed in Canadian sf literature shows that self-dehumanization is recurrent and can have major consequences, both on a personal and societal level. A close reading of *Mindscan* and the short story 'Driftplast' (2000) by Yves Meynard and Jean-Louis Trudel, writing together as Laurent McAllister, reveals that while one may expect these characters to feel more human, the blending of flesh and steel actually leaves them feeling less human, grieving over the loss of some of their human traits, and fighting to restore their humanity.

Body Transformation

Making people less vulnerable to illnesses and less prone to injuries is usually considered an acceptable reason for boosting their physical bodies, either with vaccines or with other medical techniques to help them live longer and healthier lives. In *Mindscan* and 'Driftplast', the respective protagonists both elect to undergo high-tech body-enhancement procedures to remove the threat of a looming fatal condition. The difference between the two stories is that the source of this threat is internal in *Mindscan* but external in 'Driftplast'.

In *Mindscan*, Jake Sullivan is a rich Canadian in his mid-forties, living with a genetic predisposition to a rare debilitating medical condition that caused major brain damage to his father. With the threat of a similar fate constantly hanging over his head, Jake consents to uploading his mental content into a slightly younger-looking android version of himself. After a short period of adaptation,

he is initially quite satisfied with his new disease-free body, and is hoping to resume his life.

Meanwhile, some twenty light-years away, in 'Driftplast' a small group of humans are working to colonize the planet Holm. The human body may be well adapted to living conditions on Earth but not necessarily to conditions on the other side of the galaxy. Nevertheless, Holm would have been perfectly suitable for humans if it wasn't for a thick layer of bacterial flora covering most of its surface, a flora which proves highly toxic to humans: touch the micro-organisms for a few minutes and you are likely to die. Unsuccessful at destroying this indigenous species to terraform the planet, the colonists develop a flora-resistant material, the so-called 'plast', which they use to reinforce their own bodies. Pantropy, the genetic adaptation of human beings, is seen as their only chance if they want to survive long-term in these adverse conditions.

As opposed to Jake, who is an early adopter of the mindscan technology, Valyr, the protagonist of 'Driftplast', is at first more reluctant to see her flesh replaced by artificial body parts: 'she could not stand seeing her ageing companions opt more and more for plast replacements of their failing organs' (McAllister 2010: 245). She changes her mind as she gets older, and can no longer work as efficiently. In a world where survival of the small colonist population is at stake, performing her duty reliably is essential. Whereas in *Mindscan* the corporeal change happens all at once, in 'Driftplast' it is incremental and updates accrue as research progresses. However, after a few decades, the cumulative effect is approaching full body replacement. When Valyr makes her decision to undertake the process, her body is 'massively reworked with plast' (248). Like Jake, she is initially satisfied with the transformation: it leaves 'her feeling younger and more ebullient than she had in decades' (229). Most members of the first generation (First Gen) of migrants to Holm are equally satisfied.

In our current society, prostheses are mainly used either to improve body functionality, and/or to restore the body image of an amputee. Restoring functionality ensures that the person can carry out basic daily tasks (for example, in the case of organ transplants), while restoring body image could mean a breast reconstruction after a mastectomy. In exploring the relationship between body image and personal responses to prosthesis, psychologists Craig Murray and Jezz Fox explain how a person's self-image can be affected by a change in their physical appearance (Murray and Fox 2002). According to their studies, a higher level of overall satisfaction and functionality of the prosthesis correlates to lower levels of body image disturbance. In both stories, the bodily transformation is presented as essential to the well-being of the protagonists, who are placed in a long-term, life-threatening situation. The prostheses are used for functionality, not for aesthetic reasons, and the results exceed all

expectations with improved physical abilities, resistance and longevity. The fact that both Valyr and Jake end up also looking, acting and feeling younger is just an added benefit, which should have boosted their self-esteem. So, if they are initially satisfied with both their body image and body functionality, why and when do they start feeling less human?

Theories of Self-Dehumanization

Psychological researchers such as Jerome Kagan, Nick Haslam, Brock Bastian, Charlie Crimston and Maryam Kouchaki, to name but a few, are currently trying to understand the dehumanization process, and in doing so, more clearly define what it means to be human in terms of social psychology. Although models are constantly being updated, their key aspects can be divided into two main categories. First, 'Uniquely Human' characteristics are those exclusive to humans. No other animals have them, and they include refinement, civility, morality and higher cognition. Second, 'Human Nature' attributes are fundamental to all human beings but can also be seen in other species (such as chimpanzees), such as emotionality, warmth and cognitive flexibility (Haslam 2006: 257). Dehumanization occurs when someone refuses to grant one or more of these characteristics to someone else:

> When Human Uniqueness attributes are denied to people, they are explicitly or implicitly likened to animals and seen as childlike, immature, coarse, irrational, or backward. When Human Nature attributes are denied to people, they are explicitly or implicitly likened to objects or machines and seen as cold, rigid, inert, and lacking emotion. (Bastian and Haslam 2011: 296)

It is worth noting that these core Uniquely Human and Human Nature traits are all psychological factors, and are connected to someone's emotional state, or their social and cognitive abilities. They are in no way related to their physical appearance.

While Kagan and Haslam mainly study how people dehumanize one another, Bastian and Crimston add the aspect of self-perception: they explore how both the victim of dehumanization and the perpetrator of the abuse feel afterwards. According to them, the victims tend to see themselves as less human (Bastian and Crimston 2014: 243), and to feel sad, angry or ashamed:

> People's perceptions of their own humanity are sensitive to the treatment they receive from others. Thus, we now have a more complete picture of dehumanization, showing that not only do perpetrators of abuse dehumanize their victims (or perpetrate abuse because they fail to recognize their victims' humanity in the first place), but that this dehumanization seeps into the self-perception of victims. (245)

Not surprisingly, individuals are sensitive to how other people treat them, and being rejected or abused is directly correlated to self-dehumanization, or feeling less worthy as a human being. What is of particular interest is that when someone feels less human, instead of being kinder to people, they have a tendency also to be unkind towards others and treat them in a hurtful way, thus creating a vicious cycle of dehumanization or a 'downward spiral of immorality' (Kourachi et al 2018: 1234). In both texts, Jake and Valyr descend that endless spiral.

Self-Dehumanization in *Mindscan*

Upon returning home after the mindscan procedure, Jake is welcomed by his dog who immediately starts growling at him. Animals tend to rely on their senses to identify people, and from the dog's point of view, Jake's new body is lacking some essential characteristics: the synthetic body doesn't smell like the previous organic one and the tone of voice is slightly different. After his dog attacks and bites him, a dumbfounded Jake 'just stood there […] feeling rejected and alone' (Sawyer 2005: 83). A few days later, Jake decides to part with his pet once he understands that the dog 'needed *human* companionship and […] wasn't going to accept [him] in that capacity' (109; my emphasis). Jake is dehumanizing himself by referring to others as 'human', while *de facto* excluding himself from that group. If on one side dogs recognize people based on their embodiment, dissociating the body from the mind, human beings on the other side, with their Unique traits of 'higher cognition' and 'morality', should react differently, more humanly and judge people on who they are, and not what they look like.

Yet the next betrayal comes from Jake's closest friends, including his love interest. The level of social rejection varies from avoiding eye contact to refusing to ever see him again. Despite Jake's best efforts to convince his friends that he is still the same person, he is nevertheless ostracized by all of them. Furthermore, his own mother repudiates him. She calls him a 'robot', referring to Jake's new android body. Throwing him out of her house, she explodes, 'you're not my Jake. What's happened to Jake? [...] to the original?' (87–8). Her love and compassion lie with the son she gave birth to, who is actually still alive, exiled to a luxurious resort on the far side of the Moon, since in legal terms, two people cannot live on Earth at the same time under the same identity. However, it should not be forgotten that Jake's personality, mental abilities and memories are all unaffected by the uploading of his mind. Thus, it can be said that Jake is rejected on his physical appearance only, although his synthetic body mimics the original organic one relatively well. These back-to-back episodes of rejections from his pet, his friends and his mother greatly affect Jake's perception of his new body image.

One can only speculate as to why Jake is being ostracized by his family and friends. Are they afraid of the unknown, of this new technology that is not yet widely available? It could be that Jake's newfound immortality is forcing them to face their own vulnerability. Or, they could believe that the medical separation between mind and body affects Jake's inherent personality, and that the new Jake is not actually their friend, lover or son. Yet, they do not really take the time to see if that is the case; they rebuff him at first glance. Jake is not the only mindscan being denied his humanity by family members; as we will see later, his mindscan friend Karen is also discredited by her son Tyler. However, in the course of the novel, not all mindscans are so vehemently discriminated against by their relatives, which indicates that some people could be more open-minded about this posthuman conception of the body.

Although sharing the same past experiences, knowledge, opinions and memories up to the point of duplication, what distinguishes between the mindscan and its original body are their different material embodiments (synthetic versus organic), and their most recent individual experiences. From the moment Jake wakes up in his synthetic body, he realizes, 'I feel *different* – in a 'undred ways I can't describe' (48). He adapts quickly – maybe too quickly – to this radical change in his anatomical constitution. Yet, his self-perception of his limbs and sensations now diverge from what they used to be. Although the new artificial form offers Jake several major advantages, it also has limitations, or at least inconveniences, including the inability to physically feel some sensations or fully display various emotions. As Jake acknowledges, 'These artificial faces didn't always display emotions well' (136). For example, he lacks the cathartic effect of crying, or the pleasure of smelling and tasting foods. After a while, he observes that 'things didn't feel the same. My favorite chair was no longer as comfortable; the carpet had almost no texture beneath my bare feet' (85), and the list of little pleasures that he considers are lost as the process goes on. Even if the advantages of the new body seemed to outweigh its drawbacks, Jake grieves for old sensations that he no longer feels. He acknowledges that something has changed and that he is not fully who he used to be. This is enough to make him question and reconsider his identity as a human being: 'the last thing I wanted to do right now was behave out of character, lest even I begin to think that my mother and my dog and the one and only woman I loved did, that I was some sort of ersatz knockoff, some pale imitation, an imposter, a fake' (91). The expressions he uses to describe how he thinks others might see him are self-dehumanizing, and a direct consequence of having been ostracized.

In their research, Kouchaki et al (2018) show how self-dehumanization can sometimes lead to immoral behaviours. Jake goes from being a victim

to becoming a perpetrator. His new appearance shapes the way he thinks of biological people and of other mindscans as well. His wording becomes peculiar and dismissive when he refers to the organic Jake as a 'shed skin', and he now somehow wishes that he was dead: 'it would have been easier to shut that other me off. Funny way of phrasing it: the other one was the biological version, not this one. But "shutting it off" – *It*, now! – had been the way the thought had come to me' (Sawyer 2005: 54). By using the impersonal pronoun 'it' and terminology more commonly used for objects than human beings, Jake is not only mechanistically dehumanizing the biological version of himself but also, at the same time, himself as a mindscan. His way of interpreting the world and talking about people seems to be shaped by who he feels – or what he fears – he has become. Furthermore, referring to his mindscan friend Karen, Jake notes how 'beneath the fluorescent lights, she looked particularly artificial: her skin had a dry, plastic sheen; her eyes, not really moist, likewise looked plastic' (58). By comparing Karen's artificiality to traditional human normativity instead of seeing her for who she is, Jake not only dehumanizes her, he also self-dehumanizes since her body is a mirror image of his own.

Made of plastic and steel, the full body prosthesis does not require as much daily maintenance, including aesthetically, as organic ones. Jake eventually notices that he now rarely looks in the mirror, and that this also has an impact on how he perceives himself:

> But I was having a hard time conjuring up a mental picture of my current self. The psychologists at Immortex had advised us to get rid of any photos of our old selves we had on display in our homes, but I hadn't had any. Still, it was days since I'd seen myself in a mirror, and even then – now that I no longer had to shave – they'd only been cursory glances. Could I really be forgetting what I used to look like? (95)

Or could he be afraid of what he would see in the mirror, grieving the old image of himself, his former traditional human identity? It is interesting to consider the role of the ability, or in this case incapacity, to conjure up a mental picture of ourselves in defining who we are. In the 1970s, psychologist Gordon Gallup believed that recognizing one's visual image in a mirror was correlated to self-awareness in humans, and also potentially in animals, and designed the now controversial mirror self-recognition test, in which part of an animal's anatomy is marked and then observed to see if the animal explores the mark in a mirror. Although Mindscan Jake would still be able to pass this test, proving his self-awareness, he seems to believe he has lost part of his humanity.

Self-Dehumanization in ‘Driftplast’

If in *Mindscan*, the ostracism towards the posthuman mainly comes from traditional humans, there are no such people left on Holm when Valyr finally accepts the plast implants. One may think that a more progressive transformation, affecting all members of a small population, would have given people time to adapt, and decreased the risks of dehumanization and identity crisis. But in the story it is not the case, and once the chain of exclusions of plast-enhanced people begins, it quickly escalates with disastrous results for the isolated colony.

The children of First Gen, led by Valyr’s son, Hilbert, are the first to overtly oppose body transformations. They feel that their parents have dehumanized them by using them as tools and lab rats to colonize a place they had never asked to come to. Talking to his mother, Hilbert accuses First Gen of considering them as if they were objects: ‘You played with us, you treated us like you owned us, you upgraded us like robots’ (McAllister 2010: 252). Furthermore, First Gen had used them as ‘guinea pigs’ (246), experimenting on their bodies when they were young. Knowing that First Gen wants to keep carrying out more and more invasive experiments on the following generations, Hilbert wants to save all the future children from the abuses he considered he was, and still is, subjected to. Confronting his mother, he asks, ‘Is that the First Gen’s plan? Make us into machines?’ (252). In his opinion, First Gen is dehumanizing their descendants by turning them into obedient androids, and he fears this will mean the end of humankind.

Until then, Valyr had not realized how her dehumanizing actions were affecting the younger generations. This shows that perpetrators of abuses are sometimes oblivious of how armful their actions can be. Once she does understand, her perception of her own transformed body starts to change, and with it, her view of how First Gen may be redefining human identity on Holm. Years later, her self-awareness is renewed when she sees a much younger version of herself in a video. Comparing these images captured decades ago on Earth to her current reflection, she sees in the mirror, ‘a face only slightly lined (plast collagen-analog kept flesh firm and elastic), hair the very same shade as on the screen (plast-fabricated dyes), eyes still sharp and glittering (plast-carved lenses and plast stitching to repair a torn flap of retina in the right eye). Looked at her hands, with the long, strong, four-jointed fingers’ (262). Her physical appearance is too similar to the one from the video, and yet too alien at the same time, and it has nothing to do with the usual ageing process. Having body modifications done incrementally may have made it easier to adjust physically and psychologically. However, the end result of the transition is overwhelming: Valyr feels ‘like a copy of the original, a poor simulation of who she’d been, who

she had meant to become. She had remained withdrawn for weeks afterwards' (262). She doesn't recognize herself in the mirror, contrasting who she is with her former expectations and dreams. The mirror raises her self-awareness, forcing her to notice every little difference from traditional human normativity. Taking a good look at herself, Valyr sees 'her hand as a mechanical lie, a prestidigitator's illusion. And likewise their delusion that the next generations would still be human in spite of all the changes' (257). Her reflection drives her to self-dehumanize, and to question how the First Gen's conception of individual and collective identity are being reshaped by their new body image.

Valyr's growing revolt is caused by dehumanizing herself, and also others, particularly the younger generations, not just by experimenting on their bodies, but also when judging their current behaviours. Valyr's perception of Third Gen is that 'sometimes something about them felt subtly wrong':

> Something in them echoed the impersonality all human simulacra were cursed with, from waxworks to animatronic dolls. And the odd bump under the skin, betraying the presence of a plast subsystem, only made the impression worse. (259)

She compares them to manufactured objects like 'waxworks' and 'animatronic dolls', referring to their lack of personality, coldness and passivity. Such a description of these 'human simulacra' gives the impression that, for Valyr, physicality and human personality could be strongly correlated, and the more the body deviates from traditional normativity, the less human the person would be. Later on, her negative perception is reinforced when she sees the changes planned for future generations to come, 'when she'd brought up on screen Keller's newest drawings of Holm-adapted humans and failed to recognize them as human beings. They looked like cartoon aliens. […] Valyr, wringing her plast hands together, had shivered with revulsion' (260). Her reaction of repugnance is quite telling, and she then understands how a series of small changes could eventually amount to a major body reshaping a few generations later, turning them into 'creatures who didn't deserve to be called human' (269).

It is interesting to note that, except for Valyr, it is not people from First Gen – who were once traditional humans – who rebel against this potential loss of humanity but people who are born with technologically enhanced bodies. Since the younger generations have never seen any living traditional humans, except in pictures and videos, it is hard to understand why they are so attached to this prior normative conception of the body, mourning a weaker version of what they now have. Their increased longevity and stronger bodies are better adapted to living conditions on Holm. The First Gen perceive their research as not only acceptable but absolutely necessary under the circumstances, even if

their methods would be considered unethical by the rules of our current society. While First Gen consent to their body transformation, the next generations are changed against their will, taking away their agency, and their freedom to choose for themselves.

Victims fighting for (their) humanity

With First Gen's increased longevity, the social order is changed because the balance of power remains in their hands for much longer instead of being passed down to their children. Feeling that they have been victimized their entire lives, Second Gen eventually find the willpower to break free by destroying all research facilities and all plast-related technology. It shows how an unethical behaviour can increase self-dehumanization, and in turn self-dehumanization can lead to unethical behaviours (Kouchaki et al 2018: 1245). Yet ironically, it is through violence that Second Gen stop being passive and regain their agency, a core Human Nature. Through their immoral actions, they are trying to claim back their humanity.

Valyr supports this war against ostracism and hegemony by providing crucial technical information to her son, but refuses to play a more active part in the attack. Her cooperation demonstrates that she regrets the role she originally played as a perpetrator of abuses against the younger generations. According to Bastian and Crimston, the self-perception of the perpetrator of an immoral behaviour varies, but self-dehumanization is observed when perpetrators are feeling remorseful and regret their actions (Bastian and Crimston 2014: 246). Thus, Valyr's shame and guilt actually show that she feels less worthy as a human being. From an external point of view, though, others could perceive her regrets differently. As Bastian and Crimston explain:

> If there is in fact a link between the perceived immorality of one's actions and a tendency to self-dehumanize, then acknowledging a loss of humanity may be a good thing – it may be an appropriate and socially desirable response when people cause harm to others. It is the failure to see oneself as less human that is most concerning and pathological. (246)

This explains why other First Gen researchers who never believed they had done anything wrong appear so cold-hearted, lacking any semblance of humanity to Second Gen (and to the reader). In the absence of remorse, no self-dehumanization of the perpetrator is noted. In contrast, because Valyr genuinely acknowledges the immorality of her past behaviours and feels sorry, younger generations don't see her as heartless. On the contrary, they see her as a saviour of humanity; thanks to her, traditional humans will live on Holm

instead of robots. In this scenario, self-dehumanization serves some necessary function in defining who we are and how others perceive us.

Even though Valyr and members of younger generations are all seen as regaining their humanity, psychologically speaking, the cost of rejecting the posthuman body to preserve a more traditional physical identity is high: without technology, life expectancy and birth rates drop drastically, and brings humankind to the verge of extinction on Holm. When the second wave of colonists coming from Earth finally land on Holm (more than a century after the first wave), the readers can only imagine Valyr's confusion when she discovers that the newcomers are more physically transformed than in the wildest dreams of any First Gen scientist. McAllister suggests that the spiral of body transformation once started is unstoppable: human identity is changing towards the posthuman and dehumanizing others based on their different appearance could prove pointless, even dangerous. Technology (such as medical innovation), even if it may change us physically, does improve our lives, and very few people would really want to live without it.

Just like the longer-lived characters in 'Driftplast', mindscans in Sawyer's novel should also eventually outlive their descendants – unless they also upload their consciousness – which is likely to have an impact on society. In the novel, when someone elects to undergo the mindscan procedure, they have to accept that after the duplication, their mindscan self will retain all their legal rights on Earth, while their biological self will retire to the Moon. In other words, the mindscans should be the only ones to have access to their bank accounts, property ownership, driver's license, passport, etc. However, some traditional humans refuse to see mindscans as the same human they used to be. For example, Karen's son Tyler decides to claim his inheritance after learning that his flesh and blood mother had passed away shortly after moving to the Moon. He launches a lawsuit to take possession of her estate, because he believes the mindscan living on Earth under Karen's identity is a fraud, a fake copy of his mother. A legal battle ensues to establish if mindscans meet the threshold of legal personhood, and to decide if they can be entitled to the same rights and privileges they had before they uploaded. Mindscan Karen has to fight back to prove her humanity because she knows for a fact – being her, and having made that decision herself – that 'the biological Karen wanted this Karen to have her legal rights of personhood' (Sawyer 2005: 136), before adding a few moments later, 'I *am* Karen Bessarian. And if I have to prove it, I will' (137), which is easier said than done.

The fact that, in the end, the mindscans are denied this right to personhood by the US Supreme Court, and as such denied their humanity, reveals that the society depicted in the novel is not quite ready for posthuman people to live

among them. Composed only of traditional humans, the Court refuses to grant moral consideration to beings that do not fit their definition of human identity. But how is this identity actually defined? Who decides who is 'human' and who is not? As the novel points out, 'drawing the line between personhood and nonpersonhood has represented one of the greatest challenges in bioethics' (211). For example, opinions still differ as to when someone should be declared a (new) person with legal rights: the range goes from at the time of conception to at the time of birth, some nine months later. The definitions of personhood and human identity are still subject to debates in our society, and have wider implications, for example on the right to abortion. After having been denied this legal status of personhood, and being ostracized by society, most of the mindscans ultimately decide to leave Earth to settle on Mars – synthetic bodies do offer some interesting advantages! Their goal is not just to escape the company of traditional humans but to create a new society with its own set of rules. In fact, they want to gain 'the freedom to practice [their] own brand of humanity' (291), a utopian society which appears to be more inclusive and accepting of diversity, compared to ours.

Conclusion

McAllister and Sawyer's stories both propose a variation of the ship of Theseus metaphysical thought experiment, where the ship is the human body: when most, or even all body parts have been replaced, is the resulting being still the same person? It raises other philosophical questions such as: is an exact recording of the mind, transferred into a different body, the same person or just a copy? Or, is there a threshold of physical transformation that should not be crossed if we want to keep our human essence intact? One major difference between a ship and a human is the mind, wherein lies the source of our exceptionalism and which, in our case studies, is preserved intact after the physical transformation. In 'Driftplast', the body modifications become more pronounced with each generation, while in *Mindscan* the wetware is replaced all at once by plastic and steel hardware. McAllister and Sawyer are not trying to reject the posthuman; on the contrary, they seem to argue that it is unavoidable. After all, we are already using technology to live longer and healthier than previous generations. Their message is more along the lines that because it is already on-going, then it might be time to look at what we want to achieve as a society and find ways to avoid the risks associated with unethical experimentations. Is our society ready to embrace the posthuman turn? We have touched on the idea that defining human identity and personhood is not so easy and can prove controversial. The same can be said about the posthuman. When does one become posthuman, or even transhuman, and can it affect one's legal status of personhood? This

raises even more questions than we can currently answer but should still be discussing as a society.

In both stories, what is interesting is that it is not the transformation itself that caused the protagonists to self-dehumanize. Quite the opposite, they are at first very satisfied with their new bodies. They start self-dehumanizing after having been rejected by their family and friends for their new appearance, and it spirals downward from there, driving them to eventually act immorally to counteract their fear of losing their humanity. Even if we don't want to, what we think of ourselves is often influenced by how others perceive us. Bastian and Crimston's conclusion reveals that 'the way we treat others not only has implications for how human they see themselves, but also for how human we see ourselves. […] Our humanity may be less attached to our own individual identities and more a product of our interactions with others' (Bastian and Crimston 2014: 249). When we ostracize or reject people based on their physical appearance, or any other irrelevant factor, we take away a part of their humanity and a part of ours as well.

Works Cited

Bastian, Brock and Charlie Crimston. 2014. 'Self-dehumanization'. *TPM: Testing* 21: 241–50.

----- and Nick Haslam. 2011. 'Experiencing Dehumanization: Cognitive and Emotional Effects of Everyday Dehumanization'. *Basic and Applied Social Psychology* 33.4: 295–303.

Fournier, Isabelle. 2015/16. 'La considération éthique des humains biotechnologiquement modifiés dans la science-fiction québécoise: Laurent McAllister et Sylvie Bérard'. *Quebec Studies* [Supplemental Issue]: 59–76.

Haslam, Nick. 2006. 'Dehumanization: An Integrative Review'. *Personality and Social Psychology Review* 10: 252–64.

Kagan, Jerome. 2004. 'The Uniquely Human in Human Nature'. *Daedalus* 133.4: 77–8.

Kouchaki, M. et al. 2018. 'The Link Between Self-Dehumanization and Immoral Behavior'. *Psychological Science* 29.8: 1234–46.

McAllister, Laurent. 2010 (2000). 'Driftplast'. In *The Aurora Awards: Thirty Years of Canadian Science Fiction*. Ed. Jean-Louis Trudel. Montréal: Nanopress, 229–79.

Murray, C.D. and J. Fox. 2002. 'Body Image and Prosthesis Satisfaction in the Lower Limb Amputee'. *Disability and Rehabilitation* 24.17: 925–31.

Sawyer, Robert J. 2005. *Mindscan.* New York: Tor.

Beginning at the End: Indigenous Survivance in *Moon of the Crusted Snow*

Kirsten Bussière (University of Ottawa)

In 2018, scientists from the United Nations Intergovernmental Panel on Climate Change claimed that humans must take unprecedented steps to radically reduce our dependence on fossil fuels. Anthropogenic climate change has led to a 'increase in the frequency and intensity of daily temperature extremes and has contributed to a widespread intensification of daily precipitation extremes', while also multiplying the likelihood of 'extreme weather and climate events' (Stott 2016: 1517). The impact of human-caused climate change is already being felt globally, with devastating wildfires, melting polar ice caps, rising sea levels, mass species extinction and abnormal weather events, making world annihilation seem more likely than ever before. Given this situation, it is perhaps unsurprising that post-apocalyptic fiction has grown in popularity, with the publication of climate fiction or 'cli-fi', as it is popularly referred to, steadily rising since the turn of the millennium (Whiteley et al 2016: 28). Faced with this bleak reality, David Higgins points toward a distressing trend in recent sf where many of the texts that are deeply 'concerned with the threat of impending environmental catastrophe seem immobilized by a sense of nihilistic futility; even those cynically aware of this sense of futility are often unable to do anything other than simply comment upon it with shrugged shoulders' (Higgins 2018: 69). As a result, many, though not all, of these contemporary post-apocalyptic novels are ultimately cynical about a politics of change or liberation – often exposing a future defined by grim determinism that reinforces pre-set structures of oppression.

Kyle P. Whyte, a Potawatomi scholar, has argued that 'Indigenous peoples do not always share the same sf imaginaries of dystopian or apocalyptic futures when they confront the possibility of climate crisis because the 'hardships many [non-Indigenous] people dread most of the climate crisis are ones that Indigenous peoples have endured already due to different forms of colonialism' (Whyte 2018: 226). While some post-apocalyptic narratives depict the end of our current system purely as a disruption of capitalist progress, Anishinaabe author and journalist Waubgeshig Rice's *Moon of the Crusted Snow* (2018) reverses the polarity of those discussions by framing the apocalypse as a politically mobilizing and agency-creating mechanism. In Rice's novel, settler-Canadian communities struggle to survive the unprecedented weather conditions because of their reliance on modern technology. Indigenous communities, however, who have already experienced many apocalyptic events since the

colonization of Canada begun in the late fifteenth century, are represented as being better suited to survive and prosper in a changing world. Rice's novel provides a scenario in which the traditional knowledge and stories of Indigenous peoples become a tool for 'survivance', a term used by Anishinaabe cultural theorist Gerald Vizenor to describe an active and thriving sense of presence, thus allowing First Nations communities to take full advantage of the utopian possibility of beginning again.

The research for this article was conducted at the University of Ottawa, which is situated on unceded Algonquin, Anishinabek territory. The Algonquin people are the traditional guardians of the land and I want to recognize their longstanding relationship with the territory on which I am writing. As a settler scholar, I honour the fact that the Indigenous peoples of North America have what Helen Hoy terms 'epistemic privilege', which means that they have 'superior knowledge of their own situation' (Hoy 2001: 8). As a result, this article will draw primarily on the research of Indigenous scholars to establish a theoretical background and each will be first introduced by noting their particular nation as a means of recognizing the ongoing relationship between Indigenous peoples, both historically and today, and the region they hail from as well as the one they currently call home.

To begin, Vizenor argues that while 'theories of survivance are elusive, obscure, and imprecise by definition', the 'nature of survivance' is a distinctive 'sense of presence over absence' that permeates throughout a large number of Indigenous 'stories, natural reason, remembrance, traditions, and customs' (Vizenor 2008: 1). Survivance is 'organized around decolonizing methodologies and Indigenous self-determination' (Murphy 2016: 178). While contemporary sf regularly posits white men as the 'ultimate victims' and therefore 'ultimate heroes' of their own narrative, texts centred on survivance 'often deconstruct victimization and eschew imperial masochism', actively rejecting the victimization of Indigenous populations, both in fiction and real life, by suggesting that 'they [have] never been defeated' (Higgins 2016: 53). Consequently, Rice's novel follows in the convention of 'living the Indigenous future' that Lindsay Nixon, an Anishinaabe-ne-hiyaw writer and scholar, describes as 'the outcome of the intentions, resistance, and survivance of [their] ancestors' (Nixon 2016). We are thus always, already witness to narratives of Indigenous survivance. In recent decades, there has been a growing body of speculative fictions in which Indigenous authors use the traditions of their own peoples 'as guiding principles in imagining possible futures for [themselves] and [their] communities' (Nixon 2016). Apocalypse narratives in particular have a tendency to 'posit the possibility of an optimistic future' despite the fact that the 'Native apocalypse', as termed by Grace Dillon, an Anishinaabe

scholar, 'has already taken place' (Dillon 2012: 8). Rice echoes this sentiment in his novel when community elder, Aileen, says:

> Our world [is not] ending. It ended when the Zhaagnaash came into our original home down south on that bay and took it from us. That was our world. When the Zhaagnaash cut all the trees and fished all the fish and forced us out of there, [that is] when our world ended. They made us come all the way up here. This is not our homeland! But we had to adapt and luckily we knew how to hunt and live on the land. We learned to live here […] But they followed us up here and started taking our children from us! [That is] when our world ended again. And it [was not] the last time […] But we always survived. [We are] still here. And [we will] still be here, even if the power and radios [do not] come back on and we never see any white people ever again. (Rice 2018: 149–50)

Aileen demonstrates that despite the fact that many Indigenous communities are recovering from what Lawrence Gross, an Anishinaabe scholar, calls 'post-apocalypse stress syndrome' (qtd Dillon 2012: 9), they have survived and will continue to survive and thrive despite on-going encounters with colonial forces that intend otherwise. Reflecting on past traumas while projecting the endurance of this northern Anishinaabe community into the future, Rice actively subverts 'the death imaginary ascribed to Indigenous bodies within settler colonial discourse', which essentially 'purports that Indigenous peoples must always be disappearing in order to legitimize settler occupation and the Canadian state' (Nixon 2016).

In Rice's novel, when the already isolated northern reserve becomes almost completely cut off from the outside world in the midst of an early and unpredictable winter – perhaps the result of a changing climate – it seems as though the apocalypse has befallen their community. Survival, the novel argues, is dependent on narrative memory, which is developed through 'an interconnection between space, memory, and ancestor' – 'the building of stories upon each other' (McLeod 2016: 170). Traditional Indigenous knowledge systems are 'based upon the oral tradition', which is linked to what Diveena Marcus, a scholar descended from the Tamalko Coast Miwok and Southern Pomo original peoples in California, terms a 'significant territorial "homeland" region' (Marcus 2015: 440). Storytelling is the conduit through which intergenerational knowledge is passed, allowing narrative to map a people's collective 'relationship to a specific area' and provide wisdom from 'voice and memory within a landscape' (McLeod 2016: 171). Place is particularly significant to the text's community, in part because the isolation of Northern Ontario allows the catastrophe to unfold at a much slower pace than it would in an urban centre, but also because the

novel's Anishinaabe community is one that had been displaced by the forces of colonialism. In an interview with CBC Books, Rice states that the world of his novel is one he is familiar with: it is 'a community [that is] dealing with the impact of being displaced and the effects of colonialism', making this fictional world representative of 'a dystopia [that is] already here' (Patrick 2018).

Neal McLeod, a scholar of Cree and Swedish descent, identifies the removal of Indigenous groups from their land as a form of '*spatial diaspora*' (McLeod 2016: 172). Using McLeod's theory, I argue that when 'the ancestors of these Anishinaabe people' in *Moon of the Crusted Snow* 'were forced to settle' on an unnamed reserve in Northern Ontario, which is an 'unfamiliar land, distant from their traditional home near the Great Lakes', they became part of a spatial diaspora (Rice 2018: 53). McLeod argues that 'the effects of spatial diaspora are devastating upon Indigenous people', because they create a 'condition of alienation' that 'exists both in [their] hearts [...] and in [their] physical alienation from the land' (McLeod 2001: 174). Moreover, the 'forced displacement' described in Rice's novel becomes the root of an intergenerational trauma that results in 'young people [...] committing suicide at horrifying rates' and entire decades where 'despairing men had gotten drunk and beaten their partners and children, feeding a cycle of abuse that continued when those kids grew up' (Rice 2018: 44). By removing the novel's community from their traditional lands, colonialism forced its people to live a 'disjointed life', in which 'the discourse and the physical reality surrounding this discourse' of exile 'are imposed upon the people thrown into diaspora' (McLeod 2016: 174).

Additionally, the colonial presence attempted to 'destroy the collective consciousness' of Indigenous communities, both in the novel and in real life, by alienating them from their stories and removing their peoples from 'the voices and echoes of their ancestors' in what McLeod refers to as '*ideological diaspora*' (172). The culture of the community in *Moon of the Crusted Snow* 'withered under the pressure' of the incomers' language and religion as the population was made to 'endure forced and often violent assimilation' at the hands of the colonizers (Rice 2018: 53). Rice's fictional Anishinaabe community was thus 'forced into a diaspora in two overlapping senses: spatial and ideological' by an ongoing 'colonial presence', essentially placing their people in a 'state of exile' in the Canadian nation-state (McLeod 2016: 172). But significantly, Rice's novel follows a tradition of Indigenous storytelling in which the apocalypse 'shows the ruptures, the scars, and the trauma in its effort to provide healing' (Dillon 2012: 9). Despite violent attempts to remove the Anishinaabe people and their way of life from existence, this erasure was ultimately unsuccessful because 'people like Aileen, her parents, and a few others had kept the old ways alive in secret' by whispering 'the stories and language in each other's ears' (Rice

2018: 53). So, despite the fact that their people were forced into a state of diaspora, the preservation work performed by community elders ensured that some semblance of an '*ideological home*' was maintained (McLeod 2016: 172). And it is exactly this ability to 'dwell in the landscape of the familiar, collective memories, as opposed to being in exile' (172), which enables the novel's community to survive what seems to be an unending winter.

The novel opens in autumn, with Evan Whitesky hunting bull moose to prepare for the winter months. As a child, Evan's 'father had first taught him to identify and follow moose tracks in the deep bush around their reserve when he was five', which enabled him 'nearly twenty years later' to track 'his own kill to support his young family' (Rice 2018: 5). Most years, stocking game for winter allowed Evan's family to avoid relying on 'food from the South', which was 'expensive and never as good, or as satisfying, as the meat he could bring in himself' (3). By contrast, in the year the novel is set, this winter preparation is key to the success of Evan's family and the community overall because as soon as the news of the community-wide power outage spreads, people buy out the contents of the local grocery store, leaving only 'dry dog food, vinegar, hot sauce, baked beans, […] salt, [and] baking soda' (62). And while there is 'supposed to be another truck coming in a couple weeks', the subsequent storm makes the roads impassable and completely cuts the community off from the world outside (62). Fortunately, those in the community who 'had grown up in families that believed in teaching their kids how to live on the land and […] knew how to hunt, fish, and trap', are able to draw on their traditions to perform 'the basics of winter survival' (78). Accordingly, because of the intergenerational knowledge that has been passed onto Evan by his father, he is better able to sustain his family in comparison to those within the community that had become reliant on shipments from the South.

That said, even though some members of the community do not 'spend all summer fishing and all fall hunting to feed [their] family in the winter', the community maintains an emergency supply cache that is distributed among the population according to 'each home's need' (113). This sharing demonstrates the capacity that Rice believes small communities have to support one another in times of crisis. On a smaller scale, Evan also functions as a provider for the community at large. Having already caught 'three moose, ten geese, more than thirty fish (trout, pickerel, pike), and four rabbits', Evan has 'more than enough for his family of four, but he [plans] to give a lot of the meat away' (6). Sharing is 'the community way', and as such he shares 'with his parents, his siblings and their families, and his in-laws' and saves 'some for others who might run out before winter's end and not be able to afford the expensive ground beef and chicken thighs that were trucked or flown from the South' (6). Adherence to

traditional social structures promotes a system in which the community provides for one another, essentially taking care of those who do not have enough to thrive on their own. And when catastrophe strikes, it is this nature of sharing that enables the survival of the population.

Aileen also serves as an essential role within the space of the reserve as a repository of traditional knowledge. While Evan shares food and resources within the community, Aileen shares information that becomes key to the survival of the population in a world that has quickly become cut off from the provisions they were once reliant on:

> Often, Aileen shared a teaching or an old story with the young men when they came to visit. Once in a while, someone would bring a group of children or teens to hear some old Nanabush stories or her memories of the old days. There had been no electricity in this community when she was a child and parents sometimes brought the young ones to her to remind them that life was possible without the comforts of modern technology. Now it was critical that they learn how the old ones lived on the land. (148–9)

In addition to telling stories, Aileen also takes on the responsibility of teaching Evan's partner, Nicole, 'about the old medicine ways' in case their community does not 'get any new supplies from the hospital down south' (147). Years before, Aileen used to 'take her and all the young girls' out into the bush to teach them about the natural medicines that can be made from the naturally-occurring vegetation of the region (147). Now, Nicole is 'at home, trying to prepare herself for the skills they would need if the power was gone for good while struggling to keep the children occupied' (147). The apocalyptic weather creates a space in which it becomes not only possible to rekindle the community's longstanding traditions, but rather, it becomes necessary for the survival of the community

In Canada, colonialism placed 'severe pressures on [Indigenous] culture', but was ultimately unsuccessful because people still 'found ways to preserve their identity and their place in the world' (McLeod 2016: 181). In particular, 'stories and languages led some people back to their identities', essentially allowing them to 'find true dignity and integrity in the world' by encouraging a revival of traditional ways of life (181). McLeod argues that 'stories act as the vehicles of cultural transmission by linking one generation to the next', which enables 'the possibility of cultural transmission and of "coming home" in an ideological sense' (182). And considering the diasporic condition of the novel's Anishinaabe peoples, the ability to find a home within the context of narrative represents the significance of the continuation of stories to Indigenous survivance overall. In the wake of yet another apocalypse, storywork is essential to the preservation of the community.

For example, the story of Nanabush and the geese, which Evan's father, Dan, tells to two of his grandchildren, Maiingan and Nanghon, demonstrates the way that narrative is used to ensure that knowledge is passed from one generation to the next. In this tale, which is told in English and Ojibway, 'Nanabush was getting really hungry' because 'he knew winter was coming and that he had to get ready' but was behind in his seasonal preparation because he had been 'too busy swimming and eating the berries that come late in the summer' (Rice 2018: 170). Nanabush instead plays an 'evil trick' on thirty geese that are celebrating their upcoming winter migration and kills them while they are dancing (172). Upon getting home, Nanabush begins to cook one of the geese and decides to take a nap: to 'make sure he woke up in time before the food got burnt, he asked his diiyosh – his bum – to wake him up' (173). But he does not wake up in time and all the geese that he had caught for winter are burnt until there is nothing left. From this story the children learn two lessons: '[Do not] be greedy' and 'always be ready for winter' (174). While these lessons are always important, the process of hunting many weeks before the snow falls gains new significance as extreme weather events further isolate their community, cutting them off from any outside food sources that might sustain their population through the colder months. While colonialism caused a 'radical separation with the past' that triggered a 'disjunction in the daily experience of the people', McLeod purports the idea that 'every time a story is told, every time one word of an Indigenous language is spoken, [nations] are resisting the destruction of [their] collective memory' – essentially declaring the on-going existence of Indigenous peoples (McLeod 2016: 181-2). Moreover, the catastrophe facing Rice's fictional community creates the conditions in which traditional knowledge becomes not merely an expression of survivance but also a necessary tool for survival in a radically shifting world.

Despite the work being done to sustain the suddenly isolated community, the population remains threatened by colonial forces. These dangers are embodied in the figure of Justin Scott, a white stranger who seeks refuge up north when the city collapses into chaos. Rice draws on the figure of the windigo, a 'malevolent' monster with an 'insatiable appetite for human flesh' (Smallman 2015: 18), to depict Scott's dangerous presence in the community. Windigo stories traditionally 'speak to the nature of being human and the dangers of greed' (30). I do not propose that the windigo is a postcolonial figure because not only would it be an inaccurate statement, it would also be at risk of assuming 'that the starting point for discussion is the advent of Europeans in North America' (King 2004: 185). I will, however, argue that Rice made an intentional decision in representing one of the few white characters in the novel as the windigo. Rice is thus drawing on a common trope in contemporary Indigenous art, present in

popular works such as D.D. Moses's play *Brébeuf's Ghost* (2000) and Armand Garnet Ruffo's film, *A Windigo Tale* (2010), where white colonialism is figured as a windigo as a means to demonstrate the cannibalistic nature of a colonial presence. In a dream, Evan sees that the corpses being kept in the garage until spring thaw seem to have 'decomposed into nothing' (Rice 2018: 187):

> A feral odor, like a rotting heap of moose innards, wafted briskly into the garage. A tall, gaunt silhouette stood in the doorway, outlined by the scarlet blizzard behind it. The smell made him gag. The creature hunched forward. The hair on its broad shoulders and long arms blurred the lines of its figure. Its legs appeared disfigured, almost backward. But its large, round head scared him the most. It breathed out another savage rumble.
>
> Evan slowly raised the flashlight, illuminating the figure's pale, heaving emaciated torso under sparse brown body hair. He brought the beam up to its face. It was disfigured yet oddly familiar. Scott. His cheeks and lips were pulled tight against his skull. He breathed heavily through his mouth, with long incisors jutting upward and downward from rows of brown teeth. His eyes were blacked out. If it [were not] for the large, bald scalp and the long, pointy nose, this monster would have been largely unrecognizable.
>
> The beast Scott lunged forward. (187)

Rice uses dreams as a tool throughout *Moon of the Crusted Snow* to provide characters with knowledge and insight into their current situations – essentially demonstrating an Indigenous 'model of reality' that can be 'discovered in dreams' (Goldman 2005: 104). And as ominous as it is, Evan's dream is right. When bringing Aileen's body to the garage, Evan realizes that the number of corpses has changed from twenty-one to twenty and Scott is the one who has stolen the body to eat – essentially cannibalizing the community's deceased relatives. Scott is eventually shot in the head, which 'burst[s] open above his left eye in a spray of blood, bone, and brain', thus killing him (Rice 2018: 203). With this gory ending, the windigo is removed from the community, demonstrating the capacity for the population to escape the on-going pressures of colonialism, which seeks to devour difference and 'maintain cultural hegemony' (McLeod 2016: 182).

In *Moon of the Crusted Snow* the apocalypse 'exemplifies a dystopian impulse defined by destruction and catastrophe and a utopian impulse that fuels the rebirth of new hope or a new world rising from the ashes' (Murphy 2016: 180). Similarly, Martina Mittag argues that 'conventional utopia and apocalypse are complicit in their desire for a better world' (Mittag 2009: 264), meaning that these genres are linked by an optimism that a better world is possible. Because apocalyptic narratives always have the potential to exemplify a sense of hope for the future, *Moon of the Crusted Snow* demonstrates the ways in which the

annihilation of one society can ultimately lead to the renascence of another (Murphy 2016: 180). Fictional apocalyptic events ‘by their very character are understood to destroy functional government, food distribution, organized medical care, and the infrastructure’ that allows contemporary society to operate, thus providing an opportunity for the ‘imaginative’ and inherently utopian possibility of beginning again (Curtis 2010: 2). In *Moon of the Crusted Snow*, the closest urban centres fall into chaos, while at the same time the reserve maintains some level of normalcy throughout the crisis. Due to the fact that the people in Gibson, which is identified in the novel as the nearest city to the reserve, are not completely self-sufficient, the rush for resources results in complete pandemonium:

> Then out of the blue someone threw a big rock through one of the [grocery store] windows. It smashed and glass went everywhere. One guy ran up through the crowd and just heaved a garbage can right through the big window. […]
>
> The crowd rushed into the grocery store, elbowing and shoving others out of the way. It looked like some people were getting cut on the glass because there was blood everywhere all of a sudden. Some of them were getting into fights and punching each other. (Rice 2018: 82)

This scenario, which occurs within the first couple days of the outage, demonstrates the pattern of events that might happen should a city lose power and communication services for extended periods of time. Without access to resources, the entire urban community falls apart. Rice’s novel thus argues that it is likely that other urban centres facing similar circumstances would have also fallen into a state of chaos comparable to that of Gibson.

By contrast, the conditions imposed on the Anishinaabe community result in an opportunity to survive as well as thrive. In the front book flap, Rice writes: ‘as one society collapses, another is reborn’. And while the collapsing society may refer to settler-occupied urban centres like Gibson, I believe it also refers to the collapse of colonial influence on the Anishinaabe peoples, which allows for a rekindling of their traditional ways of life. In *Moon of the Crusted Snow*, apocalyptic events thus express the potential to reverse the alienating effects of spatial and ideological diaspora:

> Their ancestors were displaced from their original homeland in the South and the white people who forced them here had never intended for them to survive. The collapse of the white man’s modern systems further withered the Anishinaabeg here. But they refused to wither completely, and a core of dedicated people had worked tirelessly to create their own settlement away from this town. (212)

The end of the novel thus demonstrates that the complete isolation of the community had already collapsed the majority of the systems introduced by settler-colonial influences. While this disruption initially acts as a hindrance to the wellbeing of the community at large, the isolation eventually allows for a broad reversion to the pre-colonial traditions that had sustained their people for centuries. While traditional sf narratives often promise 'progressive advancement toward a utopian future enabled by technoscientific expansion', without noting 'the imperial and colonial dimensions of such expansion' (Higgins 2016: 61), Rice's novel demonstrates that Indigenous science fictions can allow for a rekindling of traditional knowledge that is not marred by a western colonial concept of progress. The apocalypse, then, becomes a decolonizing event because it enables 'a process of self-recovery and survivance that involves radical', albeit unavoidable 'withdrawal from [settler-colonial] paradigms of life practice' (80).

The act of coming home through stories is therefore manifested throughout *Moon of the Crusted Snow*. Narrative ensures that traditional knowledge is passed between generations, creating a toolbox for surviving in a world without modern conveniences, where the only way to thrive is by living off the land. But this homecoming is not only expressed in a figurative sense. After Scott was killed they cannot 'be certain there [would not] be more visitors. None had come since the arrival of those from the South in those first scary months. But if civilized life remained in the cities and towns around them, the mass migration was likely under way. No one wanted to deal with any more of them. Not now' (Rice 2018: 212). And to avoid dealing with this potential influx of outsiders, Evan and his family decide to attempt a reclamation of their ancestral lands by using the apocalyptic winter as an opportunity to again occupy the space that European settlers had stolen from their people: 'they stepped onto the trail, one by one, to begin this new life nestled deep in the heart of Anishinaabe territory' (213). This process of coming home is 'an exercise in cartography, it is trying to locate the place of understanding and culture' (McLeod 2016: 183). And while McLeod argues that coming home 'is not so much returning to some idealized location' (183), in Rice's novel the population is provided with an opportunity with which they can attempt to reclaim the lands that had originally belonged to them. Rice's novel represents a coming home through stories on a number of levels, demonstrating the power of storytelling as a means of maintaining a people, while also being a book that contains traditional stories within its pages, which are then transmitted to a broad audience.

Moon of the Crusted Snow can be understood as a 'critical dystopia', which allows 'readers and protagonists to hope', thus 'maintaining the utopian impulse *within* the work' (Baccolini 2004: 520). Instead of depicting apocalyptic events

purely as a disruption of capitalist progress, Rice reverses the polarity of those discussions by framing the apocalypse as a politically mobilizing and agency-creating mechanism that allows Indigenous peoples to build on traditional knowledge about how to survive using the resources available and succeed in a new world. Throughout the novel, the isolated Anishinaabe community maintains an active and thriving sense of presence despite being cut off from the settlers' resources that they had become accustomed to over the course of centuries of colonialism. Therefore, *Moon of the Crusted Snow* is a narrative of survivance, demonstrating that through stories, language, traditions and customs the Anishinaabe peoples living in the Canadian nation-state will continue to survive and thrive, even if yet another apocalyptic event comes their way. While the end is characterized by the utopian possibility of starting again, Rice proves that Indigenous populations already have what they need to endure and prosper in a changing world marked by the threat of anthropogenic climate change.

Works Cited

Baccolini, Raffaella. 2004. 'The Persistence of Hope in Dystopian Science Fiction'. *PMLA* 119.3: 518-21.

Curtis, Claire P. 2010. *Postapocalyptic Fiction and the Social Contract: We'll Not Go Home Again*. Lanham MD: Lexington Books.

Dillon, Grace L., ed. 2012. *Walking the Clouds: An Anthology of Indigenous Science Fiction*. Tucson: University of Arizona Press.

Goldman, Marlene. 2005. *Rewriting Apocalypse in Canadian Fiction*, Montreal: McGill-Queens University Press.

Higgins, David M. 'Survivance in Indigenous Science Fictions: Vizenor, Silko, Glancy, and the Rejection of Imperial Victimry'. *Extrapolation* 57.1-2: 51–72.

Hoy, Helen. 2001. *How Should I Read These?* Toronto: University of Toronto Press.

King, Thomas. 2004. *Unhomely States: Theorizing English-Canadian Postcolonialism*. Peterborough: Broadview Press.

Marcus, Diveena. S. 2015. 'Indigenous Hermeneutics through Ceremony, Song, Language, and Dance'. In *The Routledge Companion to Native American Literature*. Ed. Deborah L. Madsen. Abingdon: Routledge, 353–63.

McLeod, Neal. 2016. 'Coming Home Through Stories'. In *Introduction to Indigenous Literary Criticism in Canada*. Eds. Heather Macfarlane and Armand Garnet Ruffo. Peterborough: Broadview Press, 170–86.

Mittag, Martina. 2009. *Futurescapes: Space in Utopian and Science Fiction Discourses*. Amsterdam: MMG Zegwaard.

Murphy, Graham J. 2016. 'For Love of Country: Apocalyptic Survivance in Ambelin Kwaymullina's Tribe Series'. *Extrapolation* 57.1-2: 177-96.

Nixon, Lindsay. 2016 ‘Visual Cultures of Indigenous Futurisms’. *Guts Magazine*. URL: http://gutsmagazine.ca/visual-cultures/ (accessed 27 March 2019).

Patrick, Ryan B. 2018. ‘Why Waubgeshig Rice Wrote a Dystopian Novel about the Collapse of Society from an Indigenous Perspective’. CBC Books. URL: https://www.cbc.ca/books/why-waubgeshig-rice-wrote-a-dystopian-novel-about-the-collapse-of-society-from-an-indigenous-perspective-1.4857257 (accessed 18 April 2019).

Rice, Waubgeshig. 2018. *Moon of the Crusted Snow*. Toronto: ECW Press.

Smallman, Shawn. 2015. *Dangerous Spirits: The Windigo in Myth and History*. Toronto: Heritage House Publishing.

Stott, Peter. 2016. ‘How Climate Change Affects Extreme Weather Events’. *Science* 352.6293: 1517–18.

Vizenor, Gerald. 2008. *Survivance: Narratives of Native Presence*. Lincoln: University of Nebraska Press.

Whyte, Kyle P. 2018. ‘Indigenous Science (Fiction) for the Anthropocene: Ancestral Dystopias and Fantasies of Climate Change Crises’. *Environment and Planning E: Nature and Space* 1.1-2: 224–42.

Whiteley, Andrea et al. 2016. ‘Climate Change Imaginaries? Examining Expectation Narratives in Cli-Fi Novels’. *Bulletin of Science, Technology & Society* 36.1: 28–37.

‘Some Eden Lost in Space’: Contextualizing Frederick Philip Grove’s ‘The Legend of the Planet Mars’

Paul Fayter (York University)

Mars has long existed at the intersection of science, imagination, religion and politics. For centuries, fiction about Mars and Martians has been an exercise in imagining the unknown. The literature on Mars also inevitably expresses the interests and beliefs of its very human creators. Late Victorian science fiction about the Red Planet often reflects the contexts and concerns of British imperialism (Kerslake 2007: 82–104; Rieder 2008: 3–10, 125–35). Mars has been perfectly situated to become both a locus of scientific discovery and a socially constructed artefact, a physical object in the night sky and a metaphoric mirror-Earth. Often, what we might call ‘real’ Mars has been barely visible through layers of hopes, dreams, anxieties and desires. This other world has served as a useful setting for commentaries on our present, rehearsals of our history and projections of our future.

According to one historian of the Red Planet, there was a ‘lull in the debate [concerning an inhabited Mars, usually with a global network of engineered canals] between 1914 and 1925’ (Markley 2005: 114), during World War One and its aftermath. Long associated with warfare and bloodshed, Mars continued serving as Earth’s extraterrestrial looking glass during this period. This article seeks to fill part of the alleged gap in the primary literature by examining Frederick Philip Grove’s almost forgotten 1915 poem ‘The Legend of the Planet Mars’, while sketching its wider historical contexts.

Looking at Mars looking at us

During the nineteenth and twentieth centuries, looking at Mars was akin to gazing into a pool reflecting human hopes, fears and desires. Perceptions, real and imagined, went both ways. Startling shifts in point of view were common in both the scientific and fictional literature. Could we imagine Martians – or ourselves – on the Red Planet? What did our telescopic gaze reveal? Perhaps more unsettling was the return gaze: *Martians* observing *us*. How did we humans look to observers on Mars? Alfred Tennyson supplies one example of a tragic and ironic perspective shift. A sequel to the 1842 poem ‘Locksley Hall’ (in which his view of the religion of progress was already troubled and ambivalent), Tennyson’s ‘Locksley Hall Sixty Years After’ (1886) expresses his despair over the decaying religious and moral values that had stabilized the social order in the Victorian Age of Science. If we observed the fair Earth shining in the Martian night sky,

Could we dream of wars and carnage, craft and madness, lust and spite,
Roaring London, raving Paris, in that point of peaceful light?

Might we not in glancing heavenward on a star so silver-fair,
Yearn, and clasp the hands and murmur, 'Would to God that we
were there'? […]

Is there evil but on earth? Or pain in every peopled sphere?
Well be grateful for the sounding watchword, 'Evolution' here.

Evolution ever climbing after some ideal good,
And Reversion ever dragging Evolution in the mud.
(lines 189–92, 197–200)

As mirror and metaphor, Mars was often used as a way of considering our place in the universe.

Nineteenth-century astronomers began employing techniques drawn from the newly professionalized discipline of geography – cartographic projections and nomenclature, travel narratives, photography – to offer 'scientific' representations of the Martian landscape, both natural and possibly engineered. From the later 1800s Mars was being mapped in unprecedented detail, with improved telescopes, spectroscopes and micrometers, along with new observatories sited in higher and drier places offering clearer viewing conditions.

In England, the Reverend William Dawes made careful hemispheric sketches of Mars during the 1860s, which another English astronomer, Richard Proctor, used in the creation of Mercator projections that, when published, carried the weight of perceived scientific accuracy, authority and objectivity (Lane 2011: 23–63). Proctor designated various surface features with such terrestrial-sounding nouns as 'continent' and 'sea', naming them after mostly English astronomers past and present (Blunck 1982). This solidified a long-developing view of Mars and Earth as analogical twins. Although Mars is only half of Earth's diameter, with a tenth of Earth's mass, unlike Venus swamped by its thick atmosphere, the Martian surface (plus its annual and daily motions and axial tilt) was clearly observable via telescope from the 1780s. Seemingly terrestrial features such as polar ice caps, oceans, islands, oases, rivers and seasonal vegetation became suggestive analogies – and possible explanations – for what was being observed on Mars. By the late nineteenth century, it had become both a scientific and theological expectation that Mars would be inhabited like Earth (Crowe 1986: 480–546).

The year 1877 was pivotal for Martian cartography. Given their respective orbital velocities and distances from the Sun, Mars and Earth exhibit regular 'oppositions', when the Sun and Mars line up on directly opposite sides of the

Earth. The opposition of 1877 was a 'perihelic' opposition in which Mars and Earth drew nearest both to the Sun and each other; the disc of Mars was fully illuminated when viewed from Earth, allowing astronomers to see the Red Planet in unprecedented detail. Two astronomers – Nathaniel Green of London and Giovanni Schiaparelli of Milan – produced significant series of Martian maps. Both employed objective-looking Mercator projections. But Schiaparelli's work landed like an intellectual bombshell.

Green had travelled to the island of Madeira for the summer, which granted him much better observing conditions, and allowed him to see more of Mars's southern latitudes. A trained artist, Green created his Martian maps (published in 1878) from beautiful, detailed, softly shaded and richly coloured sketches. The maps arising from the colour-blind Schiaparelli's viewings of Mars, published in his *Astronomical and Physical Observations of the Axis of Rotation and the Topography of the Planet Mars, 1877–78* (1895), were not as naturalistically rendered as Green's. However they – and later maps by Camille Flammarion in France and Percival Lowell in the US – revealed a hitherto unsuspected global network of clear, straight and intersecting lines, which transformed Mars into 'a kind of Rorschach test' (Markley 2005: 55) for future debates on the existence of intelligent extraterrestrials.

From September 1877, Schiaparelli reported seeing *canali* on Mars. Translating the word as 'channels' or 'grooves' would have suggested natural landscape features. The more popular and sensational translation, 'canals', implied they were artificial. Schiaparelli, a civil hydraulic engineer who knew about building irrigation canals, thought they were indeed waterways but was initially cautious about concluding they were designed. He knew there was no description of Mars without interpretation and accepted the 'clear analogy' of Mars with Earth (Schiaparelli 1996: 9). But in the interests of 'brevity and clarity' he felt 'compelled' to use such terms as '*island*, *isthmus, strait*, *cape*, etc.' (47). He also imagined what the Earth might look like if observed from the distance of Mars, suggesting 'it would present much the same appearance as Mars does to us' (48). Needless to say, 'canals', with the thrilling implication of Martian canal-builders, soon became common in both scientific and popular discourses, although not without its critics. But astronomers, including Flammarion, Proctor, Schiaparelli and Lowell, came to believe the weight of scientific observation and explanation constituted clear evidence favouring an inhabited Mars. Their detailed Martian maps, from Schiaparelli's authoritative versions to Lowell's popular ones, created a new sense of Mars as a cultural icon, as *another world in its own right*, with its own topography, place names, weather, seasons, hydrology and biology (Lane 2005; 2011). Vision involves much more than physics and physiology. The telescopic gaze of late nineteenth and early twentieth century astronomers involved not simple observation but technology,

culture, expectation, interpretation (Sheehan 1988), and the confluence of imperial astronomy, scientific instruments and professional practices (McAleer 2013). Some of the newly perceived Earth-analogous detail really existed on Mars; some existed only in the minds of scientists, some of whom were inspired by writers, theists, natural theologians and spiritualists. It is important to remember that maps are never simply objective visual representations of nature. And neither are photographs, which were often problematic; Martian canals only emerged in photographs that had been altered to make them visible (Tucker 2005: 195–233). Cartographic interpretations of nature, from cities to planets, are affected by myriad personal, disciplinary and national interests; by beliefs, hopes, purposes and preconceptions, the content of which may derive not only from relevant sciences but literature, politics, philosophy and religion. Understandings of specific Martian phenomena took place at the limits of analogy and technology, at the borderland between vision and imagination.

In August 1877, another significant event occurred that contributed to the scientific understanding of Mars, and encouraged fictional and scientific speculation about Martians. Asaph Hall, the director of the United States Naval Observatory, with the world's largest refracting telescope, discovered around Mars two small moons that he named Deimos and Phobos. Two details in his 1878 paper are interesting here: he included a careful account of how the satellites would appear to a Martian astronomer, and he supported the idea of a German colleague to create an immense pattern of large fires in Siberia to signal the inhabitants of our Moon.

Developments in evolutionary theory and theories of planetary formation, with the especially good oppositions of 1877, 1892 and 1909, and the infamous 'canal' controversy (which coincided with major feats of terrestrial engineering, including canal-building projects from Suez to Panama), combined with the series of deadly droughts and famines in India, Brazil, China and the US from 1877 to the turn of the century (Davis 2001), no doubt made the vision of a desiccated Mars populated by desperate Martians easier to imagine. All this, combined with the popularity of astronomers such as Lowell and scientific romancers like H.G. Wells and his invading Martians, prompted waves of speculations and a widespread presumption that Mars was an older, dying analogue of Earth, perhaps inhabited by beings of advanced intelligence.

Once Lowell in America and Wells in England connected their versions of nebular and evolutionary theories in their visions of Mars as an older, colder, drying, dying planet, *a scientifically legitimatized narrative framework* for scientific romance was complete. For generations the Red Planet, an ancient symbol of war, served as utopian ideal (Alice Jones and Ella Merchant's *Unveiling a Parallel* [1893]), Darwinian threat (Wells's 'The Crystal Egg' [1897]), military frontier

(Garrett P. Serviss's *Edison's Conquest of Mars* [1898]), advanced Other (Kurd Lasswitz's *Two Planets* [1897]), boy's own adventure (Edgar Rice Burroughs's *A Princess of Mars* [1912]), heavenly abode for resurrected bodies or reincarnated souls (James Cowan's *Daybreak* [1896]), and a projection screen for anxieties about disease, immigration, racial purity, gender, communism, invasion, evolution, degeneration, extinction and existential angst. The late nineteenth and early twentieth centuries witnessed 'Martian manias': eruptions of scientific interest and popular enthusiasm for an Earth-like Mars. Dozens of novels and hundreds of short stories were published; countless drawings, hundreds of maps, photographs, scientific books and journal articles; and tens of thousands of newspaper and magazine articles – all about Mars and Martians.

Grove's 'Legend': the poet and the poem

Frederick Philip Grove, born in 1879 as Felix Paul Berthold Friedrich Greve in the West Prussian town of Radomno, pioneered the multicultural Canadian novel. Scholarly research on Grove has uncovered a life with more lies, twists and turns than a television soap opera; highlights include bigamy, thefts, infidelities, false identities, imprisonment for fraud and a faked suicide (Martens 2001a, 2001b). Before entering Canada in 1912 from North Dakota and teaching in rural Manitoba, Grove had worked in Germany, Italy, Switzerland and France. When he wasn't swindling money, he was earning it as an editor, writer and prolific literary translator. Among the English writers he introduced to the German-reading public was Wells with whom, from 1905, he developed a significant close friendship (Martens 2001b).

Grove's poem set on Mars, unpublished during his lifetime, is preserved in the Archives of the University of Manitoba in Winnipeg (Grove Collection Box 18, Folders 14 and 23). 'The Legend of the Planet Mars' occupies pages 80 through 90 of a 92-page typescript titled 'Poems' under which is written 'In Memoriam Phyllis May Grove' (his beloved daughter who died of appendicitis shortly before turning twelve). Befitting the dedication, the forty-nine poems share the theme of death, with a dominant mood of grief and even fatalistic despair. The world seems a lonely and senseless place in these poems that have, like his utopian novel about an ant colony, *Consider Her Ways* (written 1919-20; published 1947), received little scholarly attention.

The typescript is divided into four sections. The first, 'Thoughts', is Hardyesque in style and mood. The largest section, 'The Dirge', consists of thirty-three poems focused on May's death; the third, 'Landscapes', consists of seven poems from 1909–24; the last section is called 'The Legend of the Planet Mars and Other Narratives'. 'Legend' is dated '1915', written four years before *Consider Her Ways*, which was influenced by Wells's 'The Empire of the

Ants' (1905) and W.M. Wheeler's authoritative textbook, *Ants: Their Structure, Development and Behavior* (1910). Twenty-one of these poems, including fourteen from the 'Dirge' section, were published in the *Canadian Forum* for April 1932. The poems in three of the four sections (the 'Dirge' section being omitted) were published and edited without annotation in 1982 by Terrence Craig in the journal *Canadian Poetry*, including 'Legend of the Planet Mars'. Also meriting attention in the Grove Collection are the contents of Folder 11, Book 1 ('Thoughts'), which includes 'The Gods', 'Science', 'The Rebel's Confession of Faith', 'Man Within the Universe' and 'The Sacred Books'. Grove's 'Additional Manuscript Notebooks' contain a further forty-six stories, thirty-four of them unpublished, as well as notes, articles and poems on a range of subjects including literature, religion and science.

In 1915, Grove was an impoverished school teacher in the south-west Manitoban town of Virden, where his second wife Catherine gave birth to Phyllis May, their first child. That same year, Grove enrolled as an extramural undergraduate student at the University of Manitoba. It is likely that Grove was aware of some of the large pre-1915 Martian literature, fictional and scientific, in addition to work by his friend, Wells. In addition, this corpus was joined by the first cinematic voyage to the Red Planet, Thomas Edison's *A Trip to Mars*, in 1904. Grove would also have been aware of Lowell's Martian research in books such as *Mars* (1895), *Mars and its Canals* (1906) and *Mars as the Abode of Life* (1908). Other popular scientific works about Mars, published between 1880 and 1914, included texts by Carl du Prel, Camille Flammarion, Otto Dross, Edgar Sylvester Morse and Charles Edward Housden.

Signals to and from Mars represented a common trope in interplanetary fiction and a frequent scientific speculation by the time Grove wrote his poem. During the major opposition of 1892, astronomers from California to France reported seeing mysterious flashes of light on the surface of Mars. This sparked an international press sensation when the phenomenon was interpreted as signal fires or light beams by which Martians sought to communicate with Earth (Lane 2011: 197–201); other eruptions of interest in signalling occurred in 1894, 1909 and 1915. During 1899–1901 the Serbian-American engineer Nikola Tesla reported detecting signals from Mars with his powerful radio receiver in the mountains of Colorado. For these and other reasons, Mars was the most obvious planet to provide alien allegories and extraterrestrial perspectives on earthly affairs.

The early twentieth century, in continuity with the nineteenth, was a time of global industrialization, mass migration, mass media, environmental assaults, and the slow-burning cultural and physical genocide of Indigenous peoples. From the 1890s Germany and Great Britain, two of the world's most developed

industrial economies, began competing for military supremacy. Their arms race spread to the rest of Europe, setting the scene for a future war. Military expenditures in European nations grew steadily in the years before 1914.

When World War One began, news from overseas was staggering, confirming fears of unprecedented slaughter. In April 1915, the German-Austrian offensive in Galicia left 1.5 million Russian soldiers dead or wounded. In that same month began the genocide of up to 1.5 million Armenian Christians by the collapsing Ottoman Empire; the Ottoman Turks also killed at least 500,000 Greek Christians and more than 300,000 Assyrian Christians, events documented extensively at the time in books and in the international press. On 22 April, during the second battle of Ypres on the Western Front, Canadian soldiers were among the very first to die, lungs and eyes burning, from a terrible new weapon, as Germans unleashed a lethal yellow-green cloud of chlorine gas.

Chemical warfare, submarine warfare, aerial warfare and the deliberate mass killing of civilian populations: here were modern, science-fictional technologies in the service of atrocity and terror. Lieutenant-Colonel John McCrae, the Canadian surgeon-poet and survivor of the second battle of Ypres, wrote ‘In Flanders Fields’ at the battlefield there in May 1915; that was about as romantic as World War One ever got. The nineteenth century creed of moral, technological and scientific progress was dying, along with traditional moral values and hopes for the future. Societies and economies in the early twentieth century were rapidly transforming. New mass media, new machines, globalization, anarchism, ethnocentric nationalism, militarism, terrorism, political appeals to popular prejudices and widespread fears were just some of the causes contributing to the emergence of a fragile, unstable world order. Would the new century witness the dawn of a Wellsian ‘modern utopia’? Hardly. The war instead brought hell on earth, an apocalyptic wasteland of almost unimaginable suffering. Civilian and military casualties were notoriously difficult to determine but they numbered in the tens of millions. Had not Wells accurately described in *The World Set Free* (1914) a brand new instrument of total war called the ‘atomic bomb’? Were we now engaged in a self-created mass extinction event? What role did ideology and belief play in our propensity for violence? Could science solve the ancient ‘problem of evil’ in a universe supposedly created by a loving, beneficent God? Or was science-*as-ideology* part of the problem? It is not difficult to imagine Grove in 1915 wrestling with such questions in response to the war.

Analytic description of the poem

‘The Legend of the Planet Mars’ is presented as a historical narrative. It consists of 260 lines divided into 65 ‘a-b-b-a’ quatrains written in iambic pentameter. It begins, referring to the Creator God:

> He spoke His fiat; and there lived a race
> Of searchers after truth on some dim star.
> It ever seemed to them they had come far
> From some world sunk, some Eden lost in space. (lines 1–4)

In the second stanza, the inhabitants of what we soon learn is the planet Mars seek to return to their former garden Paradise. Grove's debt to Biblical themes, images and symbols is firmly established, and reappears throughout. The third stanza mixes doubt, hope and ebbing memory, and evokes the crisis of faith expressed in Matthew Arnold's 'Dover Beach' (1867). The Martians, a young species close to God, have not yet tasted death. A curious prophet among them seeks to enter the 'blessed shores' (line 38) of some lost Eden in the afterlife. He promises to return if he fails in this quest for knowledge; if he succeeds, however, he will not return, but remain in Paradise. The Martian prophet's soul leaves his body and after a period of three days the people light the pyre upon which it rests. Time passes, and the people respond in one of two ways to the sight of the old one's remains: reverent faith or doubtful boredom.

On the third day, 'the doubters stood / And sneered and scoffed' (lines 81–2), deriding the believers who wait beside the corpse hoping that he has found heaven. Death *is* the end, the scoffers shout, certain in their unbelief. The believers waver for a moment in their faith, but then return to pray and weep and hope before the martyr's body, now reduced to ashes. In so doing, 'their ebbing faith' is renewed: 'And they sang hymns, in ecstasy conceived; / They felt consoled and of their fears relieved' (lines 109–11).

With 'faith and promise drunk', however, 'a few fanatics' decide to hunt down the blaspheming doubters who refused to offer 'homage to the sacred corpse' (lines 115–20). A pattern emerges: religious faith is whipped up into a fever during torch-lit nights, but with daybreak, the sunny light of reason dawns and rationality returns. So far, this tale is cast in the simplistic, late Victorian faith-at-war-with-science mould created by polemicists such as the biologist T.H. Huxley: *believers* are dangerous fanatics, ignorant and superstitious; sceptical *agnostics* or *scientific naturalists* (both terms coined by Huxley), on the other hand, are paragons of virtuous reason.

Without the biblical God, the foundational worldview of western civilization was jeopardized – a process begun by the Enlightenment's privileging of non-theistic rationality, culminating in the post-Nietzschean/post-war establishment of our secular cosmology. This is in part the thesis of Charles O'Connor's *The Great War and the Death of God* (2014), a study of how atheistic materialism in the wake of World War One displaced the long-standing belief in western history, philosophy, theology and the arts that the natural and social worlds were divinely governed. In O'Connor's reading, the Great War was utterly

catastrophic; a trustworthy and beneficent God was replaced by an indifferent and meaningless cosmos. Confidence in both traditional faith and reason were shaken to the core. Although the process was well under way before World War One, the horrors of 1914–18 did provoke a deep intellectual and spiritual crisis in the West (Wilson 1999). Without a transcendent eternal God, with only naturalistic science capable of revealing truth, with life on Earth or elsewhere in the universe the product of purposeless evolution, how could we continue to believe in the existence of meaning or morality? *Why wouldn't* dread replace hope, evil replace good?

The story unfolds. As crowds watch, the fanatics led by high priests fell huge trees, drag them from the forest to the coastal plain, and build a 'giant pyre [looming] into space' (line 164). Hidden from view, the priests arrange for twelve smaller pyres to be built. At a pre-arranged command, the pyres are lit, and the spectacle used to rouse the weakening faith of the people wondering what is going on. The doubters are rounded up and bound. The people's faith is whipped-up by the fanatics: they imagine the swirling smoke to be the wraith of the departed martyr. The scoffers beg, implore and pray. Many flee into the sea and drown. Many other thousands, though, are 'fastened to a stake as to a cross' (line 198) and ruthlessly burned to death. Soon, fully one-third of the Martian population is sacrificed to the flames.

A series of stanzas follow that suggests a terrible irony. Perhaps the martyr's spirit *had* returned. A 'dull and ghastly moan' (line 233) is heard as the fire dies down. That would mean that Paradise did *not* exist on the other side of death; the prophet's quest had failed. Had the doubters died because of mistaken belief?

Then something horrible happens. The fire leaps up high again, forming a white-hot pillar. This physical sign (which in *Exodus* represents the guiding presence of God in the Sinai wilderness) now causes all the coastal forests to go up in flames, trapping the faithful between its 'withering heat' and the sea (line 246). The fiery pillar brings death not deliverance; vengeance not vindication. The flames blaze out of control, and by the next morning, *the entire Martian race* has perished. Their search for truth had been perverted; love and hope changed into intolerant belief: the enemy of life and reason. This cruel irony is followed in the concluding stanza by an even deeper irony:

> Throughout the universe, from many stars,
> That night, were eyes strained, glued to telescopes.
> On earth, man flashed the message, full of hopes,
> 'Soon shall we know! They signal us from Mars!' (lines 257–60)

The Martian holocaust is misperceived on Earth as a *hopeful* sign. The sudden, tremendous light on the surface of Mars is seen as a deliberate attempt to

communicate by intelligent beings and bears the promise of knowledge, even of revelation.

Salvatore Proietti is one of the very few scholars even to mention 'Legend of the Planet Mars' in passing. He refers to it simply as 'a variation on the theme of [Wells's] "The Star"' (Proietti 1992). Other pieces by Wells that might have informed Grove's poem includes such articles as 'Intelligence on Mars' (1896) and 'The Things That Live on Mars' (1908). 'The Star', though, introduces themes and devices that appear not only in *The War of the Worlds* (1898) but also Grove's poem, including the extraterrestial context, natural disaster, human insignificance, complacency, panic and scientific knowledge juxtaposed with religious belief. Most importantly, both poem and short story are only incidentally Martian. In Wells's story, the final paragraph shifts perspective, to that of Mars, where Earth's near-death experience is seen as but a *minor* event. One Martian astronomer notes, 'it is astonishing what a little damage the earth […] has sustained. All the familiar continental markings and the masses of the seas remain intact, and indeed the only difference seems to be shrinkage of the white discoloration (supposed to be frozen water) round either pole' (Wells 1954: 16–17).

Both tales are cautionary, apocalyptic, and about us. Where Wells – as he does in *The War of the Worlds* – attacks late Victorian complacency and pride, reminding the reader of humankind's ultimate insignificance and vulnerability, Grove warns his world at war that the way of blind self-righteous belief leads to annihilation. Both contrast irrational religious faith with superior scientific reason. And both feature Mars in ironic, abrupt, perspective-shifting endings. Grove's themes of human arrogance *and* insignificance recall the stunning opening page to *The War of the Worlds*. They mirror Wells's own cool, calculating detachment in the face of approaching apocalypse, so that the bitterly ironic note with which Grove ends his Martian poem is a Wellsian one.

'Eden Lost'

It has been well argued that science fiction provides the mythic underpinning for dreams of techno-scientific empire and expansion through conquest and colonization (see, for example, Csicsery-Ronay Jr. 2003). Grove uses the conceit of an inhabited Mars to contest the mentality of 'us versus them', the glory of imperial conquest, the demonization of the Other, and the possibility of rightly understanding our place in the universe – one populated world among other worlds – through natural or religious knowledge alone. Grove avoids both violent Wellsian colonizing invaders on the one hand, and naïve visions of scientific and/or sinless utopias on the other. Grove's poem about the Martian fall from grace into religious conflict and, ultimately, a lethal self-inflicted inferno reflects a loss of faith in the grand narrative of inevitable scientific progress

and moral perfectibility, along with triumphalist dreams of mastering nature and romantic glorifications of war.

During the first full year of the Great War, Grove's poem was a last gasp of late-Victorian/Edwardian theological doubt (Wilson 1999). Whether Grove could foresee that collapsing monarchies, and the unravelling of traditional beliefs and values, would create profound existential anxieties and a moral/spiritual vacuum that would be filled by scientistic unbelief and Hitler's mass-murdering eugenics, is unlikely. Nor could Grove fully grasp how fervent new nationalisms and aggressive industrial capitalism would forge new politics and economies wedded to the mass production and use of the machineries of war. Still, more than a century later, his tale of a Martian paradise lost serves both as a complacency-pricking, poignant reflection on violence, and a prophetic anticipation of horrors and holocausts to come, specifically the genocidal and suicidal trajectory of self-deluding and dogmatic ideologies.

Note: The author is grateful to McMaster University, Hamilton where an earlier version of this article was delivered on 15 September 2013.

Endnote

[1]An international search on the word 'Martian' at newspaperarchive.com (24 July 2019) garnered 2075 results for the 1880s, 5835 for the 1890s, 9217 for the 1900s and 12,984 for the 1910s. Searching for 'Planet Mars' yielded 5999 hits in the 1880s, 12,3973 in the 1890s, 17,525 in the 1900s and 12,416 in the 1910s.

Works Cited

Blunck, Jürgen. 1982. *Mars and Its Satellites: A Detailed Commentary on the Nomenclature*. 2nd edn. Smithtown NY: Exposition Press.

Crowe, Michael J. 1986. *The Extraterrestrial Life Debate, 1750-1900.* Cambridge: Cambridge University Press.

Csicsery-Ronay Jr., Istvan. 2003. 'Science Fiction and Empire'. *Science Fiction Studies* 90: 231–45.

Davis, Mike. 2001. *Late Victorian Holocausts*. London: Verso.

Grove, Frederick Philip. 1915. 'The Legend of the Planet Mars'. URL: http://home.cc.umanitoba.ca/~fgrove/pEd/7groIMlandLeg/im30Lplanetmars.html (accessed 27 May 2020).

Kerslake, Patricia. 2007. *Science Fiction and Empire*. Liverpool: Liverpool University Press.

Lane, K. Maria D. 2005. 'Geographers of Mars: Cartographic Inscription and Exploration Narrative in Early Representations of the Red Planet'. *Isis* 96: 476–506.

----- 2011. *Geographies of Mars: Seeing and Knowing the Red Planet*. Chicago: University of Chicago Press.

Markley, Robert. 2005. *Dying Planet: Mars in Science and the Imagination*. Durham NC: Duke University Press.

Martens, Klaus. 2001a. 'Science Fiction and Autobiography: F.P. Grove: *Consider Her Ways*'. *Foundation* 30: 90–96.

----- 2001b. *F.P. Grove in Europe and Canada: Translated Lives*. Trans. Paul Morris with Klaus Martens. Edmonton: University of Alberta Press.

McAleer, John. 2013. '"Stargazers at the world's end": telescopes, observatories and "views" of empire in the nineteenth-century British Empire'. *British Journal for the History of Science* 46: 389–413.

O'Connor III, Charles. 2014. *The Great War and the Death of God: Cultural Breakdown, Retreat from Reason, and the Rise of Neo-Darwinian Materialism in the Aftermath of World War I*. Washington DC: New Academia Publishing.

Proietti, Salvatore. 1992. 'Frederick Philip Grove's Version of Pastoral Utopianism'. *Science Fiction Studies* 19. URL: www.depauw.edu/sfs/backissues/58/ proietti58art.htm (accessed 28 March 2005).

Rieder, John. 2008. *Colonialism and the Emergence of Science Fiction*. Middletown CT: Wesleyan University Press.

Schiaparelli, Giovanni V. 1996 (1895). *Astronomical and Physical Observations of the Axis of Rotation and the Topography of the Planet Mars. First Memoir, 1877–1878*. Trans. William Sheehan. ALPO monograph no. 5.

Sheehan, William. 1988. *Planets and Perceptions: Telescopic Views and Interpretations, 1609–1909.* Tucson: University of Arizona Press.

Tennyson, Alfred. 1886. 'Locksley Hall Sixty Years After'. URL: https://tspace.library.utoronto.ca/html/1807/4350/poem2162.html (accessed 28 March 2005).

Tucker, Jennifer. 2005. *Nature Exposed: Photography as Eyewitness in Victorian Science*. Baltimore: Johns Hopkins University Press.

Wells, H.G. 1954 (1897). 'The Star'. In *The Treasury of Science Fiction Classics*. Ed. Harold W. Kuebler. Garden City NY: Doubleday, 8–17.

Wilson, A.N. 1999. *God's Funeral: The Decline of Faith in Western Civilization*. New York: Norton.

Midnight Robber: Matriarchy and Accumulation on a Two-World Scale?

Freya Verlander (University of Warwick)

Nalo Hopkinson's *Midnight Robber* (2000) is an Afrofuturist text that interweaves Caribbean mythology, folklore and carnival. It is the tale of two worlds – Toussaint and New Half-Way Tree – and the migration between them. Hopkinson was born in Jamaica but has also lived in Guyana, Trinidad and Canada; both her life story and the narrative of *Midnight Robber* encode diasporic experiences. The text draws on, complicates and reimagines issues of colonization from the marginalized perspective: 'by setting the novel away from Earth, writing the colonized race as non-human, and casting her humans as Caribbean descendants, [Hopkinson] pushes the "doubled sense" of post-colonialism to a tripled or quadrupled sense' (Hancock 2015: 104), so as to question 'the future of colonization and the intrinsic quest for power' (104).

The narrative focuses on the character of Tan-Tan. Her father Antonio, Mayor of Toussaint, is exiled for murder and takes Tan-Tan with him across the dimension veil, to New Half-Way Tree. Though the dimension veil traverses the two worlds, there is no way back to Toussaint, a technocratic society governed by the Grand Nanotech Sentient Interface, referred to as Granny 'Nansi's Web or 'Granny Nanny'. The idea of the Anansi Web references the 'adaptive stories, techno-trickster tales and narratives that chronicle the stratagems of the West African Yoruban spider, Anansi; of the great white hare and rabbit, the Ojibwa Anansi and Naanabozho; and of Brer Anansi, […] part human, part animal-person, part immortal, and a Native, indigenous, and African diasporic metaphor for the intricately structured Web of Being' (Dillon 2017: 484).

Granny Nanny is the 'Web of Being' on Toussaint, embodied by those connected to her via earbugs. Just as Brer Anansi can become a spider, Granny Nanny can be understood as a technological spider that becomes biologically part-human when she assimilates into the human body. Hopkinson suggests that the name of Granny Nanny is not comparable to George Orwell's Big Brother but rather 'an affectionate reference to her sense of love, care, and duty' (qtd Hancock 2015: 96). These qualities connect her to her historical namesake, Nanny of the Maroons, an eighteenth-century Jamaican resistance leader who 'strategized and fought in the First Maroon War against the British […] not only a warrior, but also a mother of the Jamaican people' (Anatol 2006: 113). Giselle Anatol argues, however, that positive readings of Granny Nanny 'must be tempered […] by considerations of the legacy of colonialism in the Caribbean' (114). The term 'Mother Country', for example, encodes a

long history of exploitation. In this article, I interrogate 'the boundary between safekeeping and stifling' (114) and ask how Granny Nanny relates to such boundaries. I suggest, with reference to Maria Mies and Val Plumwood, how a mother's instrumental use of her child (making the child, and therefore herself, happy, or taking actions perceived to be in the child's best interests) is often consistent with an ethics of love, care and duty, and resonates with Granny Nanny's colonization of Toussaint and apparent desire for further accumulation on New Half-Way Tree.

Productive parallels might be drawn between *Midnight Robber* and Orwell's *Nineteen Eighty-Four* (1949) to emphasize the tripartite split of Granny Nanny's character: 'mothering', 'smothering' and 'othering'. As Eric Smith explains: 'Hopkinson's matriarchal variation on Orwell's Big Brother, an omniscient and ostensibly benignant artificial intelligence […] controls the planet through the perpetual surveillance and management of 'earbugs', cybernetic nanotechnology that binds each subject of Toussaint to the Anansi Web' (Smith 2009: 140). Both Big Brother and Granny Nanny are constructed as familial connections to the subjects they interact with, control or modify. While 'surveillance' may keep subjects safe and resonate parental concern, 'perpetual' is smothering. When Tan-Tan's son, Tubman, is born, he is described by the eshu as 'the human bridge from slavery to freedom' (Hopkinson 2000: 329), a reference to his historical namesake, Harriet Tubman, the abolitionist and escaped slave who helped free others through the Underground Railroad. The description positions Tubman as a bridge between the two planets with one conceivably representing 'slavery' and the other 'freedom'. It is unclear which is which and, indeed, what constitutes 'slavery' in this context. Under technological rule, however, 'freedom' from labour requires people to be bound to technology. We are, for example, told that 'a Marryshevite [a supporter of the Marryshow Corporation] couldn't even take a piss without the toilet analysing the chemical composition of the urine and logging the data' (10). Tubman therefore functions as a bridge for the potential future colonization of New Half-Way Tree akin to Toussaint. With reference to ecofeminist and posthuman ethics, it is possible to reconsider Granny Nanny's s/m/othering role as a matriarchal-capitalist who exploits nature, chases biological capital and accumulates between two worlds.

Maria Mies' *Patriarchy and Accumulation on a World Scale* (1986) inspires both the title and content of this article. Mies illuminates the interconnectedness between capitalist accumulation and the violence of colonization, or the 'underground of capitalist patriarchy' (Mies 1986: 77). Mies's work resembles Val Plumwood's concept of 'backgrounding', or the free appropriation of the Other's resources and labour:

> The historical development of the division of labour in general, and the sexual division of labour in particular, was/is not an evolutionary and peaceful process, based on the ever-progressing development of productive forces (mainly technology) […] but a violent one by which first certain categories of men, later certain peoples, were able and mainly by virtue of arms and warfare to establish an exploitative relationship between themselves and women, and other peoples and classes. (74)

In other words, the rise of capitalism as a world system is predicated on the violent subjugation of the Other. Mies explains how 'science and technology became the main "productive forces" through which men could "emancipate" themselves from nature, as well as from women' (75), which emphasizes the dualisms (technology/nature, for example, or male/female) which underlie patriarchal modes of production.

Mies and Plumwood, respectively, expound on how violence against female bodies, including a feminized nature, underpins capitalism, patriarchy and technological progress. Plumwood explains that when 'the tectonic plates of liberation theory – those concerned with the oppressions of gender, race, class and nature – finally come together, the resulting tremors could shake the conceptual structures of oppression to their foundations' (Plumwood 1993: 3). For Plumwood, 'reason' and 'culture' are aligned with the 'male' while the 'female' is aligned with 'nature' and the 'body', or spheres to-be-controlled. Plumwood aims for 'an environmental feminism that can be termed a critical ecological feminism' (3), which challenges the dualisms that construct the female as nature and as inferior 'other'. Women cannot just realign themselves with 'reason' and 'culture', however, because this accepts the dualisms that enable the unethical treatment of others in the first place. In other words, it represents an uncritical assimilation where women fit themselves into the master model, above other othered groups, including, and against, nature.

A feminism of uncritical reversal is similarly problematic and 'strangely resembles the [world women] seek to escape' (3). It rejects the alignment of female bodies and nature as other but, again, it positions women above nature as well as above males and various othered groups. Both fail to shake the master model's foundations. A critical ecological feminism, however, redefines women's relationship to nature. Women 'consciously position themselves *with* nature' (21) to challenge dualisms, recognize nature's agency and make possible an ethical response to the non-human. Mies also critiques the idea that 'complete automation and computerization' represents an alternative to 'destructive capitalism' because technological fields still exclude and exploit women. She argues that 'this [fully automated] paradise is not for women […] it is the last

desperate effort of White Man to realize his technocratic utopia, based on [the] domination of nature, women and colonies' (Mies 1986: 215–6). Granny Nanny complicates this because she is a reimagining of the sf convention of the White Man's use of technology to defeat the alien other. However, the colonization of Toussaint *is* similarly predicated on the eradication of nature and the fully automated society that still favours men. Bill Clemente suggests, though, that the birth of Tubman signals 'hope in the new world for the melding of […] empathy and environmental sensitivity […] with the technological achievement Granny Nanny represents' (qtd Hancock 2015: 101). But, while I suggest that Granny Nanny more closely illustrates a feminism of uncritical reversal than a 'technological achievement', I similarly question what possibilities Tubman represents, including the possibility for a new posthuman ethics.

Elana Gomel writes that in 'mining the conventions of SF for a whole zoo of posthuman types – the cyborg, the hybrid, the android, the AI, the question of values has remained somewhat murky. Radical representations of genetically enhanced or computer-plugged subjects coexist with a familiar feel-good agenda of individual freedoms and human rights. The Golden Rule apparently remains in place even when all the other rules are suspended' (Gomel 2014: 4). The 'Golden Rule' encapsulates humanism as 'an ideological construct whose not-so-hidden purpose is to justify western dominance, patriarchy, and capitalism' (7). In encounters with the non-human other in sf, similar problems therefore arise to those associated with uncritical reversal or assimilation. Humanist ethics can prevent an ethical response to the other by failing to acknowledge that the other's values may differ. Encounters with the other traditionally result either in confrontation, where the other is perceived as too different, or assimilation of the alien into the self, representing a failure to recognize difference. Gomel identifies transformation as a third category of encounter which transcends the 'limitations of humanism in pursuit of an ethical stance beyond the Golden Rule' and, as such, the 'posthuman becomes an ethical response to the inhuman' (6–7). Posthuman ethics, therefore, have similarities with the idea of a critical ecological feminism and an ethics of mutuality. A posthuman ethics would recognize both difference and similarity with the Other.

Gomel also argues that 'the structural aspect of SF is inextricably bound with its ethical aspect' and that 'humanist ethics [are] inscribed in the narrative tools it deploys: a *bildungsroman* plot, deep focalization, and first-person narration' (30). She suggests such tools are 'inadequate [for] representing a posthuman subject that would result from the merging of human and alien' (30) and 'many novels of alien encounters end up reinforcing anthropocentricism and even ethnocentrism' (28). While *Midnight Robber* models what Gomel identifies as the 'preferred scenario of feminist and postcolonial SF' (30), the

merging of the alien technology (Granny Nanny) with Tubman's human biology – so that his 'little bodystring will sing to Nanny tune' (Hopkinson 2000: 328) – such narrative strategies are not inadequate for representing the posthuman in *Midnight Robber.* Although the novel is a *bildungsroman,* as it relates Tan-Tan's formative years, the structure also creates, carries and delivers the posthuman, Tubman, as the result of the 'merging of human and alien'. The process of becoming posthuman can be understood as a function of the text because the eshu's narrative comes from within Tubman and the text concludes with the posthuman's birth. We must ask, however: does Tubman represent the birth of a posthumanism which represents 'not an identity or an ideology but a willingness to abandon both [to enable] an ethical response to the radical otherness of the Universe' (Gomel 2014: 28) on New Half-Way Tree?

Another key question is whether Granny Nanny's s/m/othering role is more closely affiliated with motherhood or colonial expansion. Her maternal role is foregrounded in *Midnight Robber*, for example during the Jonkanoo Season, Toussaint 'celebrate[s] the landing of the Marryshow Corporation nation ships that had brought their ancestors to this planet two centuries before. Time to give thanks to Granny Nanny for the Leaving Times, for her care, for life in this land, free from downpression and botheration' (Hopkinson 2000: 18). Toussaint's carnival celebration contrasts the ritualized thanks given to Big Brother. The maternal qualities of 'care' and life-giving are valued in a way that the master model denies:

> Reason in the western tradition has been constructed as the privileged domain of the master who has conceived nature as a wife or subordinate other encompassing and representing the sphere of materiality, subsistence and the feminine which the master has split off and constructed as beneath him […] as in other patriarchal reproductive contexts, it is the father who takes […] possession of this misbegotten child, and who guides its subsequent development in ways which continue to deny and devalue the maternal role. (Plumwood 1993: 4)

Granny Nanny 'exercises unconventional yet unquestionably feminine processes for control' (Enteen 2007: 271); however, as in the western tradition, this control is predicated on the backgrounding of nature. Nature is carved out for technology's procreation which enlarges the 'scope of feminized attributes' (271), or matriarchal authority over the new colony on Toussaint. Granny Nanny's role as 'violent sexual conqueror' over nature 'illustrates her disregard for gender conventions created and enforced by non-native colonizers' (271). In this respect, she constitutes an ecological feminism of uncritical reversal (although this is not to suggest that Granny Nanny is entirely uncritical of the

master model). While Janilla Enteen suggests that Granny Nanny functions 'most prominently as a guide […] for humans who strive for a world that eliminates previous forms of inequity' (265), the inequity between humans and nature persists which precludes an ethical response to the nonhuman Other. Nature on Toussaint, for example, is conceived of as a female body to-be-exploited:

> New Half-Way Tree is how Toussaint planet did look before the Marryshow Corporation sink them Earth Engine 127 into it like God entering he woman; plunging into he woman; plunging into the womb of the soil to impregnate the planet with the seed of Granny Nanny. (Hopkinson 2000: 2)

The impregnation of the earth with Granny Nanny's seed forms the basis for the technocratic society on Toussaint, or the matriarchal master model. Like the feminism of uncritical reversal, nature's agency is denied; therefore, Granny Nanny replicates the dualisms that construct the patriarchal model.

The language used to describe the impregnation of the earth, 'sink' and 'plunging', is evocative of sexual violence. The civilization of Toussaint parallels the establishment of patriarchy and accumulation on a world scale. The soil, conceptualized of as womb, is forcibly impregnated:

> One is reminded of the initial gendering of the so-called 'New' World territories that stretched before the European imperial gaze starting in the late 15th century: although explorers' discourses feminized landscapes and visualized them specifically in terms of heterosexual fertility, their feminine and maternal metaphors lacked any accompanying association of authority and nurturance. (Anatol 2006: 142)

Like the rise of matriarchal accumulation, which emerges as a two-world system in *Midnight Robber,* the rise of patriarchal capitalism as a world system is entwined with violence against nature. Mies explains that the 'rise of modern science, a mechanistic and physical world-view, was based on the killing of nature as a living organism and its transformation into a huge reservoir of "natural resources" or "matter"' (Mies 1986: 75). In Mies' terminology, Granny Nanny is predicated on 'digging holes in the womb' of the earth; however, the earth's insemination with nanomites, far from offering 'raw-materials' to be synthesized by 'Man' to secure his independence from 'Mother Earth' forms a new 'living organism', or a 'Mother Technology', from which disconnection is difficult (75).

Granny Nanny effectively 'inseminates', or reprograms, Tubman's biological code within Tan-Tan's womb; thus, the posthuman is conceived. Her

appropriation of the practices of both human and organic reproduction aims to naturalize technology's violation of Toussaint, biological womb and human tissue. Enteen argues that 'human habitation on a remote planet is made possible through radical environmental destruction and [that] an individual rebel becomes a hero by manipulating technology and confronting the inequities she perceives in society' (2007: 263). Tan-Tan, however, does not manipulate technology but rather is the incubating body for the *manipulating* technology. Granny Nanny manipulates human biology by 'instructing the nanomites in [Tan-Tan's] blood to migrate into [Tubman's] growing tissue, to alter you [Tubman] as you grow so all of you could *feel* nanny song at this calibration' (Hopkinson 2000: 328). The eshu's claim that 'when Granny Nanny realize how Antonio kidnap Tan-Tan, she hunt he through the dimension veils, with me riding she back like Dry Bone' (327) suggests the parental desire to protect a child; however, Tan-Tan, whose 'earbug never dead' (327), also represents the potential for future accumulation. Tan-Tan, like Tubman, represents a bridge between the two planets.

Erin Fehskens points out that by 'forcing maternity on Tan-Tan, Antonio has colonized her body' (Fehskens 2010: 146). In continuation of the planting and impregnation metaphor, Tan-Tan says 'he [Antonio] put this baby in me, like the one before. He was always trying to plant me, like I was his soil to harvest' (Hopkinson 2000: 260). Her observation recognizes both an affiliation of the female body *with* nature and challenges the concept of male ownership over the female body – 'like I was his soil to harvest' – as well as the practices of backgrounding female labour. Tan-Tan reclaims her reproductive agency by choosing not to abort Tubman. In doing so, Fehskens recognizes that 'Tan-Tan converts embodiment from an obstacle into an act of resistance', which she argues 'brings about a subtle transformation of the social fabric on the mirror planet' (Fehskens 2010: 146) of New Half-Way Tree. Tan-Tan most closely models the possibility for a critical ecological feminism.

Elizabeth Boyle suggests that Granny Nanny offers both 'the "seed" which fertilizes "the earth itself on Toussaint and all the Nation Worlds", and the protective womb in which they can develop' (Boyle 2011: 55). Granny Nanny certainly makes a womb of the earth but the narrative is held within Tan-Tan's womb and thus pregnancy and labour, as suggested above, are structural. The narrative begins with contractions – 'Oho. Like it starting, oui?' (Hopkinson 2000: 1) – and the eshu tells Tan-Tan's story to distract Tubman from the pain of being born. Toussaint and New Half-Way Tree are then explained in dualistic terms. Structurally, the following excerpt opens *Midnight Robber* but the narrative is only as long as the labour; therefore, the colonial logic remains at the end:

> New Half-Way Tree, it look a little bit like this Toussaint planet where I living: same clouds in the high, high mountains; same sunny bays; same green, rich valleys. But where Toussaint civilized, New Half-Way Tree does be rough. (2)

The dualism of 'civilized' and 'rough' evokes the colonial mindset of the master model whereby 'civilized' and 'savage', and 'culture' and 'nature', construct the relationship between the two worlds. It precedes the revelation that New Half-Way Tree is exactly how Toussaint looked before it was colonized, or 'civilized', by technology. The eshu introduces these dualistic concepts to Tubman, which problematizes the idea that Granny Nanny is a wholly benignant ruler. While Granny Nanny challenges aspects of the patriarchal world-system, she is ultimately a model of uncritical reversal and matriarchal accumulation on a two-world scale.

A critical ecological feminism, however, is predicated on an ethics of mutuality which 'provid[es] an alternative account of relations to nature which both breaks down [the] self/other dualism and provides a model for relations of care, friendship and respect for nature' (Plumwood 1993: 142). The ecological self takes a non-instrumental approach to the other. The self/other divide does not collapse as in assimilation; rather the earth other is recognized as an intentional 'other' and centre of resistance. The douen are eradicated on Toussaint, for example, and perhaps Granny Nanny has played mother by othering and eradicating a perceived danger to people (as with the eradication of the mako-jumbie bird). On New Half-Way Tree, however, we find that the douen communities are sentient, skilled, compassionate and wary of the dangers 'tallpeople' pose. The exiles that colonize New Half-Way Tree maintain an unethical approach towards non-human nature by othering the douen and instrumentalizing their labour. When Tan-Tan first arrives in Junjuh village, she is cautioned for telling Chichibud not to call One-Eye 'boss' because '*shipmates all have the same status. Nobody higher than a next somebody*' (Hopkinson 2000: 121). The exiles 'burst out laughing, even Daddy':

> 'Pickney-child,' said Claude, 'is a human that?' […]
> 'No,' Tan-Tan replied doubtfully.
> 'So how he could call we Compère?'
> 'I don't know.' She felt stupid. (121)

The concept of 'human' is based on exclusion. Tan-Tan's doubtful agreement, however, is *not* her agreement that Chichibud should be treated without respect. The aim of an ethics of mutuality is to recognize the 'other as alike (non-alien) [and] as different [because] the individual conceived in terms of mutuality is formed by, bound to and in interaction with others' (Plumwood 1993: 156).

When Tan-Tan murders Antonio, as he rapes her, Chichibud helps her escape Junjuh's 'life for a life' legislation. He convinces his reluctant community to allow Tan-Tan to live with them. Tan-Tan then moves into the 'daddytree' (the douens' home) and adopts a way of life based on an ethics of mutuality. As Grace Dillon recognizes, Tan-Tan's 'open-minded youth […] creates a space of tutelage [for] Chichibud who relates the indigenous "art"of innovative grafting [onto the "daddytree"] and husbandry' (Dillon 2017: 483). Tan-Tan cannot eat the same foods as the douen but compromises by cooking what she sources, and eating with them. Benta, Chichibud's wife, warns Tan-Tan not to eat poisonous mushrooms and, when it is discovered that Tan-Tan's urine damages part of the daddytree's ecosystem, Benta carries Tan-Tan to the forest-floor. The exchange of knowledge is predicated on the recognition of both likeness and difference. Compromises are made to live together *with* nature.

Midnight Robber 'maintains hope through the depiction of regeneration – specifically of the younger generations reawakening to cultural tradition, including scientific literacies' (Dillon 2017: 484). If Tubman signals hope for an ethics of mutuality, it is despite Toussaint's logic which models Plumwood's ideas that 'both those earth others conceived as Nature and those humans cast as natural are defined through exclusion of culture (identified with 'civilization' by the master culture), as having just those features this exclusion dictates. They are noble if civilized society is corrupt, and low savages if civilization is conceived as the site of value' (Plumwood 1993: 163). Toussaint is the site of value and civilization, and those on New Half-Way Tree are rendered 'rough', because they are excluded from civilized society, must labour and are surrounded by untamed nature. Granny Nanny's manipulation of human biology is, therefore, perhaps an attempt to 'civilize', or 'humanize', Tubman. The (un)ethical future he promises may continue that civilizing process through the colonization-through-reproduction of New Half-Way Tree. The attempt to humanize him might show Granny Nanny's care, in alignment with the proverbial 'mother knows best', but the colonial smothering and othering are emphasized because the alteration is predicated on the 'Mother Planet's' dualistic beliefs. The possibility that Tan-Tan and Tubman might value life on New Half-Way Tree *with* nature is not considered. When Granny Nanny assimilates with Tubman he is not recognized as an intentional other but instrumentalized to form the connection to New Half-Way Tree. Non-consensual manipulation of biology within Tan-Tan's womb also constitutes the backgrounding of female reproduction by the matriarchal model: another natural space colonized for the expansion of feminized technological control.

Fehskens recognizes that 'at the intersection of Nanny's benevolent mothering and insidious smothering, Hopkinson launches a critique of

globalization's promises by creating tension between the immanent and labouring body and the transcendent, pleasure-seeking self' (Fehskens 2010: 139). Toussaint is a post-industrial society where 'back-break', or labour, 'ain't for people' but the pedicab runners live in 'headblind' communities (Hopkinson 2000: 8) disconnected from Granny Nanny, making a living through manual labour. This echoes Mies' belief that it is the conditions of labour, rather than labour itself, which are oppressive since the runners believe 'honest work is for people' (8). The runners' labour however – lifting and transporting others – prompts a 'labour tax' (8) that aims to assimilate them within the post-labour society. At the novel's beginning, the pedicab runner, Beata, uses 'nannysong' to take Antonio 'offline' to negotiate the tax. He wonders 'how the rass had she done that? So many times he'd wished he could' (9). Being bound to technology is 'freedom' from labour but such freedom limits the physical body:

> Antonio develops confused comparisons to make sense of [Beata's] size. Her arms are 'muscled as thighs, and her 'thighs bellied with muscle' […] Though bellied refers to Beata's bulging muscles; it metonymically brings to mind wombs as well […] The description of Beata establishes a matrix of relations among physical strength, labour as work, labour as birth, and innovative/oppositional models of dwelling in but not of Nanny's world. (Fehskens 2010: 142)

Tan-Tan becomes muscled with labour and bellied with Tubman on New Half-Way which illustrates how 'the female body and the labour in which it can engage is directly linked to the unmooring of subjects otherwise at the mercy of Nanny's protective web' (142). Tan-Tan's 'unmooring,' or the foregrounding of the muscled physicality she develops promises a change in human/nature relations. Although manual labour characterizes life on New Half-Way Tree, the attitude that 'to be a labourer is to be something other than human' (Smith 2009: 152) is prevalent. When Tan-Tan arrives on New Half-Way Tree, Aislin tells her 'we not people no more. We is exiles. Is work hard or dead' (Hopkinson 2000: 135). The movement towards nature, towards labour, is considered dehumanizing. Just as the pedicab runners value physical labour because it is 'work you [can] see, [can] measure […] we know how much weight we could pull, how many kilometres we done travel' (8), *Midnight Robber* foregrounds female labour and biological reproduction as work, both structurally and in terms of content. As Smith suggests, 'the absence of – or liberation from – her eshu forces Tan-Tan to reconsider both the authoritative narratives she has been told and the values they both manifest and obscure' (Smith 2009: 147). The text is framed by 'back-break' – labour and birth – but the eshu guides Tubman to adapt: 'You feeling pressure, eh doux-doux? Don't worry, that normal […] No, don't fight it so, relax. Or it does hurt more. Yes, relax'

(Hopkinson 2000: 289). The eshu's preparation of Tubman – 'try and stretch your spine straight. It go ease some of the pressure' (289) – is already designed to minimize 'back-break' on New Half-Way Tree.

When Tubman is being born, the eshu explains 'that feeling is your head crowning, sweetheart' followed by 'Welcome into *one of the worlds*, pickney!' (328; my emphasis). Enteen argues that:

> The Marryshow Corporation and Granny Nanny constitute and are constituted by their community. They cannot evolve into machines that no longer respond to the populations with whom they intersect. Communication and play, rather than corporate capitalism and accumulation, are their aims. (Enteen 2007: 265)

Indeed, while Granny Nanny *is* responsive to her population, biological, if not corporate, accumulation is certainly on the agenda. Granny Nanny pursues Tan-Tan with the aim of establishing a connection to New Half-Way Tree. Enteen suggests that the machines cannot evolve into ones that 'no longer respond' to people, but Granny Nanny has evolved *into* the biological body, therefore into people, and perhaps the evolutionary future.

Linking back to my titular question, Fehskens argues that 'Nanny has found Tan-Tan through the previously untraversable dimensional veils' which constitutes 'a flight of capital's desires to protect its investments' (Fehskens 2010: 151). Granny Nanny's pursuit and infiltration of human biology is therefore a s/m/otherly act of instrumentalism that parallels 'traditional motherhood [where] meaning and significance [is found] in and through service to others [children] who are justified as ends in terms of their wider social participation' (Plumwood 1993: 146). Although, in this case, while Granny Nanny instrumentalizes Tan-Tan and Tubman in what she conceivably believes is their best interests, it serves the master model's ends, or their 'wider social participation' in the technocratic society. In other words, it can be understood as Granny Nanny's incorporation of the other (Tubman) into the master model's selfhood.

Tubman's birth exemplifies the potential for what Deborra Battaglia terms the 'second origin' of 'weird life' which is where 'life forms [are] dislodged from their planets, say knocked off by a collision, along with their physical context, and surviv[e] to colonize' (Battaglia 2012: 219). *Midnight Robber* narrates the events up to the 'second origin', beginning when Tan-Tan is 'dislodged' and culminating in Tubman's birth. The possessive 'welcome into *one* [my emphasis] of the worlds' is suggestive of technology's desire for Tubman to 'survive to colonize'. This desire equates with J.D Bernal's 'vision of "mechanized man"', which focuses on the 'scientific capacity to radically reconfigure the human body [which is achieved by] replacing the flesh with advanced technology, extending

the central nervous system across various sensors and measurement devices [and] biochemically engineering the substance of human evolution' (qtd Milburn 2014: 529). The 'mechanized man' represents evolutionary progression, from Toussaint's perspective, because 'nature was provoked by technology' (526):

> You could hear me because your whole body is one living connection with the Grande Anansi Nanotech Interface […] you will be a weave in she web. Flesh people talk say how earbugs give them a sixth sense, but really is only a crutch […] You now; you really have that extra limb. (Hopkinson 2000: 328)

Granny Nanny instructs the nanomites to 'migrate into [Tubman's] growing tissue', thereby instrumentalizing biology to produce a variation of 'mechanized man'. Tubman's 'whole body [becomes] one living connection' and, although there is no description of Tubman's appearance, the distinction between how 'flesh people' are connected to Granny Nanny and how Tubman is a 'living connection' prompts the idea that Tubman is physically different, else '*flesh* people' becomes redundant.

The prescriptive 'you will be a weave in she web' also consigns Tubman to a support-function within the matriarchal master model. Tubman is theoretically free to communicate across the dimension veil; however, he is biologically trapped by technology. Granny Nanny alters Tubman's bodystring to create a variation on Brer Anansi, the 'little man who could become a spider' (31). Brer Anansi can become a spider at will but what agency does Tubman have? If nannysong can disrupt the flesh people's connection, whose earbugs were only ever a 'sixth sense', what would exposure to nannysong do to 'a living connection'? The term itself, 'living connection', represents both the fusion and juxtaposition of biology and technology. Would a disruption in one, the 'connection', for example, cause a disruption in the other, 'living'? Or will the 'living', Tubman, extend the connection through procreation on New Half-Way Tree?

Despite Granny Nanny's unethical foundations, there *is* potential for a critical ecological feminism to emerge: perhaps through Granny Nanny's creation of the posthuman (and a potentially posthuman ethics) or the mode of living *with* nature that Tan-Tan models. While Granny Nanny's intentions appear to be the colonization of New Half-Way Tree, and Tubman certainly makes possible matriarchal accumulation on a two-world scale, Tan-Tan models the possibility of 'a critical ecological feminism in which women position themselves *with* nature' through the reclamation of reproductive agency and labour, and her choice to deliver Tubman in the wilderness surrounded by a human-nature hybrid family: Melonhead (her human partner) and Abitefa (the hinte). Within an ethics of mutuality '"wilderness" does not designate an excluded place defined negatively, apart from self, alien and

separate [or] assimilated to self. It is a domain where earth others are autonomous or sovereign' (Plumwood 1993: 163). Tubman is born into a family positioned *with* nature and one that understands both 'continuity and difference'. If Tubman signals hope for a posthuman ethics, or the posthuman as an ethical response to the non-human, it is owing to his alignment with Tan-Tan's ethics of mutuality.

Works Cited

Anatol, Giselle L. 2006. 'Maternal Discourses in Nalo Hopkinson's *Midnight Robber*'. *African American Review* 40.1: 111–24.

Battaglia, Deborra. 2012. 'Life as We Don't Yet Know It: An Anthropologist's First Contact with the Science of "Weird Life"'. In *Imagining Outer Space: European Astroculture in the Twentieth Century*. Ed. Alexander C.T. Geppert. Basingstoke: Palgrave, 211–23.

Boyle, Elizabeth. 2011. 'Vanishing Bodies: "Race" and Technology in Nalo Hopkinson's *Midnight Robber*'. In *The Black Imagination, Science Fiction and the Speculative*. Eds. Sandra Jackson and Julie Freeman Moody. London: Routledge, 51–66.

Dillon, Grace L. 2017. 'Indigenous Scientific Literacies in Nalo Hopkinson's Ceremonial Worlds'. In *Science Fiction Criticism*. Ed. Rob Latham. London: Bloomsbury, 470–86.

Enteen, Janilla. 2007. '"On the Receiving End of the Colonization": Nalo Hopkinson's 'Nansi Web'. *Science Fiction Studies* 34.2: 263–82.

Fehskens, Erin M. 2010. 'The Matter of Bodies: Materiality on Nalo Hopkinson's Cybernetic Planet'. *The Global South* 4.2: 136–56.

Gomel, Elana. 2014. *Science Fiction, Alien Encounters, and the Ethics of Posthumanism: Beyond the Golden Rule*. Basingstoke: Palgrave.

Hancock, Breckon. 2015. 'New Half-Way Tree and the Second World: Themes of Nation and Colonization in Nalo Hopkinson's *The Midnight Robber'.* In *The Canadian Fantastic in Focus: New Perspectives*. Ed. Allan Weiss. Jefferson NC: Macfarland, 95–107.

Hopkinson, Nalo. 2000. *Midnight Robber*. New York: Grand Central Publishing.

Milburn, Colin. 2014. 'Posthumanism'. In *The Oxford Handbook of Science Fiction*. Ed. Rob Latham. Oxford: Oxford University Press, 524–36.

Mies, Maria. 1986. *Patriarchy and Accumulation on a World Scale: Women in the International Division of Labour*. London: Zed Books.

Plumwood, Val. 1993. *Feminism and the Mastery of Nature*. London: Routledge.

Smith, Eric D. 2009. 'The Only Way Out is Through: Space, Narrative, and Utopia in Nalo Hopkinson's *Midnight Robber*'. *Genre* 42.1/2: 135–63.

Apocalypse Now: Covid-19 and the SF Imaginary

Gerry Canavan, Jennifer Cooke and Caroline Edwards in conversation with Paul March-Russell

The following conversation was conducted via Google Docs between 1st May and 23rd June 2020. The participants were Gerry Canavan (Marquette University), Jennifer Cooke (Loughborough University) and Caroline Edwards (Birkbeck College, London). Gerry is President of the SFRA; his books include *Green Planets: Ecology and Science Fiction* (2014), co-edited with Kim Stanley Robinson, *Octavia E. Butler* (2016), and most recently *The Cambridge History of Science Fiction* (2019), co-edited with Eric Carl Link. Jennifer is a poet and academic; her first book was on *Legacies of Plague in Literature, Theory, and Film* (2009) while her most recent is *Contemporary Feminist Life-Writing: The New Audacity* (2020). Caroline's books include *Utopia and the Contemporary British Novel* (2019) and, with Tony Venezia, *China Miéville: Critical Essays* (2015); she is also editor of *Alluvium* and co-founder with Martin Eve of the Open Library of Humanities.

Paul March-Russell: Can I ask, how have you all been coping during the pandemic? My responses have ranged from anxiety to acceptance, probably spurred-on by having a very busy household. Yet at the same time there's no one, universal experience, so how has it been for you?

Jennifer Cooke: As an academic, with a house and a garden, I am privileged and I already spend a lot of time working from home or in libraries so that was not a challenge. I'm also on research leave, which has saved me, so far, from the scrabble to take all teaching online, although I do not think we will return fully to face-to-face teaching in October so I probably have all that ahead. Research leave has been disrupted by the closure of the British Library, of course, but there are aspects of my plans I can complete. Emotionally, I was extremely anxious at the start of cases in the UK because of the government's slow response, the horrifying herd immunity strategy, and the presence of the arrogant assumption that somehow we would not be subject to the ravages of the disease in the same way other countries were. Lives were lost needlessly. I was angry and anxious about that, but oddly calm about the way the disease would itself unfold and what needed to happen. During lockdown, I was calmer. I miss the bustle of London. As lockdown begins to lift, I am anxious about what lies ahead. My partner is not an academic and the institution he works for is bringing in a high number of compulsory redundancies, so I am personally worried, but more broadly, my confidence in the UK government's competence is extremely low and I cannot see how, with plans as they are, we can avoid a second wave.

Gerry Canavan: By chance, I was also on research leave this semester, so I too was spared the chaos of the move to 'remote learning' (which I am

grateful for). With two young children at home my life has been transformed into an all-day home school, both before and after my local school district moved to its virtual learning platform – with all our favourite places inaccessible it has been a struggle to keep everyone on an even keel, much less preventing either the children or us from becoming overly anxious. In the span of a few weeks it seems as though the future has completely collapsed; where I once spent my time worrying about climate change and its deformation of my children's futures decades from now, I am now petrified by the prospect of living through a significant economic depression that could last years, or a decade, or longer – at which time climate change will still catch up to us! It is very hard to be optimistic, especially as both governments and non-governmental organizations in the West have proven themselves totally inadequate to the task of administering this crisis, and, as Jennifer says, seem to have thrown us all into this lockdown without any plan, and are now simply seeking to scrap the whole thing and expose huge segments of the population to biological danger in the name of the smooth functioning of capitalism.

Caroline Edwards: It's been such an emotional rollercoaster. I'm extremely conscious of the privilege of having a job where I can work from home and not be under immediate threat of redundancy (although this is increasingly not the case for academics in UK universities), and, although my partner is in the vulnerable category of people who need to self-shield, our experience has been relatively similar to our PhD days. I think what makes me sad is that the years of anxiety and depression that I've experienced within the neoliberal university system have prepared me for this kind of experience – the constant fear and uncertainty, feeling that you have little control over your own life or future, working all hours to try and keep up with an unrealistic volume of work, and being unable to socialise with friends or family. When lockdown first became a lived reality, it honestly felt like very little had changed. The main difference was, perhaps like Gerry, trying to keep our toddler entertained without being able to go outside. Although I initially felt completely overwhelmed by having to work and look after my 20-month-old daughter in the same space there have been some funny moments. Not realising my audio and video were switched on during a departmental team meeting and that 40 colleagues could see me frantically running around the kitchen whilst Aeli threw egg at *Bing* on the TV and sat spooning hummus into her lap was quite a comedy moment. Under these conditions, workplaces cannot ignore their employees' caring responsibilities and we become actual human beings again – with messy lives that get in the way of the 24/7 'always on' culture. This could be a positive thing to help us out of the reifying structures of employment.

PMR: How do you feel our experiences of Covid-19 measure against the depiction of plagues and other disasters in fiction and film? Brian Aldiss famously accused John Wyndham of writing ‘cosy catastrophes’. Has Covid-19 been a ‘cosy catastrophe’, with people dutifully queuing for food? Or is there something fundamentally distasteful referring to any catastrophe as ‘cosy’?

JC: There’s a phenomenon in plague literature, when a lot of people die from an infectious outbreak (whether a disease or zombies, although it is a feature of natural disaster movies to some extent too), which is that we get a lot of smaller stories. I called them ‘episodemics’ in *Legacies of Plague* to capture how writers create lots of ‘episodes’ during the epidemic. These are usually small vignettes where we are introduced to a character, family, or group, and follow their story for a while, until they die. But our experience of Covid-19 doesn’t have this omniscient perspective. Instead, we are atomised into individual households. We might be able to read of these other experiences in the news or on social media or hear them from friends, but then they are part of different genres, the media’s ‘personal story’ genre or the anecdote, and they don’t cohere into a pattern or a selection that exemplifies a point a writer is trying to capture (such as, ‘even the most careful get infected’ or ‘a strong belief in your right to individual freedom is not a prophylactic’). I don’t think what we are experiencing is cosy, though: it certainly isn’t in my borough, Newham, which has the highest death rate in the UK amid one of the most diverse populations.

GC: Living through this now I’ve been surprised by how few writers predicted the *dullness* of this modality of pandemic. While I remember vividly the Captain Tripps section of *The Stand,* which sees global society effectively collapse entirely over the course of a few weeks, this transformation has been so much quieter, weirdly calmer. The text I keep thinking about is actually Asimov’s Spacer novels, which saw small numbers of people colonizing extrasolar planets on vast estates that turned them intensely agoraphobic, as they interacted only with screens and robotic servants. On the rare days when I have an in-person interaction with someone outside my household it comes as almost a shock – and it hasn’t been that long.

CE: I found myself thinking, back in about early March, that what we were living through are the one or two paragraphs you get in pandemic and catastrophe narratives like Wyndham’s *Day of the Triffids* or Ballard’s *The Drought* where months – or years – pass between the initial signs of the catastrophe and the present narrative time of spectacular survivalism. That the odd combination of terror and boredom Covid-19 seemed to be introducing, in which an entire way of life had fundamentally changed seemingly overnight (although, of course, we have been living with various crises for some time now in terms of austerity, surging inequality, climate crisis, and so on), was matched by the daily grind of

lockdown and actively attempting to do nothing - outside at least. And that this is the bit novelists usually miss in favour of proleptic jumps into the future when things *really* start to happen and you get looting, everyone scrambling to leave the city, and the gradual embrace of survivalist, often bizarre new cultures (think of *Mad Max*, or Ballard's mad Jungian figures in the desiccated desertscape of *The Drought*).

PMR: I often feel like I've wandered out of Russell T. Davies's *Years and Years*, bounced from one disaster to another. Do you think that our reading of apocalypses in science fiction and other genres prepares us for apocalypses in the real world?

JC: I felt a kind of deadly calm acceptance at the start of the pandemic, an uncanny sense of familiarity. I'd soaked myself in plague literature and accounts of infectious diseases and pandemics for years. I knew what would happen, in what order, and I expected it to unfold as it did. While a lot of friends and family were panicked and surprised by different measures as they were rolled out, I was not. There is a pattern to pandemics that is reflected in most plague literature.

I think we have ahead of us a moment not sufficiently covered by plague literature because, by necessity, literary stories end. Often, in the case of plague literature or infectious disease films, the threat recedes or, in miraculous time to save the lead actor, a vaccine is found. Even a bleak ending, like in McCarthy's *The Road,* is an ending. But it is not clear that a vaccine will be found for Covid-19 and it certainly won't be developed and widely administered before the end of 2020, from all accounts. Ahead of us, therefore, we will have to learn to live completely differently, with fear of infection as a daily present, with different routines and practices in all areas of our lives, from the public to the private. Our consumption practices will alter. Our socialising will change. Our workplaces, our travel, our spending will change. The divisions of life into work, leisure time, holidays, 'a night in': all these are already crumbling and will not, I think, be restored quickly to their usual patterns. The university sector in the UK is predicting that 30% of university jobs will be lost. Many of us with previously stable jobs will find themselves without employment. As Gerry says, we will have to live with the global economic consequences of lockdowns. This is scary and, to some extent, hard to comprehend since it affects every area of our life. Most plague literature also deals primarily with the plague, whereas we are also living through an extraordinary time of effective protests that have swept the world in the wake of the killing of George Floyd by a police officer in the United States. Statues are falling, US cities are committing to changing or even abolishing their police forces. So the pandemic has also become the backdrop for a long overdue time of reckoning between citizens and their states over the treatment of black people.

GC: It doesn't seem to me that fictional apocalypses train us that well for thinking through real disasters. Our narratives always involve acts of intense violence, with small, tight-knit, deeply paranoid groups having to make 'tough choices' about exclusion and murder, whereas real disasters are typically characterised by moments of solidarity, self-sacrifice, and mutual care. If we think about the Covid-19 lockdowns we have seen essentially everyone in society transform the coordinates of their lives overnight to protect those at risk and limit the spread of the disease; it was the political leadership of the US and the UK that failed and perpetuated the disaster, not the citizenry, and it's that same political leadership that is now pushing us out of the lockdowns before we are ready.
CE: Oddly (appropriately?), I was reading Octavia Butler's *Parable of the Sower* and *Parable of the Talents* as Covid-19 was brewing 'elsewhere'. I remember learning the phrase 'social distancing' well before lockdown was even mentioned by the UK government, and told my union I wouldn't be travelling into Central London for our picket – opting to record my teach-out on 'The Coming Catastrophe' from my garden in Brighton. I agree with Jennifer that a familiarity with apocalyptic and disaster books and films certainly prepares us to an extent for the inevitable early stages of a global emergency – that's the 'uncanny familiarity'. I disagree that apocalyptic narratives haven't prepared us for what comes next – not all of them at least! Butler's *Parable* novels are notable for their mixing of the horrifying dystopian (far-right vigilante groups feeling empowered to destroy or enslave vulnerable communities, a pyromanic drug craze, gang rape, brutal murders, and so on) and the insistently utopian – even amid all the butchery, Lauren and her group demonstrate that human ties of trust, kindness, self-sacrifice and the long tough undertaking of rebuilding can occur.

Kim Stanley Robinson's *New York 2140* strikes me as another instructive novel, in this sense. As global sea levels rise and cities like New York become submerged and intertidal, capitalism accommodates itself to the new catastrophic situation generating aquatic markets for speculative finance. The apocalyptic flooding doesn't end capitalism and Robinson introduces us to a world of retro-fitting submerged buildings, figuring out ways to travel through the intertidal, and new forms of co-operative living and mutual aid. We can see some of these more hopeful, even utopian, things happening around us during Covid-19 with the rapid proliferation of mutual aid groups, local networks for providing food parcels to those who are vulnerable or self-shielding, and the simple offer of remote company for people living in isolation. I find this very hopeful, particularly after years of grinding austerity (and the prospect of gruelling economic hardship for years to come to pay for all this furloughing).
PMR: Okay, let me vary that question. What is the purpose, do you think, of reading or watching fictional catastrophes? Other than potentially preparing us for

something that might happen in the real world, do they serve any useful function? Or is that too instrumental a way of thinking about fictional apocalypses?

GC: It seems to me to be an attempt to perform what Richard Grusin calls *premediation,* to anticipate and rehearse what we think will happen (and maybe what in some sense we secretly long for). Perhaps I've already given up the game with my earlier answer but I don't know that these fictional catastrophes are training us all that well; the surreality and confusion I have felt during the Covid-19 epidemic hasn't been mollified in any way by years of watching zombie movies, and to the extent that those films have informed the way I've reacted to this situation it's been mostly by training me with the wrong structures of feeling (giving, for example, a run to the grocery store a weird charge of danger or threat). What we've seen in this epidemic is not people turning on each other but reorganizing huge elements of our society, on the fly, in the name of solidarity and collective caring; our leaders have proven wildly inadequate to the moment, but by and large ordinary people have risen to the occasion in ways our mainstream, mass market science fictions did not anticipate.

CE: For me, the answer is very simple. These narratives, to varying extents, allow us to inhabit the thought experiment of what life would be like outside of contemporary capitalism. Whether they depict that world as cannibalistically barbaric (I'm thinking here of narratives like the BBC TV series *Threads* or Julie Myerson's really disturbing *Then*) or tentatively pastoral and escapist (Richard Jeffries' *After London*, Wyndham's *Day of the Triffids*, Leigh Brackett's *The Long Tomorrow*, Jim Crace's viral pandemic *The Pesthouse*) depends on the author's politics and the historical moment in which they are written, and to which they respond and creatively remediate. Their function is incredibly important, I think, in allowing readers to occupy these speculative worlds and imagine how things might be different and just how historically contingent our contemporary world of capitalist modernity really is, once you view it from the perspective of a different timescale.

JC: I think it largely depends on the quality of the fictional apocalypse, its ability, as Caroline says, to make us think and feel differently about how the world and our societies could be configured. A lot of mainstream catastrophe movies are focused on reassuring us that the world can and will eventually return to normal. Even texts that are interested in exploring different configurations of society often still want to reassure us as to the universality of human structures of feeling.

PMR: And to finesse that question again. Are science fiction fans, let alone science fiction academics or scholars of apocalypse, any better prepared at facing real-world disasters? I'm wary of perpetuating the sense of exceptionalism that has often been ascribed to fans, 'all fans are Slans', etc. But can people outside the sf community learn anything from how fans organise and collaborate? For

example, I read a great story from New York of how cos-players were using their design skills to make facemasks for health workers.

GC: One way I hope we are, if we are, it's in being more suspicious of the pre-packaged narratives of threat and blame that rapidly emerge from official sources in these situations. Having role-played the apocalypse so many times, in so many different ways, it would be nice to think that might be a bit more resistant to efforts to propagandize the virus; perhaps we might have a better sense of the many different sorts of stories that might be told (and by who, and to what ends). I'm not sure I believe that, but it would be nice if it were true.

PMR: In one sense, Covid-19 feels like it's been a very rapid disease, from its initial outbreak in December through to the horrific death tolls in April. But, in another sense, it feels like it's been a very slow disease because we've had repeated warnings over the last twenty years that not only could something like Covid-19 happen, it also *would*. Viewed that way, Covid-19 seems to describe what Timothy Morton calls a 'hyperobject'. If so, how do you think Covid-19 changes our sense of time and place, now that days seem to stretch into the distance?

CE: I couldn't agree more. We've been living in a crisis for a long time now, with the feeling that things can't be stretched any further. I'm really struck by Kathryn Yusoff's idea of the 'black Anthropocene', which builds on work in black and indigenous studies to critique the inescapable whiteness of geology as the discipline that gave us the geological epoch of the Anthropocene. Yusoff makes the point, and this is something N.K. Jemisin also talks about, that for African Americans *the apocalypse has already happened*; it's been happening for a long time. We might even say that the idea of sf apocalypse as a sudden, spectacular event is the product of a white imaginary that has been shielded from many catastrophe experiences. Take, for example, the idea of environmental racism, which relates to the black Anthropocene. African American communities have been living in apocalyptic conditions – with polluted water sources (Flint, Michigan, anyone?), carcinogenic environments (think of Cancer Alley along the Mississippi), vulnerable to climate disasters like Hurricane Katrina, which devastated black communities in New Orleans. In fact, Jemisin wrote a short story about this in her 2018 collection, *How Long `Til Black Future Month?*

As to the hyperobject, I think recent studies like Yusoff's remind us of the entanglement between humans and nonhuman entities, the almost unfathomable networks of exchange that connect us with animal, organic and inorganic life forms and materials, as well as the fetishized objects of our own labour that circulate globally and render unthinkable the processes of human living labour (as well as what Marxists call 'dead' labour, that is machinery and automation, as well as capital investment in such things). Marx famously described dead labour as 'vampire-like' in the way it sucked the life out of the

living labour (labouring humans), and it's perhaps no surprise that this is taken up by object-oriented ontologists and theorists of actor-network theory, who are interested in Marx's consideration of the non-human labour that interacts with living human labour in the production of commodities.

GC: Another hyperobject-like quality of coronavirus is the way it seems to defy our ability to learn about it and prepare accordingly. When I think back on many of the facts we were told in February, even just looking back from the perspective of June, it is startling just how hard it has been to get a handle on the true transmission patterns and risks of the violence – and we are now confounded by months of reporting from both governmental and scientific actors that has turned out to be significantly incorrect, as well as misreported, but still circulates on social media and in folk epidemiology as if it were accurate knowledge. Add to this the bizarre political polarization in the US that has, for several months, treated the virus as a partisan issue subject to cable-news debate, and the project of simply educating ourselves and informing the public about the virus has proven extremely challenging.

JC: Because the disease has caused the inequalities in our societies to be thrown into even sharper relief, as we see, for example, with the disproportionately higher death toll among ethnic minorities, with the fact that in so many countries care home residents were forgotten about until it was too late, and with women having tended to shoulder the burden of home-schooling, at the expense of their jobs and careers and, of course, their mental and physical health, there is a sense of urgency demanding we tackle these problems, properly this time, not simply in a reformist manner. We have seen this energy manifest in the Black Lives Matter protests and there is wider public sympathy with the protesters and their actions than I think we have seen before. People I would not expect to support the demolition of statues do so, for instance: they understand why it is offensive and are more comfortable jettisoning 'the way things were' than in pre-pandemic times, I think. It feels almost claustrophobically urgent to rethink and restructure our societies along fair lines that prioritise care over profit, and I think the despair that will result if we return to the normal structures of inequality will be crushing.

PMR: Related to that question is perhaps also a question of technology. Two months ago I'd never heard of Zoom or Microsoft Teams, now they seem to have become central to my working life. Equally, I've been thinking about 'social distance sf' where characters interact only through technology. So, how do you think the pandemic is changing – or could change – our relationship to technology?

CE: Yes, I've been thinking a lot about Vashti in Forster's 'The Machine Stops'. I feel like a swaddled lump of flesh, with a face as white as a fungus at the moment. Nobody told me we'd be *eating so many biscuits* in the apocalyptic

pandemic! I'm fascinated by the way in which technology will change our teaching practices in high education for a long time to come – as Jennifer says, we're going to be teaching online, or in some blended form, for many months and possibly years to come. It feels as if every university has had to reimagine itself as the Open University, virtually overnight. I like the idea of social distancing sf. Another (comedic) example would be that Mitchell and Webb 'Remain Indoors' sketch about an apocalyptic quiz show, which feels rather close to home now. But I was also thinking about Laura Mixon's cyberpunk novel *Glass Houses*, in which the protagonist Ruby prefers going outside using her homemade robot-avatars or 'waldos'. Ruby's agoraphobia enables this fascinating inter-subjectivity with her waldos (which mixes human and nonhuman, as well as blurring genders into a kind of assemblage subjectivity – shout-out here to my PhD student Sasha Myerson who is writing about this), but also imagines a world in which climate change has led to outdoors being so dangerous that only the very rich can afford the protective clothing necessary to enable people to leave the house.

GC: It will be interesting to see what elements of the lockdown become permanent, whether by consumer choice or by austerity-driven decisions of institutional leaders. Many people have expressed satisfaction with working from home, for instance, and a large number of corporations have identified this as an attractive play to cut real estate and HR expenses (as well as shift some fixed costs like electricity, plumbing, and technology directly to employees); this may be recognized a major legacy of the crisis, and will in turn have major implications for the way cities generate revenue and maintain infrastructure. Other elements may not be so long lasting – it seems that the experiments with remote learning have had the effect of convincing both students and instructors of the value of in-person instruction, and may set the stage for conflict between them and administrations who still see online instruction as a means to cut costs and weaken labour power.

JC: I agree that online learning and teaching has not been the success that the developers of platforms to facilitate it imagined. I am concerned – as ever – that this enforced experiment and the conditions of life after lockdown will mean that face to face teaching will become part of an elite offering, from universities that have the space and finances to provide such a learning environment. There have been advantages, however, to online activities. Since Easter, I have been running a weekly research seminar for our faculty (which I've wryly called #PlagueTimePapers). We keep it to an hour and it is among ourselves, at this stage, and has proved far more popular than if we held the event in person, with over double or triple the numbers tuning in, both of faculty and graduate students. For faculty, it has the advantage of being only an hour, and

is less disruptive to one's day than a trip to campus. We also all want to hear about each other's research: it has almost felt luxurious to do so for nearly ten weeks now. For graduate students, they do not even need to turn their video on, so there's no pressure to be 'seen', to feel they should ask a question. At my institution, many of the more unwieldy university meetings (whole School/ faculty meetings with a lot of people where information is primarily 'cascaded' rather than discussed) have been cancelled. I think this is in part because the technology highlights starkly that these meetings were only ever a performance of leadership visibility rather than any real consolidation of an intellectual community or School unity. I think that's a fantastic by-product of the moment. If we can convince our management of what we have all known for a long time – we will be happier and have more time for teaching and research with fewer meetings in our lives and more productive meetings for those we have to have – then that would be a substantial post-pandemic gain.

PMR: Whether it's Bill Masen in *The Day of the Triffids*, or the protagonists of films like *The Day the Earth Caught Fire*, *The Quiet Earth*, *Open Your Eyes* or *28 Days Later*, there's always that great moment when the characters stumble through streets that have been left barren and desolate. But, on this occasion, streets are desolate because we've had to stay inside and limit our physical contact. So, do you think writers of 'inner space' like J.G. Ballard are better guides to our current condition? (Not that I'm necessarily recommending cannibalism as a solution!)

CE: It's a weird coincidence that I've been writing a couple of lectures on Ballard during lockdown and thinking about inner space. But also Doris Lessing's *Memoirs of a Survivor* where the narrator can't leave her flat and sort of morphs into the walls, behind which she discovers this other dimension. What I find fascinating about this more experimental kind of psychological sf is that I think it genuinely attempts to think through how our entire ontology would be altered after some apocalyptic event fundamentally changes society. Ballard's 1960s ecocatastrophe novels (*The Wind From Nowhere*, *The Drowned World*, *The Drought* and *The Crystal World*), and even his concrete trilogy in *Crash*, *Concrete Island* and *High Rise*, stand out for their surreal characters – it's hard to think of another writer who captures the sheer bat-shit possibility of deranged individuals living in a world without rules who gradually acquiesce to their most regressive instincts (except, perhaps, a character like Baron Harkonnen in Frank Herbert's *Dune*; David Lynch's 1984 film adaptation really captures this). It's the combination of speculative world-building with surrealist influences (Ballard's novels are full of visual intertexts by painters like Dalí and Paul Delvaux) but also the extrapolation of what human nature might look like outside of civilized society.

PMR: To take that line of inquiry further, could this be an opportunity to explore more deeply what we mean by questions of intimacy, of affect, of almost something like telepathy – touching at a distance? Do science fiction or other forms of literary apocalypse give us pointers as to how we might reimagine such borders?

GC: I think perhaps coronavirus helps us recognize some of those structures as fantasies more clearly: the idea that communication can be simply disembodied by telepathic or digital mediation has been disproven in an extremely visceral, felt way. We are social creatures and we need close, physical with other people to function – not just touch but also just the comforts and cues one gets from just being near other humans. The push towards virtuality and digitality in all things has, I hope, hit a significant roadblock now that we've seen just how impoverished our interactions are under these conditions of mandatory solitude.

PMR: Although I care for someone with physical disabilities, I think so far I've had a fortunate lockdown experience. But, over and above the social isolation and physical confinement, there's also been increasing instances of domestic violence and mental health concerns. Although the austerity mantra, 'we're all in this together', has been rehashed for Covid-19, you are more likely to be affected disproportionately if you are from an ethnic minority or working-class background. Without trivialising such realities, do you think apocalyptic fiction speaks to these issues of class, race, disability and gender?

GC: I would certainly hope that science fiction – especially given the intersectional and anti-imperial turns the genre has made in the last couple of decades – has helped its fans to recognize how unevenly the threat of Covid-19 has been spread, and to appreciate that there is no cosmic or moral logic to the impacts the disease has had on different populations. If the apocalypse is a 'revelation' of truths we ordinarily cannot see, Covid-19 certainly seems to qualify, showing us in quite stark terms what sort of work and what sort of workers are deemed 'essential'/disposable. But science fiction is a multi-headed monster: for every radically leftist work of transformative belonging there is a eugenic nightmare justifying social violence as if it were a force of nature, and we are certainly seeing elements of that in new calls in the US and the UK to simply let the virus take its course. I also have some anxiety that science fiction has trained people to narrativize the virus in teleological ways that are counterproductive, especially with respect to the constant appeals to 'until a vaccine is found'. I am optimistic that a vaccine or effective treatment will be found, but there are no guarantees this is true; we have never produced a workable vaccine for a coronavirus before this, and while there are promising avenues of research there are also indications that we might actually never be unable to permanently

vaccinate against Covid-19 and its successors. One of the worst parts of living through this moment in history is having no idea which sort of story we are actually in.

PMR: In the years leading up to our present crisis, there was a huge spate of apocalyptic fictions. From zombie apocalypses like *The Walking Dead* to climate change novels, like Kim Stanley Robinson's *Green Earth*, and pandemics such as Steven Soderbergh's *Contagion*. The 'sense of an ending', as Frank Kermode once called it, is integral to hosts of world religions and mythologies, from The Book of Revelations to Ragnarok. But why do you think there has been this *current* fascination with the apocalyptic?

GC: I gestured towards this above, but it seems to me that we are dealing with a cultural force that is simultaneously diagnosis and desire. We know capitalism is cruel, we know it is unfair, and we know it is unsustainable – we know this can't go on forever and on some level most of us don't want it to. So we are looking for something to tell us what to expect next, and to find narratives that can convince us that the radical transformation of the coordinates of our lives might not be so bad.

JC: Cultural objects are often made by people who have not lived at the cruellest end of capitalist inequality. I think there has been during my lifetime a recognition by the middle-classes in the West that we have largely benefited from capitalism. This was starting to loosen, with millennials saddled with huge debt for their educations, shut out of the housing market, and thrown into a far more precariously orientated workforce. But even their prospects were considerably better than many millions of others in the Global South. For makers of films and popular apocalypse books and series, I think there's been an underlying anxiety about these unequal benefits and, more recently, the damage we have done to the environment in the process and the unequal effects of that too. In the West, the narrative structures we love are still the old ones of comeuppance, of a sin that eventually attracts its punishment, still those of *Doctor Faustus*. It's there in so many films: the evil man is punished, the one who betrayed the group is eventually eaten by zombies himself, the woman who commits adultery is shamed and brought low. Some of our most celebrated and canonised literature rehashes these simple moral fantasies and apocalyptic films are not exempt. It is possible to see apocalyptic cultural objects as fantasies of punishment. They are made by wealthy people who know their wealth is, in some murky chain of consequences that they may not wish to examine in too much detail, reliant upon exploitation in the world elsewhere and they suspect that this might not be deserved or lasting.

PMR: So, do you think that fascination will continue *after* Covid-19? Or do you think we'll want a 'sense of a beginning', something more utopian perhaps?

GC: From my position in the States, we seem to be reaching a crisis point there: ordinary people are re-evaluating their lives and what they value, and are desperate to recover the elements of in-person connection they have lost, while the managerial and administrative bureaucracies are looking to make permanent some of the austere structures of Covid-19 (like widespread computer learning, and radically disconnected, interchangeable labourers) they have always supported but were only able to actually implement under the sign of emergency. So I anticipate some serious labour struggle over what the post-Covid future should actually look like.

Even since this conversation began we've seen very rapid transformation of the terms of social understanding in the US, with an unprecedented protest movement (bordering on the insurrectionary) opposing police violence emerging in the streets as a nearly dialectical reversal of our previous enforced isolation. We seem to be in a moment of tremendous possibility, of all kinds.

JC: I fear Gerry is right: as Naomi Klein's *Shock Doctrine* detailed, emergencies are often treated by governments as a time to introduce measures that would otherwise be unimaginable or so unpopular as to be unworkable. People in the UK were convinced to democratically endorse austerity after the 2007-8 financial crash. That hardly gives me hope for what lies ahead. Yet, at the same time, there's an upsurge of hope, especially with the speed, uncompromising ferocity, and extent of the Black Lives Matter protests. Even the mainstream media are starting to interview prison abolitionists, for example, and treat their positions seriously. That these kinds of arguments would be covered by news programmes on the BBC was almost unthinkable ten years ago. So I think there is a shift and it is not only on the streets, although the momentum is coming from there, from protesters, organisers, and campaigners. I have so much to say here – too much in fact! Like Gerry, I suspect there will be labour disputes in the near future and if there's widespread unemployment, then there is going to have to be considerable rethinking of the economy.

CE: I agree that this is a moment of 'tremendous possibility', as Gerry puts it. The toppling of the slave trader Edward Colston's statue in Bristol on 7th June, as part of the global protests against George Floyd's murder and the reignited Black Lives Matter movement, was a profoundly historical and symbolic moment. Just watching it back hours later on social media and in the UK news, I felt that thrill and that optimism that such symbolic turning points can provide. As Jennifer says, the energy of protest movements like BLM and Extinction Rebellion (XR) have made certain kinds of conversations possible even in the most conservative of discursive spaces. The months and years ahead are going to be unimaginably hard I think – unemployment will clearly rise which was already on the cards given rising automation and its technological displacement. Of course,

people don't let go of the status quo without a bloody fight, but I just don't see how we can all go on without some kind of fundamental break with neoliberal hegemony. Since the Global Financial Crisis in 2008, since the massive cycle of occupations and protests in 2011 (and not forgetting the tumultuous student anti-tuition fees marches of Winter 2010 in the UK), and the more recent XR direct action, it's become clear that 'business as usual' is not an option. We now see an entire youth movement and a generation of schoolchildren who have grown up during these years and for whom the political choice is much clearer, more stark: it's an existential question of planetary survival. So yes, I am hopeful that something more utopian can emerge out of the wreckage. Two great hostile camps directly face each other – *socialisme ou barbarie*. When the complexity of social and class struggle crystallises in this way, some kind of political change will wrestle itself into being.

PMR: So, here's the one I've been building up to. With Covid-19, can we finally lay to rest the Jameson and Zizek misquote, 'it is easier to imagine the end of the world than to imagine the end of capitalism'? Without necessarily getting political (unless you want to!), can we use science fiction to imagine a time beyond our current disaster capitalism? I'm thinking particularly of more ecologically minded fictions.

GC: I don't know! It seems like we are seeing the truth of that quote confirmed in a way: we have seen the entire economy fly over a cliff, both with respect to global supply chains and with respect to small local businesses, with completely unprecedented, genuinely massive unemployment likely to extend into years or more, and there has been almost no response from the powers that be. The US Congress has been out of session for weeks; the stock market has recovered back to its highs; all the effusive early talk of universal basic income and government payroll protection seems to have died on the vine. If Covid-19 can't make us think in a different way about the relationship between capitalism and human thriving, what could? On the other hand, at the same time, as mentioned above, those conversations are happening at street level, with the current Black Lives Matter protests and their calls for systemic change proving extremely popular, not just on the left but across the entire population, at least as of this writing. So perhaps we're still on the knife's edge, and could go either way.

CE: I've already addressed this above, but what fascinates me at the moment is how we might adopt the *longue durée* of nonhuman timescales to really put this question into perspective. H.G. Wells does it in the far distant future of *The Time Machine*, when all we see is a lurid shoreline of giant crustaceans scuttling about. And Richard Maguire does it in stunning graphic form in *Here*. I've been teaching Nikolaus Geyrhalter's 2016 documentary *Homo Sapiens* recently, and

this might be the most controversial example of all – a film that imagines the world without us, after humanity's mysterious extinction, in which the cinematic perspective is weirdly utopian and the experience of watching the film seems oddly calming. With its birdsong, buzzing bees, and gently swaying grasses in the winds, watching a film that anticipates the rewilded, ruined world after humanity has perished is akin to doing a mindfulness exercise.

JC: It's easier to imagine the end of the world because organising against capitalism is extremely hard, exhausting work involving disappointment, arguments, and mistakes, and it does not necessarily provide a space where racism, misogyny, ableism and all the other forms of discrimination that blight us are left at the door. It's easier to imagine blowing it all up. Action films love this fantasy. The reality of challenging the status quo is more tiring and time-consuming. It's also risky. There's a reason why critical theory is so adept at criticising its present and so reticent about what should replace it: there's no absolute guarantee that a fairer society will make us collectively happier. Quite a number of people are invested in and highly attached to forms of capitalism that do not serve them well, after all. It is a familiar habitas. Sf, as Caroline says, at least is a genre that tries to think through some of the problems of future change.

PMR: And to wrap up, an obligatory question perhaps. Is there *one* fictional apocalypse, perhaps a pandemic but not necessarily so, which you would recommend people to read or watch? And why?

GC: It's hard to imagine recommending anyone but Octavia Butler in this moment: she seems to have seen the real future coming in a way few others did, as well as opened up alternative possibilities and utopian lines of flights that can still inspire us. The Parable books are almost thirty years old, but somehow seem like they're given us the news from six months from now; they seem even more prophetic now than they did at the time. For something less grim, I would recommend Kim Stanley Robinson's recent fictions like *Aurora, New York 2140,* and the upcoming *Ministry for the Future,* all of which revolve in different ways about finding the seeds of utopian possibility in the ruins of catastrophe and collapse.

JC: I agree with Octavia Butler. Given what is happening right now, we should all be reading people of colour's work, especially if we haven't been doing so much before. We need to be engaging with and most importantly listening to black and ethnic minority activists, friends, colleagues, academics, and campaigners, centring their voices, attending to their writing (of all types, not just sf and pandemic fiction), and trying to change for the better the places where we work and live to make them spaces where everyone feels and, indeed, is valued equally.

CE: Ditto. And there's a new graphic novelisation of *Parable of the Sower* by Damian Duffy and John Jennings to reignite your interest in Butler's prophetic narrative. It's not just the disaster of capitalist inequality and climate change that Butler captures, it's the unerringly grim imagination of what a populist resurgence of white supremacy might look like, with self-appointed, gun-toting militias taking it upon themselves to police the streets and kill black Americans. Think it can't happen here? It already is.
PMR: And on that note, thank you.

The Peter Nicholls Essay Prize 2021

We are pleased to announce our next essay-writing competition. The award is open to all post-graduate research students and to all early career researchers (up to five years after the completion of your PhD) who have yet to find a full-time or tenured position. The prize is guaranteed publication in *Foundation* (summer 2021).

To be considered for the competition, please submit a **6000-word** article on **any** topic, period, theme, author, film or other media within the field of science fiction and its academic study. The article should be original and not previously published. All submitted articles should comply with the guidelines to contributors as set out on the SF Foundation website. *Only one article per contributor is allowed to be submitted.*

The deadline for submission is **Friday, 4th December 2020**. All competition entries, with a short (50 word) biography, should be sent to the journal editor at paulmarchrussell@gmail.com The entries will be judged by the editorial team and the winner will be announced in the spring 2021 issue of *Foundation*.

The Fourfold Library (11): Thomas Burnett Swann, 'The Manor of Roses'

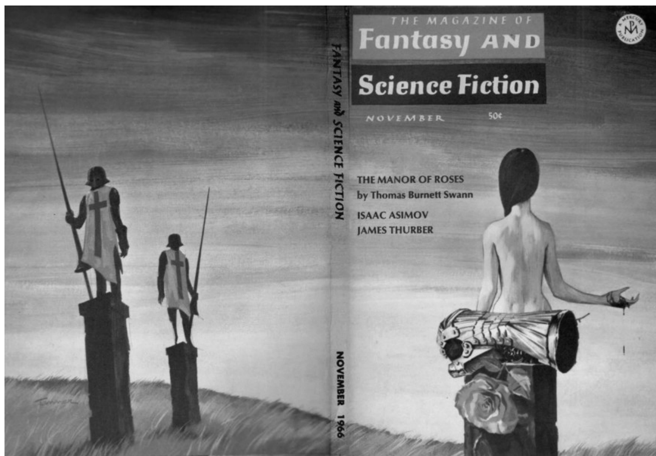
Geoff Ryman

While libraries and archives have been forced to close during the pandemic, The Fourfold Library, due to its higher-dimensional location, has remained indefinitely open. Special requests for rare and hard to find items, such as that selected by Geoff Ryman, are permitted via wormholes in the space-time continuum. Born in Canada but long-term resident in the UK, Geoff's work has slipped between fantasy, sf and experimental fiction. His sf novels include the multiple award-winning *The Child Garden* (1989) and *Air* (2004). As an editor, his anthologies include *When It Changed: Science into Fiction* (2009). The administrator of the African Science Fiction and Fantasy Reading Group, Geoff is also one of the founders of the Nommo Awards for African Speculative Fiction.

In October 1966 I bought a copy of *The Magazine of Fantasy and Science Fiction*. It was lined up with at least five other science fiction magazines in an ordinary supermarket in west Los Angeles.

You could buy good books in drug stores, gas stations, and liquor stores. I found not only Tolkien but also *The Worm Ouroboros,* and all of James Baldwin including plays and essays in the circular racks of the local drug store. You could also buy ice-cold crisp apples from vending machines and thick comics with three stories for twelve cents.

There was a story in that issue of *F&SF*. Ever afterwards I could recall the last line because it had made me cry. 'Earth, the mother of roses, has many children.' Sixteen-year-old me couldn't account for its impact. I had to go back and re-read that story many times. I was not a skilled reader. Mostly I read comic books.



For many years I thought the story must be called 'The Mother of Roses' and so couldn't find it again. For fifty-four years, I've been able to call up a reasonable memory of the cover because it illustrated that story. Today I found it online.

Imagine an sf magazine now being able to lead with both Isaac Asimov and James Thurber in the same issue. *F&SF* was called '*The New Yorker* of science fiction magazines' because it was devoted to the proposition that fantastic fiction could be literature and should aspire to being literature. 'Literature' could mean 'writing of the very highest quality' and also possibly 'enjoyed by readers who would never normally read sf'. Think 'Flowers for Algernon', think the best of Ray Bradbury. *F&SF* stories could be everyday and delicate with wafts of the fabulous. They could be fantasy or horror – and science fiction yes, but less likely to be star-smashing space opera. 'The Manor of Roses' snagged my attention at once:

> I am thirty-five, a woman of middle years, and yet in this time of pox and plague, of early death and the dying of beauty before the body dies, it is said that I am still as beautiful as a Byzantine Madonna, poised in the head of a gold mosaic and wearing sorrow like a robe of petals.

Reading it now, I'm relieved. I remembered the story as being breathlessly well written in a tangled, original kind of way. And there it is, the voice as heady as whole bottle of sherry.

Look at how many things that one long sentence does – gives us the narrator and makes us see her age and beauty. It implies what she wears. It shows us roughly when and where we are. Stories have visual styles as well, and that one sentence calls up something art nouveau or gilded like Klimt. But above all else that sentence establishes the tone of voice. And the tone establishes the subjects: beauty and sorrow. It also contains a massive clue to the eventual revelation at the end.

Thomas Burnett Swann was a poet and this story thinks in images. The story is held together not just by plot but a separate argument of imagery – thorns, roses, plants, icons, and the Virgin. Part of the reason the story knocked a younger-me sideways was that it worked like a poem. But I didn't know that then.

There were other more personal reasons.

My family had moved to Los Angeles from a tiny Canadian village in countryside so sparsely populated that the back roads were unpaved. My best friend's family farm was 600 acres with stretches of woodland and the Credit River flowing through it with snapping turtles. His house was a two-story magnificence built in 1823 from brick. It was demolished fifty years ago, and the farm has long been a plain of dated subdivision bungalows.

Silence.

A group of men from Toronto started weekending in the bush, as we called the hinterlands, meaning us. A married friend of my parents started spending Saturday nights with them. I remember my father saying, 'I think they're the kind

of men we are hearing a lot about these days.' Except of course NOBODY was speaking about them. My mother affected amusement and wondered to friends on the phone if his wife had any idea.

I remember there was an article in *The Saturday Evening Post*, a single page with a blurred photo, something like 'I am a Homosexual'. I asked my Mom what a homosexual was and her reply stayed with me: 'It's a terrible thing. It's a woman inside a man's body.' I wanted to know how that was possible, since Mom had never adequately explained the differences between men and women. I remember getting quite angry with her, and asking if it was just differences in hair and clothing. I think I'd stumbled into the difference between sex and gender.

I was not alone. I remember in first grade, sitting in a schoolroom built in 1871. A local boy showed me pages from a woman's underwear catalogue. Bras! Girdles! Stocking clips! Slips! He'd traced with a pencil the hidden treasures underneath. All of his naked women had a penis.

Mom travelled to one of the local towns, Brampton, to get her hair done. Two Italians ran the salon. For Canadians at the time, Italians were the available exotic. When Meadowvale's new school was being built, the labour was mostly Italians, often with their shirts off in the sun. I was riveted by them – but I fell in love with Mom's two hairdressers. They were funny and gentle, and Mom chortled all the time she was with them. They had airily inflated, smooth black hair and hairy chests and shoes with elevated heels that were considered effeminate.

There was something wrong with me. By age nine, I was in silent crisis. I remember going to a bowling alley with the boys from school, and in the middle of the game I suddenly knew that all my feelings for these guys were wrong. My incompetence at sport was more evidence of how wrong I was inside. Nobody ever told me that you're going to be bad first time you do anything. Well before puberty I completely despised myself, and by the time of high school I had more or less stopped talking to anybody my own age.

'The Manor of Roses' sunk in for that reason – now I can see it is a story about how two teenage males can love each other, while one of them has a girlfriend who loves each of them in different ways. Sort of a *Design for Living* set against the Crusades.

And I knew something else in my bones – the author was a homosexual. It was much more than the love between John and Stephen. The story is one long unrequited ache of love, most especially in the voice of Mary, the mistress of the Manor of Roses where the three teenagers take shelter. Mary has lost her only child to the Crusades and now yearns to protect and keep with her these three beautiful children. Nearly everyone in the story is motivated by love or the lack of it.

In the idiot, self-oppressing way we humans sometimes have of imprisoning ourselves, I remember feeling I had one up on the author. I felt that I'd pierced his mask and that I'd been very perceptive.

Reading it now, with all of scholarly John's yearning glances at Stephen and all the professions of love between them, it's perfectly clear that there was nothing to be perceived. The story was as open as it could have been in 1966. Any science fiction magazine had to remember that some of its readership was underage. This slightly veiled story was as far as the magazine could go. I'm sure the editors saw it as a plea for open-heartedness towards all.

The story ends with love between species, between enemies who in this world eat each other. It was 1966, just before the Summer of Love, and culture was a matrix trip-wired to show that kindness and undifferentiating love could undo human aggression and hate.

The threat in Swann's story comes from something called Mandrakes and I simply couldn't work out what they were. Vampires? They drank blood, sometimes. Before the Internet, researching anything could take weeks, months, forever. I finally found a reference in my school's copy of the *Encyclopaedia Britannica*. Mandrakes were roots that looked like people and were used for medicines. How could roots be villains? Or drink blood?

Puzzled by the Mandrakes, I'd skimmed over the story's moments of horror. In 1966 I didn't want to read about violence or hatred. I wanted islands of safety and stories in which bland beneficence won. *Star Trek*, which premiered that year, existed in a fundamentally benign universe; so did hippies. The Summer of Love was already in the music. In October, The Beatles' 'Tomorrow Never Knows' landed like a spaceship at the end of *Revolver.*

Mary has filled in the Manor's moat with mulberry trees. Its other defences are her hedges of roses; but brigands don't attack, and nor is she besieged by men wanting to marry her for her lands. Her staff obey her out of love even though many of them die mysteriously. It turns out that Mary has had protection and love from an unexpected direction. Earth has many children.

*****

In 1976, the year that Swann died, a fix-up called *Tournament of Thorns* appeared. It jams together 'The Manor of Roses' with another story, 'The Stalking Tree', first published in 1973. I have read, or tried to read, some of Swann's other novels and I don't like them, for some of the same reasons I don't like this fix-up. Swann can be cloying. I don't remember any unicorns in 'The Manor of Roses', but this version has them.

We start with Mary's flavoursome narration but lurch into a much plainer third-person narrative. The prose has been Hemingwayed. It's clear, simple and functional, but the structure is a bumpy ride with different flavours, themes and

plots. One thing in its favour – it is relentlessly clear about the Mandrakes. Even I would have understood what they were.

The book design of *Tournament of Thorns* is enough to knock me sideways in time. There was a vogue then for all things 19th century – granny glasses or old engravings. On the back cover, looking like an advertisement for snake oil, is a box listing the star authors of the Ace Specials series. Some of the names are (I hope!) still well known – Moorcock, Brunner, Dick, Silverberg and Zelazny. Some names have diminished. Reynolds is Mack, not Alistair. The back page tantalises with a novel of his called *Equality in the Year 2000.* Bob Shaw was an Irish writer, personally beloved by UK fandom. His novels were popular, funny, but also scientifically strong. Lafferty (R.A.), Goulart (Ron), Simak (Clifford) and Davidson (Avram) also smell as strongly of that time as pulp paper.

Some women feature in that box of wonders; prime among them Le Guin and the more radical Russ who might head any similar list now. The wonderbox doesn't mention Phyllis Gottschalk, Andre Norton or Leigh Brackett who were also published by Ace. My memory of the `70s is that women produced the defining sf/f of the era: Vonda McIntyre, Suzy McKee Charnas, Chelsea Quinn Yarbro, Sherri Tepper, Jane Yolen, Joan Vinge and many more. Saddest of all, though, in the top left corner: Bradley (Marion Zimmer). There are still some readers who remember the beneficial impact her books had on their lives. But she not only covered up her husband's sexual abuse of young boys, her own children accused her of abusing them.

There is not one writer of colour in the wonderbox. Samuel R. Delany had published his first eight novels with Ace, but none in the Specials series. These included *The Einstein Intersection* (1967), exactly the kind of book I wished I could write. Ace Specials did not publish another writer of colour.

*****

It's good and necessary that things die. Imagine a horrible world in which 19th century slave owners, Joseph Stalin, or Ayn Rand were still alive. But it is not at

all true that the good men do lives after them and the bad is buried with them. More like the bad lives on and the good is swept away.

For most of us, the most lasting legacies of the US will be the deformations caused by slavery, the settling of the West and the destruction of the Native Americans. Other cultures will have their own moon shots and Mars shots to celebrate.

What is lost is so often the quietly good. The fresh crisp apples in vending machines rather than candy. Minor writers who worked so hard to give harmless pleasure. I am probably the only person who read 'The Manor of Roses' this year. In ten years' time, I doubt anybody will.

You dismantle your parents' home and find that their clothes, books, papers, awards and little treasures are dispersed or thrown away. That mink stole of your mother's – no one can wear it now. The estate-valuer tells you that your uncle's video collection is worth nothing – chuck `em. You might save fifty photos to record their lives, and one copy of an article by your father. Your niece or godchild might save one of those photos out of curiosity.

After my Dad died, my mother looked into my eyes and said, 'You know, everywhere your father went, he built things.' She was looking at a photo of the house Ivan George Ryman had built in Meadowvale almost entirely without help – the frame timbers, the floorboards, the roof tiles, the poured concrete, the sun deck, the awning, the Canadian deep basement with its sump pump to drain it.

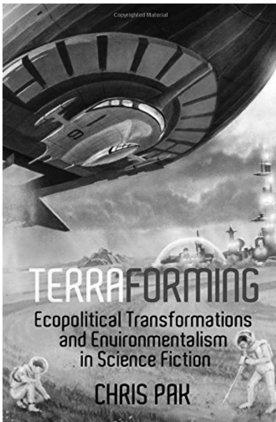
Last month I Google-earthed Meadowvale. For a time the place had had a bell jar dropped over it as an historical village, so old houses were preserved. But now my father's house had gone, torn down to build an elaborate pseudo-classical monstrosity, as I saw it.

Maybe the child of that new house will regard it as their first kingdom. Maybe they will be able to Google-earth the 2020 version and walk through their distant past. Catch a glimpse of themselves on the passing Google camera sitting on the front steps.

Death doesn't take people; it takes whole worlds. Including you and yours. Onto the next. And the next after. We clasp things to our hearts, while they beat.

Note: I finally found a digital copy of 'The Manor of Roses' at https://archive.org/details/Fantasy_Science_Fiction_v031n05_1966-11_PDF/mode/2up. You can find a print copy in *The Best Fantasy Stories from The Magazine of Fantasy and Science Fiction*, ed. Edward L. Ferman (1985).

Book Reviews



Chris Pak, *Terraforming: Ecopolitical Transformations and Environmentalism in Science Fiction* (Liverpool University Press, 2016, 243pp, £25 [also available Open Access])

Reviewed by Bodhisattva Chattopadhyay (University of Oslo)

We have always been terraforming, and terra has always been forming us. The globe is currently under different stages of lockdown due to a pandemic whose origins and expeditious spread are connected to anthropogenic impact on the environment. The consequent decline of industrial activity has revealed clear blue skies and unpolluted rivers in many parts of the world for the first time in decades. Since the rapid industrialization that went hand in glove with the rapacious colonial destruction of the world, the creed of progress depended on transformations of the environment, including extraction, mobilization and relocation of planetary resources to suit human needs. The emergence of science fiction is closely connected to this creed, and thus has always had something to say about the effects of these processes. Terraforming is the distended potentiality of these processes within sf as the prospect of human voyages to outer space and other worlds swell with the desire to remake all planets in the image of Earth, capable of supporting human life and activity.

Chris Pak's *Terraforming* is a brilliant study of this theme. Chronologically arranged, the book follows the trajectory of anglophone sf as it moves from frontier colonialist imaginaries of terraforming to more recent, complex understandings of planetary systems and the limits of human intervention in planetary transformation. Tracing both geoengineering and extraplanetary terraforming, Pak shows how the notion of terraforming transforms with shifts in scientific understanding, as well as how scientific and cultural understanding also transforms with these changes in imaginary landscapes. For me, this is the book's USP: that it is a history of anglophone sf as much as it is of the scientific culture around science fiction in its uniqueness as a world-system.

Given that there have been relatively few studies of terraforming as a theme in either science or sf, it is unsurprising that Pak's introduction, space often kept for some form of literature review, is remarkably brief. The core of the book consists of five chapters, each of which takes on a particular theme and historical

period for its analysis, juxtaposing different ideas of terraforming within those decades. Pak takes us from pre-1960s British sf in the first chapter dealing with 'proto-Gaian' narratives, through frontier narratives in the American pulps in the second chapter, ecological concerns and environmentalism of 1960s/70s sf in the third, ending with eco-cosmopolitanism and an expected study of the terraforming classic, Kim Stanley Robinson's Mars Trilogy (1992–6) in the final chapters. Pak's brilliant study merges close readings of several well-known works from the perspective of environmentalism and terraforming, such as Olaf Stapledon's *Star Maker* (1937), Frank Herbert's *Dune* (1965), Ursula Le Guin's *The Dispossessed* (1974) and Pamela Sargent's *Venus* trilogy (1986–2001), with a zoomed-out perspective on other Anglophone sf, numerous pulp writers, and general speculation about terraforming in their contemporary period.

At the heart of Pak's analysis is a concern with the political and ethical implications of terraforming. Of central importance now is the potential of speculation to offer alternative possible visions of the future as well as ways to address the physical, social and psychological trauma of climate change. This is the reason why there has been a growth in the environmentalist 'futures industry' which has gone hand in hand with diversity debates in sf. From the Arthur C. Clarke Center for the Human Imagination at UC San Diego and the Center for Science and the Imagination at the Arizona State University to think tanks and innovation foundations such as NESTA and X-Prize, numerous organizations now present speculation as a way forward when it comes to imagining sustainable futures. These visions offer one side of a speculative fantasy (or goal) of 'terraforming 2.0' or transforming Earth itself for a better future for all. On the other side of this fantasy lies the continuing shadow of 'technosolutionism', the dreams of terraforming Mars or heading into outer space to colonize other worlds.

This torturous duality is at the core of Pak's engagement with the history of the genre. In the earliest works that Pak dives into, such as the novels of H.G. Wells, M.P. Shiel and Arthur Conan Doyle, the 'otherness of nature', which is itself part of a longer history of environmental understanding between nature as a site of worship and rejuvenation versus nature 'red in tooth and claw', underpins the technocratic control and resistance to nature. Pak introduces one of the key themes in the book via this duality: an effort to master or control a hostile nature as the *raison d'être* of Wells's geoengineering fictions versus the proto-Gaian living worlds of Shiel and Doyle, in which the object is to break down the boundaries between human, nature and non-human others, or reveal the destructiveness of human attitudes towards its others. While the technocratic scientific management is driven by a certainty in the techno-scientific method, the latter is driven by different kinds of mysticism, be it of the

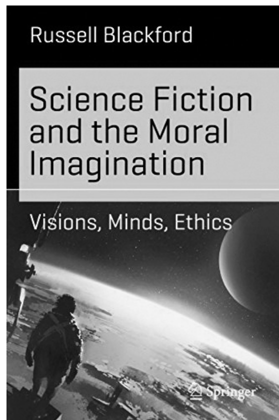
ultimate unknowability of cosmic processes or the sublimity of the otherness of Earth itself. Stapledon's philosophical explorations work as a bridge between these two perspectives, scientifically unassuming yet resistant to scientific management on the one hand, and atheistic yet philosophically in tune with the ethics of cosmic mystery on the other. Indeed, while sf criticism has often contrasted Vernian and Wellsian sf, from Pak's reading one is tempted to argue that the Wellsian and Stapledonian contrast is the engine of ecological perspectives within sf.

In Chapters 2 and 3, Pak gradually moves towards more dystopian visions embedded in terraforming sf, especially taking issue with scientific management. From post-war American pulps, described by Pak as 'the American pastoral', to the environmentalism of the 1960s and '70s, the politics of expansionism and progress come under criticism. By the 1960s, the legacies of imperialism and the Cold War threatened the visions of benign managerial technoscience, which Pak explores via the environmental movements and new ecological awareness of the period. While the previous chapter focuses extensively on geoengineering, Pak shows how later works by writers such as Herbert, Le Guin, Robert Heinlein and Ernest Callenbach employ ecological themes as a political commentary via the metaphor of terraforming alien worlds. Chapter 4 registers the shift towards eco-cosmopolitanism in Sargent's trilogy and Frederick Turner's *Genesis* (1988), where a new attitude develops out of countercultural beliefs around the harmony and balance between humanity and nature. Terraforming is thus reintegrated within the philosophical attitudes of making a home in other worlds, even alien worlds, just as space exploration opens-up new possibilities and ideals near the end of the Cold War. The move thereafter to Robinson's trilogy is expected, given its importance in foregrounding terraforming as a theme in sf as well as its unique synthesis of the different concerns that have run throughout Pak's study. Robinson's Δv argument as to whether humanity can escape its history of violence, conflict and ecological destruction in its approach to newer worlds is at the centre of Pak's analysis, as are the newer themes of trash, recycling and compost.

Pak's book is remarkable in its breadth and depth, which is why its shortcomings are indications of future possibilities rather than significant criticisms of the book itself. There are some omissions in the work that would have been useful to consider, such as the role of Gaia theory in the later works of Isaac Asimov. The omission of non-anglophone sf might be considered a more significant gap – one that requires other people to engage with the same history with different materials and reveal the theme of terraforming in global sf.

Consideration of later works, at least those of the first decade of the twenty-first century, would also have been useful. An expanded scope incorporating

transmedial analysis, especially with film and video games, some of which are hinted at in the conclusion is another direction for future research. Strategy games, in particular, have had a strong thematic connection to terraforming and geoengineering, and some exciting work is being done now with video games that could benefit from a similar historical study.



Russell Blackford, *Science Fiction and the Moral Imagination* (Springer, 2017, 216pp, £15)

Reviewed by Paul March-Russell (University of Kent)

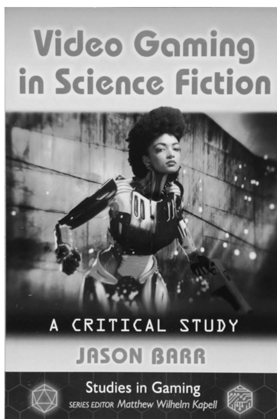
Published as part of Springer's 'Science and Fiction' series, Russell Blackford's book offers an accessible, if familiar, introduction to the sf genre and its engagement with moral and ethical dilemmas. It is informed by Blackford's deep knowledge of classic genre science fiction, and by his background in moral philosophy, especially his recent publications on the social effects of technology and the implications of transhumanism. The book itself is not overly theoretical, which adds greatly to its readability, but also detracts from the expectations of readers wanting something more substantial. Although Blackford supplies various disclaimers, hoping that his book will still appeal to more seasoned readers of sf and to be more than a philosophy textbook, he nonetheless concedes that it 'could function […] as an introduction to SF for someone with only limited knowledge', and that he hopes it may 'be useful for philosophy teachers'. These *are* laudable aims, but they do point to the kind of book that it is, constrained by the series in which it is published.

This impression is confirmed by chapter one, in which Blackford gives a (very) potted definition and history of science fiction, a brief overview of moral philosophy, and an indication of how the two may interact, primarily through the impact of technology, social organization and sexual expression, encounters with other life-forms, and the transformation of the human body. In chapter two, Blackford gives a slightly lengthier history of sf and, in chapter three, a more detailed account of morality, ethics and virtue. As Blackford concedes, he is steeped in anglophone science fiction, and within that, his preferences are drawn to the engineering paradigm that he finds in H.G. Wells, runs into American pulp sf, and is given new expression in the revivals of hard sf and space opera during the 1990s. The history of sf that he offers, although prefigured by Johannes Kepler's *Somnium* (1608), is one that does not differ from such critics as Brian Aldiss, Darko Suvin and Gary Westfahl. There is no mention of more recent

histories, such as that by Adam Roberts, for whom Kepler is also a key figure. The only non-anglophone writers that Blackford spends much time with are Karel Čapek and Lixin Ciu, since their science fiction can be reconciled to the engineer paradigm. The authors who recur most often include Isaac Asimov, Robert Heinlein, Arthur C. Clarke, Iain M. Banks and Ursula Le Guin. (Somewhat frustratingly, the index only lists themes not authors.) Other female writers who receive significant mentions include Nancy Kress, Ann Leckie and Mary Doria Russell; chapter four offers (another) potted history, this time of feminist sf in the wake of the women's movement, but – apart from Charlotte Perkins Gilman – there is little acknowledgement of women's sf before the 1960s. With the exceptions of Samuel R. Delany and (to a lesser extent) J.G. Ballard, the New Wave is skirted round while cyberpunk, specifically William Gibson, is relevant solely for the interface between people and machines. One feels that Blackford's sympathies are much more with hard sf writers such as Gregory Benford, Greg Egan and Kim Stanley Robinson. As Blackford admits, the history that he offers is not original but his preferences and omissions are significant, beyond an insight into the likes and dislikes of a critic, because they illuminate the kinds of sf he feels best illustrate moral dilemmas. His choices also reinforce the very practical model of moral philosophy that Blackford pursues; his is not a book for opaque discussions about Emmanuel Levinas and 'the ethical turn'. Blackford's reference-points are classic ones (Aristotle, Kant) as well as more recent figures such as Bernard Williams and – representing posthumanism – Cary Wolfe.

Chapter three exemplifies both the strengths and weaknesses of Blackford's approach. After reviewing the definitions of moral philosophy, he argues that science fiction can be read as 'enabling' the exploration of philosophical questions. This is hardly a controversial proposition, especially when Blackford illustrates his point with an analysis of James Blish's well-known *A Case of Conscience* (1953). Before he gets there, though, Blackford offers a wide-ranging discussion of moral conundrums in such contrasting works as Kurt Vonnegut's *The Sirens of Titan* (1959) and the Star Wars spin-off, *Rogue One* (2016). He then follows this with separate sub-sections on William Golding, Heinlein, Blish, Russell and Banks. This structure is pretty much how the subsequent chapters proceed, and Blackford's ability to flip from one text to another makes the reader glad to have a chronological list of the primary texts as an appendix (even though this reaffirms the sense of the book being a primer for the uninitiated). Although Blackford's selection of texts is marked by his preferences, he displays both deep knowledge and a not uncritical fondness, which makes his analyses enjoyable to read. At the same time, though, there is a tendency (not unfamiliar in the Springer series) to simply name-check one text after another, so that we have a roll-call of titles, but little sense of a coherent, unfolding thesis.

Chapter four broadly looks at how moral structures may differ in the future or within alien encounters. Blackford's texts include such staples as Aldous Huxley's *Brave New World* (1932) and Asimov's *The End of Eternity* (1955), the almost obligatory comparison between Heinlein's *Starship Troopers* (1959) and Joe Haldeman's *The Forever War* (1974), before considering the roles of exoticism and gender, concluding with Delany's *Stars Like Grains of Sand* (1984). Chapter five looks at science fiction's love/hate relationship with technology and the biosciences before resolving into a discussion of Promethean science versus the martyred figure of Galileo. Chapter six explores some of science fiction's most well-known embodiments of otherness – aliens, robots and mutants. This paves the way for the discussion of transhumanism in chapter seven, which takes J.D. Bernal's *The World, the Flesh and the Devil* (1929) as its ur-text. Blackford views this work as a hinge between texts about external prowess, such as Philip Wylie's *Gladiator* (1930), and later fictions concerned with the internal enhancement of human beings. The concluding chapter draws upon Spider-Man's mantra, 'With great power comes great responsibility', to argue that science fiction's representation of the possibilities of science, for example in terraforming other worlds, compels us to consider the moral responsibilities that come with such power. Little of this is new to the sf reader (although it's no hardship to hear it being repeated so entertainingly), but it does position the book – despite Blackford's opening claims – as one for the novice reader. To that end, s/he could do worse than starting with this engaging introduction. The more seasoned reader, although likely to welcome Blackford's analyses of a wide-ranging selection of novels and films from within the Anglophone tradition, will ultimately want something more challenging.



Jason Barr, *Video Gaming in Science Fiction*, McFarland, 2018, 156pp, £41.50

Reviewed by Rob Mayo

Coinciding with Steven Spielberg's 2018 adaptation of Ernest Cline's *Ready Player One*, and bookended by the rebooted *Jumanji* franchise (2017–) as well as standout episodes of *Black Mirror* ('USS Callister', 2017; 'Striking Vipers', 2019), Jason Barr's study of video games and their players in sf is undoubtedly timely. Each medium imagines a future radically altered by new technology. Barr argues, however, that sf's depiction of video gaming remains rooted in the past, leaning on stereotypes of gamers and gamer culture that have undergone minimal revision in the intervening decades.

Barr's primary critical lens is the videogame culture itself. He draws from this a vocabulary of 'hardcore' and 'casual' gamers, and the shift in understanding of the 'geek' as a social pariah to a fashion lifestyle. Alongside the ubiquity of video games, democratization of geek culture and diversification of gamers, Barr identifies in the corpus of video game-focused sf a characteristic fascination with the erosion of the barriers between games and 'gamespace' – the perception that the real world is governed by rules as unfair and arbitrary as many video games. Consequently, there is a danger in these texts for characters to become addicted to games or become permanently absorbed into the game world. Despite the apparent popularization of geek culture in the mainstream, the negative stereotypes which developed in the 1980s remain strong, as Barr identifies dated tropes and characterizations in even the most 'geek-friendly' authors such as Cline.

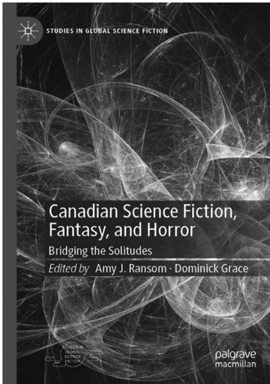
While this tired stereotype is exclusively male, one could never mistake these texts for self-critical feminist works. Barr notes an increased visibility of female characters in video games, but credits this not to attempts to more accurately represent the expanded audience, but to games catering to the desires of a maturing male audience for hypersexualized depictions of women. The deplorable 'Sad Puppies' anti-diversity voting campaign in 2013, just a year before the even more deplorable 'Gamergate' harassment of female video game developers and critics, provides the background to Barr's most substantial chapter, on how the hypermasculine and pseudo-military persona promoted by many video games is reflected in literature. Barr's all-male texts, such as Orson Scott Card's *Ender's Game* (1985), fail to move beyond androcentric narrative tropes, despite the subversive potential offered by characters who may adopt a different gender through their gaming avatar.

Chapters 5 introduces (in just six pages) the theme of video games being a means of rebelling against an evil, controlling corporation. Barr identifies this in just two texts, *Ready Player One* and the hitherto unmentioned *The Restoration Game* (2010) by Ken MacLeod, which somewhat undermines that claim that this is a generic trope. Barr also makes the interesting point that gamers expect to be entertained over a much longer period than consumers of many other artworks do, and that this may be the cause of greater animosity between gamers and developers when games such as *Mass Effect 3* do not meet player expectations. (Although, having said that, the delay and rework of 2020's *Sonic the Hedgehog* film in response to fan reaction to the trailer demonstrates this process at work in other media.) Barr provides further evidence of anti-corporation sentiment in chapter 6, which introduces a new corpus of texts as Barr switches focus to 'juvenile science

fiction' aimed at young readers. In establishing this generic distinction, Barr observes that in contrast to the 'digital pioneers' who grew up in the 1980s, there now exists a generation of 'digital natives' with no experience of an analogue world. It is curious, however, that the authors examined in this chapter are all from the digital pioneer generation (or older!), and so it is unsurprising that Barr finds no deviation from tropes established in the previous chapters.

Barr begins his book with a 'disclaimer' that he '[has] played video games for much of [his] life', and his long immersion in this topic is evident throughout. His broad knowledge is often let down, unfortunately, by poor editing – meditation on Barr's ideas is frequently disrupted by the need to parse what he is trying to say when a typo appears. Another barrier to interpretation is the nebulousness of the texts that Barr examines. Since the number of sf texts which depict video games is purportedly remarkably small, the lack of a clear listing of them, their authors and publication dates, seems like a perverse oversight. Several texts emerge as major touchstones – *Reamde* (2011) by Neal Stephenson and *Killobyte* (1993) by Piers Anthony are perhaps the most significant after Cline's and Card's works – but the only means by which one can gauge the relationships between texts in the corpus is the number of pages devoted to them. Barr typically also analyses texts sequentially, without pause for examining how texts contrast or present continuity with other texts examined earlier, which also denies the reader easy orientation.

Perhaps most perplexing is the afterword which, after six chapters exclusively analysing written texts, turns focus to 'The origins of video gaming in science fiction cinema'. If *Tron* (1982), *War Games* (1983), *Nightmares* (1983) and *The Last Starfighter* (1984) are originary for the corpus of written texts, why is this section relegated to the end? In fairness, however, Barr's is a potentially massive topic: thematic projects like this must be restrained by somewhat arbitrary limitations and Barr cannot be faulted for (mostly) narrowing his focus to literature. The shift in focus to film makes some structural sense, too, given Barr's overall argument that the literary corpus remains largely beholden to stereotypes about video games and gamers which were developed in the 1980s, and popularized in no small part by these films. Barr ultimately concludes that these stereotypes are undergoing a slow erasure and ruefully wishes for 'hopefully more progressive' texts. Given the even more recent return to prominence of video games in sf film and television, one hopes that this fascinating topic is given further academic attention, and that Barr's pathfinding work lights critics' way to the texts which he finds absent so far.



Amy Ransom and Dominick Grace, eds. *Canadian Science Fiction, Fantasy, and Horror: Bridging the Solitudes* (Palgrave, 2019, 394pp, £89.99)

Reviewed by Heather Osborne (University of Calgary)

Published as part of Palgrave's Global Science Fiction series, this volume's organizing metaphor is derived from Hugh MacLennen's 1945 novel, *The Two Solitudes*, in which the Canadian protagonist delves into his intersecting French and English identities. Amy Ransom and Dominick Grace point out, however, the many other identities that compose Canadian society, including the crucial influences of colonialism, postcolonialism and diaspora. They correctly note the anxiety of Canadians to positively identify themselves and their culture as opposed to negatively, in contrast with their more powerful North American neighbour. This anxiety raises questions about Canadian sf: is it a blend of empirical traditions or a liminal space? a mosaic of separate identities or a constellation that connects the various islands in the archipelago? As the volume's title implies, the editors focus on explicit or implicit connections: the bridges, webs, juxtapositions and contrasts that highlight the 'complex and problematic nature of intercultural engagement'.

Ransom and Grace's introduction is an excellent overview of Canadian sf criticism. The editors situate the genre within national history and mainstream (realist) literature. They argue that Anglophone Canadian sf emerged in the 1970s, rooted in the CanLit tradition, whereas the more clearly distinct sffq (*la science-fiction et le fantastique québécois*) grew from and with Québec's *révolution tranquille* of the 1960s. Ransom and Grace introduce the few definitions of Canadian sf which have so far been enumerated, including those of David Ketterer, Robert Runté, John Robert Colombo and Christine Kulyk, yet they do so without much comment on either the definitions' accuracy or their usefulness to later critics. For Ransom and Grace, these definitions remain 'clearly contestable' and not sufficient to distinguish a particular strand of sf as purely Canadian. Nevertheless, Ransom and Grace provide a useful background to the study of Canadian sf.

The volume is divided into a prologue, epilogue and five main sections. Allan Weiss's prologue argues that, in the nineteenth and early twentieth century, anglophone and francophone speculative writers wrote near-future scenarios in order to promote their own views of Canadian nationhood. Weiss's reading of early Canadian sf as supportive of the British Empire is surprising but fascinating;

Weiss argues that generally both anglophone and francophone authors saw the influence of the British as a bulwark against American annexation, with the francophone authors viewing the empire as more likely to preserve francophone autonomy for Québec. The prologue provides a strong foundation for the remaining sections, which include examinations of postcolonialism, nationalist myths, generic fluidity, posthumanism and queer approaches to sf.

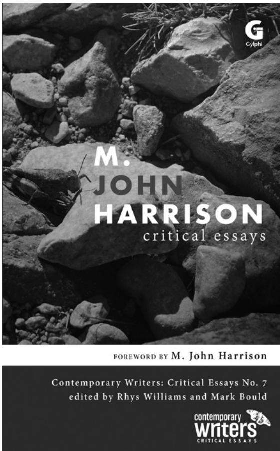
The volume is at its strongest when the contributors question and problematize the editors' organizing metaphor. Evelyn Deshane's chapter on Kathleen Winter's *Annabel* (2010) offers insight into the difficulty of applying sf concepts to a non-sf text. Wayne/Annabel, the intersex protagonist of the novel, is situated as a fantastic other who 'is coded as a monster but without the speculative landscape where the monstrous can be redeemed'. This reading offers a cogent critique of Winter's approach to writing an intersex protagonist, while outlining specific texts as counter-examples which provide multiple perspectives from transgender and intersex characters, lessening the issue of having a single character stand in as the only possible (and fantastic) representative of an identity.

Meanwhile, Judith Legault points out that the metaphor of bridging suggests two bridgeheads of equal power and agency, which denies the reality of systemic oppression faced by First Nations peoples. Legault deftly illustrates how Indigenous writers and filmmakers can make use of speculative tropes to re-imagine the autonomy and cultural resilience of their protagonists. The use of speculative themes promotes 'Indigenous modes of regeneration' rather than acquiescing to reconciliation's implicit recolonialization through apology and acceptance. Legault's reading of Jeff Barnaby's horror films focuses on moments when horror tropes are used not *as horror*, but as 'comforting and a source of cultural strength' for the protagonist. Similarly, Kristina Baudemann examines how Barnaby's films fit into the movement of Indigenous future imaginaries by insisting upon the 'right to represent the ongoing colonial oppression of First Nations people in Canada from an Indigenous perspective'. Baudemann engages deeply with the bridging metaphor, examining its implications of both connection and separation, and insisting on the space for Indigenous authors and filmmakers to turn away from and deny the colonial metaphor of two, or even multiple, solitudes. Both chapters powerfully make the argument that 'colonialism *is* horror' and it is yet to be resolved or reconciled.

Several chapters, while not providing overarching analyses of Canadian sf, nevertheless are highly useful as examinations of individual authors or specific texts. These include Ritch Calvin's close reading of major themes in Judith Merril's short fiction, amplified by excerpts from her interviews and non-fiction. Wendy Gay Pearson explores the idea of queer futurity in two novels by Asian-

Canadian authors, Hiormi Goto's *The Kappa Child* (2001) and Larissa Lai's *Salt Fish Girl* (2002), and argues that the speculative allows for a doubled escape (and queerness) in the novels, as it offers a new space for Asian-Canadian authors to write outside the cage of literary autoethnography that diasporic authors are expected to accept. Sylvie Bérard's look at Michel Tremblay and Élisabeth Vonarburg ably demonstrates the fruitfulness of reading two authors together; one considered a realist and one an sf specialist. She finds intriguing commonalities between them, such as their use of 'transfiction' in which a single universe can hold an entire host of stories.

In all, Ransom and Grace provide a thoughtful examination of current trends in the field of Canadian sf, with careful attention to multiple voices heard among the nation's speculative writers. Ransom and Grace rightly point out that few monographs have been written on specific Canadian sf writers, so this volume fills a necessary niche as the field develops more deeply. Most of the contributions are accessibly written, and provide many different critical approaches as well as examining a wide variety of texts, with a strong focus on postcolonialism. As such, the volume offers a wealth of beginnings for examining Canadian sf.



Rhys Williams and Mark Bould, eds. *M. John Harrison: Critical Essays* (Gylphi, 2019, 294pp, £17.99)

Reviewed by Kevin Power (Trinity College Dublin)

Do not escape: this is the message, endlessly reiterated, of M. John Harrison's fiction. It isn't that escape is impossible. Escape is possible. But escape to where? Beyond the veil of reality lies only more reality. The fantasy kingdom is cluttered with rubbish. The fantasy kingdom *stinks*. This is what the gnostic adventurer Dr Petromax discovers, when, in 'A Young Man's Journey to Viriconium' (1985), he passes through a bathroom mirror in a London café and takes up residence in the longed-for otherworld of Viriconium: 'It was winter, and everything was filthy. Inside, the houses smelled of vegetable peel, sewage, perished rubber. Everyone in them was ill.' Seria Mau, in *Light* (2002), undergoes grotesque bodily alterations in order to merge with her K-ship; the price of escape is irreversible immurement. Fantasy will not save us; but neither will reality, always assuming that 'reality' is something that can even be apprehended by human cognitive powers. As

John Clute, writing in the *Encyclopedia of Science Fiction*, said of *Climbers* (1989): 'the only difference between the lords and ladies in science fantasy and climbers clinging to a rock in the real world […] was that the latter knew where they were.'

In their terse, resonant introduction, Rhys Williams and Mark Bould remark that 'To read Harrison's fiction is to be aware, perhaps for the first time, of what it means to read fantasy'. This awareness is not always welcome news. Williams and Bould record a student's response to the *Viriconium* books: 'I see his point […] But I *hate* him for it.' It is easy to hate a writer who insists so doggedly that nothing in his work is 'anything more than words on a page'. If the average fantasy reader opens a new paperback with the motto from Fox Mulder's office very much in mind – I WANT TO BELIEVE – then Harrison wants you *not* to believe. His career-long task has been to sever sf/f from its escapist-pulp umbilical cord – to make it *grow up*. His fiction stages a range of assaults upon that most basic of fantasy axioms, the suspension of disbelief. It is a project that, in Harrison's best work, collides with his extraordinary talents as a narrative artist. (To take one instance: for a writer who hates the very notion of space opera, and who, in *The Centauri Device* [1974], composed a nihilistic parody of the genre, Harrison writes tremendously good space battles.) In all of Harrison's work you can glimpse an artist of prodigious imagination doing his best to dismantle the very concept of an imaginary world, and insisting, in a prose that hovers somewhere between the grumpy and the gorgeous, on the mundane unknowability of whatever is left behind.

Harrison's work is such a natural subject for academic criticism that this volume, based upon a one-day conference at Warwick University in August 2014 (see *Foundation* 119) feels overdue. We do, of course, have Bould's earlier collection (with Michelle Reid), *Parietal Games: Critical Writings by and on M. John Harrison* (2005), which performed the useful service of assembling Harrison's early book reviews alongside critical pieces by Farah Mendlesohn, Rob Latham and others (see the SF Foundation website of how to obtain copies). The sf/f academic community is already in Bould's debt several times over, but his work here, alongside that of Williams, deserves high praise – not least because the editors, having provided a modest introduction, tactfully withdraw and allow the collected essays to stand for themselves.

The book is divided into three notional sections, roughly corresponding to three phases of Harrison's career: the early fiction, especially the *Viriconium* books; the middle period, during which he largely abjured sf/f and wrote three strange, essentially Hermetic mainstream novels, *Climbers* (1989), *The Course of the Heart* (1992) and *Signs of Life* (1996); and the late-career sf/f renaissance that produced *Light* (2002), *Nova Swing* (2006) and *Empty Space: A Haunting*

(2012). Each section contains riches but there is, alas, a marked diminution in usefulness as things go on. Which is to say that the first half of the book – containing as it does pieces of outstanding scholarship – forms an indispensable companion to Harrison's *oeuvre*, while the second half, less scholarly and more theoretical, isn't perhaps quite so indispensable.

The good stuff first. Harrison himself provides a foreword, which oscillates winningly between the gnomic and the revelatory. It will almost certainly become a key resource for future Harrison scholars. 'I'm not interested in causality,' he writes. Nor does he bother much about 'character, motivation, a self-consistent world, empathy or just a really wonderful story (all staples of fiction's ongoing Heritage Experience)'. His goal is to 'Provide a sense of linkage for unlinked things'. There is also, of course, a sense in which this is the goal of academic literary criticism, as Harrison himself suggests: 'how satisfying, in the end, to drive up to Warwick U in August 2014 & be irradiated & broken up for parts by other people & wind up bricolaged back together in a book like this'.

The first essay, Rob Latham's 'A Young Man's Journey to Ladbroke Grove: M. John Harrison and the Evolution of the New Wave in Britain', is superb. Addressing 'the project of genre renovation undertaken by Michael Moorcock's *New Worlds* during the 1960s' through the lens of Harrison's literary criticism for that magazine, Latham manages to tell a new version of the old New Wave story, and to produce alongside this a satisfying account of the fundamental coherence of Harrison's evolving critical positions – his conviction that 'the basic escapism of genre-bound entertainment' is 'psychologically and morally corrupt'. Paul Kincaid's typically rich and perceptive '"There Have Been Many Viriconiums": From the Pastel City to London' traces the historical, literary and cultural archaeology of Viriconium, from Roman ruins to A.E. Housman to Harrison, illuminating 'how a city built of words can never be the same and is always the same', and reflecting on the ways in which this reflects 'the evolution of Harrison's writing style.'

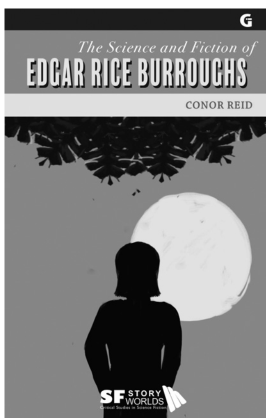
The best and most useful essay in the book is Ryan Elliott's 'On Versioning'. In Elliott's formulation, 'versioning' refers to the ways in which Harrison 'reuses images, descriptions, scenes, characters and narrative structures to bridge texts in a primarily thematic and interpretive manner.' Paying forensic attention to the texts themselves, and drawing percipiently on contextual material, Elliott provides something like a key to Harrison's *oeuvre*: 'One text becomes a context for the other and vice versa, beckoning different readings of each and thereby making new texts out of both'. The essay is a foundational pillar of Harrison scholarship.

Different key, same lock: Christina Scholz, who has already published valuable work on Harrison, here reads the *Empty Space* trilogy in parallel with one of its key intertexts, the film *oeuvre* of Andrei Tarkovsky. In the work of

both artists, according to Scholz, ‘Returns and salvation are impossible, and we remain outside the sublime space, looking in’. Also indispensable is Vassili Christodoulou’s ‘The Misanthropic Principle’, which sets Harrison alongside the philosopher John Gray, arguing that both men seek perspectives ‘untainted by the mythologies of liberal humanism’.

Too many of the later essays suffer from the besetting vice of academic literary criticism, whereby some unfalsifiable theory (or some bit of half-understood science) is grafted onto an artist’s work like an extra head onto Frankenstein’s monster. So, you get stuff like this: ‘Deleuze and Guattari conceive of the cosmos as consisting of *chaosmos*, an originary chaos made up of flows of difference, which exists on the *plane of immanence*’. Do they, indeed? In his essay on fractals and the *Empty Space* trilogy, Nicholas Prescott almost gives the game away: complexity theory, he writes, possesses ‘for literary scholars […] an extremely attractive lexicon’. Attractive lexicons do not good criticism make – although in fairness to Prescott, his chaos-theory reading of the trilogy does render more or less lucid some of the novels’ knottier metaphysics.

There is, perhaps inevitably, a great deal in these pages about *Viriconium* and the *Empty Space* trilogy, and not so much about Harrison’s other work. (A few mentions of *The Committed Men* [1971], Harrison’s Ballardian debut; scant traces of ‘Running Down’ [1975], perhaps Harrison’s most important short story). No one collection can do everything, of course. Cavils aside, Bould, Williams and their contributors have done sf/f scholarship a valuable service. *M. John Harrison: Critical Essays* is an essential companion to the work of a difficult, ornery, disarming, obsessive artist.



Conor Reid, *The Science and Fiction of Edgar Rice Burroughs* (Gylphi, 2018, 269pp, £16.99)

Reviewed by Aren Roukema (Birkbeck, University of London)

Conor Reid explores Edgar Rice Burroughs’ extensive fiction-based dialogue with scientific theories, specifically those related to Martian (speculative) astronomy, anthropology, neurasthenia, Social Darwinism and eugenics. Reid provides detailed, thoroughly researched histories for each of these sciences, and shows remarkable familiarity with Burroughs’ priorities, philosophies and prodigious body of work. The book frequently acknowledges Burroughs’ (often self-perpetuated) reputation as

‘a disinterested *producer* of mass entertainment’, but Reid takes the author seriously, as he seems secretly to have desired. He identifies numerous transactions between science and fiction in Burroughs’ work, particularly with relevance to his commitment to a nature-bound, pioneer masculinity and a teleological Social Darwinism. Reid draws a nuanced picture of an author who mediated a masculine, nationalist, and white-centred view of nature and history – usually built on dated rather than cutting-edge scientific knowledge – to his enormous readership, thus significantly affecting the politics and ‘popular scientific conceptions’ of his day.

A necessarily brief biographical introduction lays the groundwork for the book’s comprehensive and critically engaging investigation of Burroughs’ various turns to scientific knowledge in constructing his plots, worlds and characters. Reid’s creative opening prefaces this discussion, as he takes an imaginative tour through the World’s Columbian Exposition in Chicago, 1893, where a young Burroughs worked on a display for his father’s battery company. Reid stakes out the book’s cultural and intellectual terrain on the virtual map of the Expo, highlighting exhibits on indigenous Americans, anthropology, neurology, and American military weaponry and territorial expansion. He draws some straight lines between the Exposition and Burroughs’ later ideas and writings, but he is largely interested in establishing the broader episteme within which Burroughs thought and worked.

Reid arranges five chapters around the scientific currents discovered in his virtual stroll through the Exposition, though there is often significant overlap. The first chapter situates Burroughs’ *Barsoom* novels in the ongoing construction of Mars and its potential inhabitants, a simultaneously fictional and scientific process of discovery that, Reid illustrates, *Barsoom* both reflects and perpetuated. The chapter opens with a review of the ‘standard history’ of the Mars imagined from the theories of Giovanni Schiaparelli and Percival Lowell, and closes by situating the *Barsoom* novels within the context of two contemporaneous sf tropes: the mad scientist and the ‘super-evolved’ brain. The chapter also supports the book’s central interest in Burroughs’ depictions of ‘race and racial hierarchies’, situating the Martian hierarchy of red, green, blue, white and black races in a complex web of politics, capitalist economics, masculinity and Social Darwinist evolutionary theory. Chapter two continues in this direction, analysing the relationship between eugenics and utopia in Burroughs’ sfnal *Amtor* series, as well as a non-sf novel, *Pirate Blood* (1932). Reid provides an exhaustive survey of the history of eugenics, and details Burroughs’ personal belief that the science offered the possibility of reducing criminality, imbecility and moral deviance, a feat achieved in the *Amtor* novels through ‘technology and evolutionary science’.

Although published in Gylphi's SF Storyworlds series, it is science and fiction, rather than science fiction *per se*, that is Reid's focus. The remainder of the book delves into texts that are rarely considered relevant to sf criticism or genre history, but continues to consider the collision of science and fiction in Burroughs' worldbuilding. Chapter three explores the impact of Victorian anthropology on *Tarzan*, revealing the eponymous character as both 'an object of anthropological study' and an anthropologist himself. The next chapter draws on the frequent identification of neurasthenia as a disease which strikes at male virility, situating Burroughs' Western novels – and Westerns in general – within strategies to recover from urban effeteness through adventure in the American West, the primitive jungle or the homosocial spaces of war. Chapter five hones in further on the relationships between gender, race, war and evolution in Burroughs' fiction, particularly his *Caspak* trilogy, written during World War One, which portrays 'bellicosity, violence and aggression' as evolutionary tools and 'natural expressions of masculine identity'.

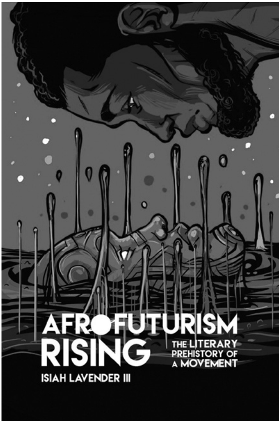
As a result of their shared focus on masculinity and racial hierarchy, the last three chapters can be productively read as a unit, while the *Barsoom* and *Amtor* sections are equally related via critique and interpretation based in sf studies. Though evolution is purportedly the subject of the last chapter, evolutionary degeneration, natural selection and Social Darwinism are central aspects of the preceding chapters as well; this subject is better seen as a unifying theme, one just as pivotal as the integration of science and fiction. Reid provides in-depth, well-researched historical context for the various strands of evolutionary thinking that seem to have influenced Burroughs, though an even more complete analysis might have included the 'root races' introduced by theosophy, which, as several scholars have observed, seem to have influenced Burroughs' conceptions of racial hierarchies in continual process of physical, intellectual and moral evolution. However, this, and many more aspects of Burroughs' engagement with various levels of scientific thinking, can certainly be left for future research, and Reid's treatment provides an excellent resource for those who wish to pursue it.

While sf criticism has often taken Whiggish or presentist approaches to the sciences that motivate authors, Reid's approach is refreshingly inclusive, and carefully avoids questions surrounding the epistemological currency of particular theories and hypotheses, focusing instead on their potential to generate narrative. His treatment of Burroughs' fiction is a similar combination of inclusive and exhaustive. He includes at least fifty novels in his analysis, in addition to stories, journalistic articles and private correspondence. Reid is also not content to let individual novels stand in for extensive series. He specifically argues the critical merits of grappling with the breadth of a series rather than

single, more popular texts like *A Princess of Mars* or *Tarzan of the Apes* (both 1912). This approach reveals transformations in Burroughs' thinking over time, and allows Reid to track developments in science, perspectives on race and gender, and world and American history – particularly that related to the World Wars.

Reid takes the stance of an objective historian in detailing the views on racial hierarchy, male dominance and virility, and nationalistic American aggrandizement that so frequently motivated Burroughs' writing and worlding. He hides nothing, but he largely presents Burroughs' fictional depictions and real-life views – as well as their likely intellectual and cultural origins – without critique, allowing the reader to make their own judgments. These will likely be easy enough for most readers to form, but some may find themselves discontent with this methodologically distant approach. Certainly, however, this stance allows Reid to avoid obscuring either his depiction of Burroughs or his illustration of popular science and its cultural manifestations in the period. He clearly illustrates that despite the simplicity of some of Burroughs' fiction, the man himself held complex, sometimes contradictory views, subject to change over time. Reid's approach enables a nuance that is able to capture these changes and contradictions without subjecting them to an overall critical structure as, for example, when he illustrates Burroughs' dedicated attempts to reproduce the point-of-view of indigenous Americans in his *Apache* novels.

Sf fans and critics may also wish for more assertive analysis of the place of the author and his texts in the history and 'mega-text' of the genre. Reid's early chapters are useful contributions to the historiography of early sf, but he is much more interested in the science that authors like Burroughs brought into fiction. Reid is interested in how Burroughs' novels exemplify 'the complex and captivating ways in which science and literature can interact, overlap and inspire', but this interest is more on the level of historians of literature and science like Gillian Beer or George Levine than of sf critics. The way in which Reid dissects Burroughs' consistent deployment of anthropology, eugenics and neuroscience suggests there might be value in adjusting the genre categories into which Burroughs' work is placed, but this is not Reid's focus. It will thus also be left to the reader to decide why *Tarzan* has been canonized as adventure fiction or exploration fiction, while the *Barsoom* and *Amtor* series, which converse with many of the same anthropological and evolutionary influences and priorities, are received as science fiction. *The Science and Fiction of Edgar Rice Burroughs* does, however, make clear the significance of Burroughs as a popularizer of scientific knowledge, a disseminator of various socio-cultural paradigms built upon that knowledge, and an often-overlooked influence on the development of science fiction.



Isiah Lavender III, *Afrofuturism Rising: The Literary Prehistory of a Movement* (Ohio State University Press, 2019, 230pp, £26.95)

Reviewed by Lars Schmeink (HafenCity Universität)

The field of American Studies in Germany (and most of Europe) is different from its namesake in the United States, first and foremost in that American Literature has a higher ranking as its main object of interest. Whereas political, sociological and historical subjects can be part of the American Studies curriculum, a majority of scholars deal with America through a cultural, mostly a literary lens. Further, American Studies is mainly included in English departments, teaching the US-side of language and literature to education majors and has to vie for too few tenured positions, often restricted to one scholar specializing in 'America'. As a result, the field suffers from being conservative and consensual – driven by administrators looking for 'broad knowledge' and common ground to impart to future teachers. In consequence, more often than not, works that emerge from this field are safe and uninspired readings of canonical texts that do little to further an understanding of literature and its significance within our current historical moment.

Why am I telling you all of this? Because the book on review is a shining example of what scholarship on canonical and historical American Literature could look like, if done right. To my eye, as a German Americanist, Lavender has produced a valuable study of the science-fictionality of early African American literature – an important book for everyone in sf studies to consider. But he has also produced an even greater book, a paradigm-shifting book for anyone working in American literature, as it not only showcases the value and relevance of early African American literary experience for today's culture, but that rereading it through an Afrofuturist lens reveals layers of meaning beyond those that any generation of scholars could have seen before, because the science-fictionality of the works in question is being shaped by the continued injustice done to African Americans. Reading this book, and thinking about its impact, has become even more poignant, as America is burning while I write these words, and the President just invoked a law from 1807 to quell what he considers an insurrection: peaceful protest against systemic racism.

Interestingly, it is from this same vantage point, only a few years earlier, that Lavender starts his book. For him, the key to understanding the African American experience in the USA, and to unlocking the hope expressed in movements

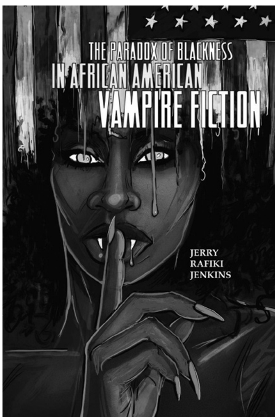
like Black Lives Matter, is already existent in the earliest examples of African American culture, in its origins of enslavement and the double-conscious practices involved in living in the US while being black. In extending the concept beyond our current technocultural moment and its impact on African American imaginaries of the future, Lavender argues that Afrofuturism represents ‘a set of race-inflected reading protocols designed to investigate the optimisms and anxieties framing the future imaginings of black people’. The focus is on reading not producing, and this allows Lavender to claim that many literary expressions of African Americans, from the slave narratives of the early nineteenth century to the folkloristic novels of Zora Neale Hurston, from Richard Wright’s angry depiction of systemic oppression in *Native Son* (1940) to Colson Whitehead’s *The Underground Railroad* (2016) can all be bound together in a ‘transhistorical feedback loop’.

In a bold move to extend the western concepts of technology and science to include non-western concepts such as a ‘black networked consciousness’ or ‘spiritual technologies’ such as conjuring and root-work, Lavender claims a technocultural language to explain how black experience have always been science-fictional. In six insightful chapters, he moves from a broad view of African enslavement and the employment of ‘freedom technologies’ towards the 1970s and its future of a racial conflict ending in war in John A. Williams’ *Captain Blackman* (1972). The first three chapters each discuss different technological strategies of dealing with the hyperviolent realities of slavery in the nineteenth century: from the feelings of alien abduction when transported to strange lands, to literacy as a technological tool for freedom, to the creation of more favorable pocket universes as slaves hid out in attics and fled to northern states. In the latter three chapters, Lavender foregoes the broader view, and focuses specifically on three central texts as exemplary case studies, extending the historic trajectory to include novels by Hurston, Wright and Williams.

All these function as a direct link to contemporary African American experiences and visions of a future that guide actions such as the Black Lives Matter protests today. For example, an Afrofuturist reading of Hurston’s *Their Eyes Were Watching God* (1937) reveals the alien-otherness of black experiences in a segregated South, and promotes the literalized search beyond the horizon for a world that accepts and loves Janie, the novel’s protagonist. In this, Lavender argues, lies a utopian longing for a better future, which Hurston expressed in order ‘to value and humanize blacks’. In contrast, the Afrofuturism of Wright’s *Native Son* is a radical challenging of racist stereotypes. In mercilessly showing us the forced identity, the black man become murderer and rapist, Wright uses his novel to challenge the construction of blackness as ‘a *cyborg*, an *alien*, and a *monster*’. Lavender reads the novel as a klaxon-call,

a reminder to the black networked consciousness not to become the image of white stereotype and prejudices.

In conclusion, *Afrofuturism Rising* is an important work for sf studies, for American literature and especially for African American studies. It connects canonical texts with today's cultural moment, revealing the long history of othering and oppression that has been plaguing America, and it argues for the science-fictional reading practice of Afrofuturism as a means to understand the past. Moreover, it is this movement, from the past to the present, Lavender loudly proclaims, which allows for a way to think about the future through Afrofuturism. It is only fitting then that he wraps up the book in a gesture of expansion into time and space – by gesturing towards contemporary African American authors and by broadening Afro-futurism to African futurism, and inviting study into the many facets of black science fiction.



Jerry Rafiki Jenkins, *The Paradox of Blackness in African American Vampire Fiction* (Ohio State University Press, 2019, 201pp, £26.95)

Reviewed by Sara Wenger (Virginia Tech University)

In this book, Jerry Rafiki Jenkins exhumes a notable undead figure: the black vampire. With the exception of Jewelle Gomez's *The Gilda Stories* (1991), purportedly the first African American vampire novel to be published in the USA, and Octavia E. Butler's *Fledgling* (2005), Jenkins finds the discourse around African American vampire fiction to be woefully limited. In response, Jenkins dedicates each chapter to a different African American vampire novel, including Tananarive Due's *My Soul to Keep* (1997), Brandon Massey's *Dark Corner* (2004) and K. Murry Johnson's *Image of Emeralds and Chocolate* (2012). These stories serve as an answer to the text's guiding question: is there more to being black than having a black body, and what might be the answers to that question mean for African Americans in the twenty-first century?

From the outset, Jenkins proves himself to be an enthusiastic, well-read disciple of African American vampire scholarship. At every turn, Jenkins showcases his fascination and, in many instances, adoration of bloodthirsty creatures, particularly those who do not resemble the age-old, Dracula-type monster. As Jenkins states from the beginning: these 'novels are not only de-whitening the vampire myth [...] they are also suggesting that the

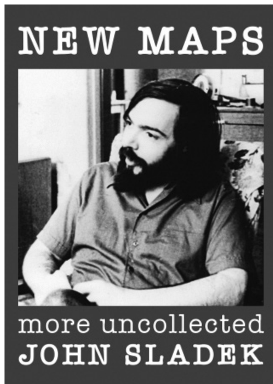
question of whether there is more to being black than having a black body cannot be answered in a racially or culturally homogenous vacuum precisely because blackness, like all racial identities, is about what black people think of themselves *and* what nonblack people think of black people'. Throughout his text, Jenkins cites scholars of Afrofuturism, Afrocentrism and Pan-Africanism, slowly unraveling the racial and gendered constructions of African American vampires and what they mean in current times.

While Jenkins laments the academy's disinterest in African American vampire novels outside of Gomez and Butler, one of the book's most satisfying chapters focuses on Shori, the central figure in Butler's *Fledgling*. Part of the centuries-old Ina people, 53-year-old Shori is shown to be complicated, ambitious and brazen – all the while appearing as a pre-adolescent African American girl. Jenkins troubles conceptions around Shori and her appearance with equal parts delicacy and alacrity. Here, Jenkins places past sf scholarship on *Fledgling* against characterizations of Shori, described by others in the novel as 'black', 'jailbait' and, on matters of pleasure, 'disturbing'. To Jenkins, Butler's vision of Shori represents a 'transhuman blackness' where 'every human, regardless of skin color, is born black because every human, except for the rare exceptions, has melanin'. Figures like Shori constitute a changing of the guard in the world of vampire fiction, as 'new-black' vampire novels show how 'all Americans, like every human on the planet, are black' and, as such, 'the material inequalities that exist among so-called races are not natural or divine but created and reproduced by human minds and hands'.

In recent years, the relationship between American horror and blackness has been moulded by stories such as Jordan Peele's *Get Out* (2017), a film that demands audiences reckon with the deep-rooted carnage of white violence. Before visionaries such as Peele burst onto the scene, classics like George A. Romero's *Night of the Living Dead* (1968) provided a critical look at the horror genre, masquerading social commentary under layers of ghouldom. Now, Jenkins offers a new look into the complicated relationship between blackness and things that go bump in the night. In particular, what does it mean for the monster to be labelled or presented as black? Furthermore, what does it mean for one to be *treated* as black, particularly in contemporary American society?

For some sf readers, the undead might be better off buried. To be fair, Jenkins sprinkles a savoury amount of sf elements over his talk of African American vampires, including issues related to transhumanism and visions of worlds beyond the stars. Additionally, sf heavyweights such as Butler and Nalo Hopkinson make memorable appearances in the text, leading readers into discussions on sf and race. Lastly, dedicated sf readers might recognize the series in which this book is published – New Suns: Race, Gender, and Sexuality

in the Speculative, edited by Susana M. Morris and Kinitra D. Brooks. If given a chance, open-minded sf readers will leave this text satisfied, no matter their preferred subgenre. Above all, this book serves as an important intervention in the world of vampire fiction, urging twenty-first century readers to think about blackness beyond the corporeal.



John Sladek, *New Maps: More Uncollected John Sladek*, ed. David Langford (Ansible Editions, 2019, 254pp, $20)

Reviewed by Jeremy Brett (Texas A&M University)

There is always a risk in collecting the ‘uncollected’, from any creator. By the time one reaches that level of granularity – having already assembled and read the novels, the stories, the essays, the reviews, the articles – one wonders, how much is there left to find? One asks, where is the dividing line between being ‘comprehensive’ and merely gathering up the remnants after everything of worth has already been published and read? Even with a career as prolific as John Sladek’s, that question is still worth asking in response to David Langford’s sequel to *Maps* (2002), his previous anthology of Sladek’s writing. Is what is left that significant?

With *New Maps*, the answer is … ‘Well, maybe.’ There is some gold to be found among the remaining Sladek ore, but overall, the collection does not contribute a good deal to a greater understanding of Sladek and his career. What we have are, for the most part, reiterations of Sladek’s satirical impulses and his incisive wit; while these are welcome, little here is revelatory. As Langford notes in his introduction, ‘In the alarmingly many years since *Maps*, further “lost” stories and hints of Sladekian weirdness have come to light. These are now collected in *New Maps*, together with essays, squibs, and numerous reviews that were excluded from *Maps* … if only because that book had become far more substantial than first expected.’ So, for the most part these are second-string efforts, which could not make the cut for the first collection. This is not to say that the volume is not worth reading, only that the reader should be advised up front as to what they will be getting. There are stories, essays and reviews, but really, they are only supplements to the main Sladek *oeuvre*.

Of course, almost anything from Sladek is still worth reading. The collection has numerous examples of his searing social commentary and his playfulness with style: ‘The Rebus Version of *Mein Kampf*’ (1976) summarizes Hitler’s work

in a series of homemade symbols that reduce his meandering and hateful 'thought' to childish and easily-deciphered images. The noir satire, 'My Greatest Case: An Unauthenticated J. Edgar Hoover Story As Dreamed to John Sladek' (1974), coming not long after Hoover's death, entertainingly mirrors his concern with his own reputation and his obsession with fighting Communism.

Sladek's concern with the issues of his day is also on full display. In the long essay 'Peace & Paradox' (1967), Sladek ably dissects the paradoxes inherent in the current theories surrounding the all-encompassing threat of nuclear war. In 'Science Fiction and Pseudoscience' (1972), he not only unravels the connections between the two in plain language: 'The question "What if …" is asked by both sf and pseudoscience. The main difference is, the pseudoscientist doesn't know when to admit it's all a game'. He also notes the inherent paranoia and existential fear present in pseudoscience, emotions that continue to radiate in today's era of 'fake news' and people's willingness to believe outright falsities. As Sladek notes, 'Scientology seems to share one feature with the Nazi enterprise, and that is paranoia. Fear is probably a saleable commodity anywhere.' He is equally keen to point out social foibles: in 'Sense Fission Corner' (1996), for example, he is relentless in his analysis of American prohibition laws (drugs, gambling, profanity) in all their pointlessness and inefficacy. As Sladek mordantly notes, 'Prohibition, forever popular, is forever politic.'

His analyses of sf are replete with insights both witty and heartfelt. 'Four Reasons for Reading Thomas M. Disch' (1980) includes a trenchant analysis of Disch's story 'The Squirrel Cage' (1966) and a discussion of how Disch portrays change as a way of trying to escape death. 'The Science Fiction Virus' (1990) should be required reading for anyone who writes or thinks about writing sf. In this essay, Sladek relates what brought him to sf in the first place: after the same kind of excitement many of us develop for sf in childhood, he decided as a teen that it was all too frivolous and he 'would write only Good Stuff. Or if not Good, at least Avantgarde Stuff.' His pomposity was eventually deflated by an encounter with a Philip K. Dick story, appropriately enough: 'That did it. The goose bumps were back, and I was reinfected. Here was a popular fiction that could tackle big themes like the nature of reality, *and get away with it*. This had to be worth trying.' Despite Sladek's characteristic informality, the essay provides real insight into Sladek the Person rather than Sladek the Satire-Generating Machine.

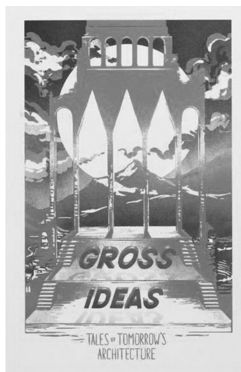
Much of the collection is given over to book and film reviews, which I found to be the most engaging portion of the volume. Even here, Sladek is never off his game, providing thoughtful commentary on several works. Given his deep love for Philip K. Dick, it comes as no surprise that his 1982 review of *Blade*

Runner is riddled with a thoughtful analysis of Dick and his work, concluding with a loving tribute:

> In an interview shortly before his death, Dick said he approved the script, which had been rewritten by David Peoples from an earlier version. 'Peoples did a *terrific* job. He's got one thing in there that moved me to tears, and it's not in my book. It's something that he inserted and it's beautiful.'
>
> I think I know the answer. It would be the scene where Rachael is sitting at the piano and – but see the film. And read the book. Meet the man.

His reviews can be cutting yet always fun. He dismisses Ursula Le Guin's *The Eye of the Heron* (1982) with 'It is almost as if these people constructed their two societies not to live in, but solely for the purpose of appearing in a didactic novel by Ursula K. Le Guin.' He notes of the film *Return of the Jedi* (1983) that 'the effects are spectacular, when the dialogue isn't putting you to sleep'. Of Isaac Asimov's *The Robots of Dawn* (1983), Sladek comments that 'everyone in the book seems eager to make small talk endlessly, e.g. explaining the metric time system of the planet Aurora, which we don't need to know', and he notes with disappointment that 'Asimov is, in his way, addressing real problems about the interaction of humans with artificial intelligences. He may even be raising real ethical and social questions which will need answers 20 years hence. But because he chooses to bury it all in a humdrum whodunit, retrieving the message (if any) is just not worth it.'

In sum, *New Maps* is welcome as everything from Sladek is welcome. Sladek fans and scholars will no doubt derive much pleasure from these bits and pieces, as should general readers. But in the end, *New Maps* will be most valuable for the Sladek completist while the rest of us can, I think, be satisfied with his major works.



Edwina Attlee, Phineas Harper and Maria Smith, eds. *Gross Ideas: Tales of Tomorrow's Architecture* (The Architecture Foundation, 2019, 208pp, £12.90)

Reviewed by Michael Godhe (Linköping University)

Gross Ideas is a collection of sf stories that accompanied the Oslo Architecture Triennale 2019. As Hanna Dencik Peterson and Nina Berre point out in the preface, it is not an exhibition catalogue but rather 'works by established and emerging writers, architects and engineers.' The goal

of the book is to ‘challenge the way we disseminate architecture’, and to provide readers with alternative *possible* future scenarios in light of the current climate crisis, although some of the stories also deal with more *preferable* futures (those with a utopian stance) and *probable* futures (those slightly more dystopian). The collection aims also to challenge readers to think otherwise, as is common in the science fiction genre. As Phineas Harper writes in the introduction, ‘it has become clear that society needs new stories’ and challenge existing narratives on ‘endless economic growth’.

The collection contains seventeen contributions, ranging from end-of-the-world-scenarios (‘You wanted this’ by Lev Bratishenko) to utopian sustainable futures (‘Oli Away’ by Edward Davey). Some of the stories are, although interesting, programmatic and suffer from the ‘don’t-tell-me-show-me’ syndrome common in blueprint utopian writing before the twentieth century. Recurring keywords throughout the collection are, for example, ‘degrowth’, ‘organic matter’, ‘CO2’, ‘climate change’, ‘flooding’, ‘living architecture’, ‘consumerism’, ‘capitalism’, and so on.

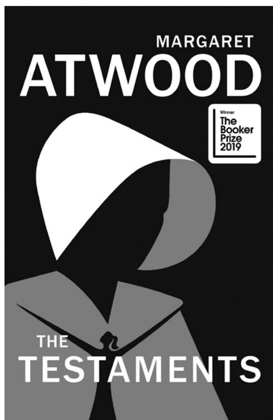
Some of the contributions are more evocative, however, catching the reader’s attention by portraying drastic changes that seem probable or possible, although not always preferable. ‘Bittersweet’ by Rachel Armstrong imagines living architecture and places ‘the well-being of all, at the centre of human development’, meaning not all people but ‘All life’. Other stories depict future worlds where, for instance, we are constantly alert to flooding due to climate change but have adjusted to live with the threat (‘Materiality’ by Cory Doctorow), or post-apocalyptic cityscapes where we live in the ruins of industrial civilization (‘Deliberate Ruins’ by Camilla Grudova; ‘Cat’ by Deepak Unnikrishnan). Doctorow’s story is especially interesting by posing ‘the problems of forecasting in a chaotic climate’. To have future awareness is, among other things, to understand that the future means uncertainty and sometimes unpredictability.

With some exceptions, most of the short stories depict future worlds where the belief in progress has come to an end. As such, the collection can be viewed as part of a degrowth movement in our time. Many of the narratives challenge rationalist ideas on how to organize society and the idea of endless economic growth. Most of the stories are, therefore, if not low-tech, then at least not reliant upon robots and AI (with the exception of ‘In Arms’ by Jo Lindsay Walton) or human expansion into outer space.

Most of the stories do not depict a post-scarcity future. However, in ‘Oli Away’, Davey tells us his dream of the world in 2050 through the voice of the protagonist, travelling around (by train and boat) a world still with problems but improving thanks to the ‘global progress of renewable energy’. Cities are much cleaner and environmentally friendly, deforestation has come to an end

as has eating animals, and many countries work for making their space an ecological civilization without nationalism or closed borders. Similarly, in Robin Nicholson's 'Growing the New Life: London 2039', the protagonist recalls how the improvements began with the schoolchildren's strikes inspired by the Swedish climate activist Greta Thunberg (there is even a movement called 'the Gretarians' in the story). The fight for climate change led eventually 'to meat being shunned, cheap flights becoming unaffordable and the next stage of capitalism, if you can call it that.'

In many of the contributions, new communities have emerged in the wake of capitalism's end, although there are some warning signs of going backwards to pre-capitalist societies ('Placation' by Sophie Mackintosh). In their preface, Petersson and Berre refer to the Danish writer Carsten Jensen: 'The earth, the way it was before climate change, cannot be revisited. Man can dream of walking backwards, but nature knows no dreams of coming home.' Life will never be the same, but hopefully this collection can open alternative futures beyond the logic of capitalist realism. And yes, it is possible to imagine capitalism's end before the end of the world!



Margaret Atwood, *The Testaments* (Chatto & Windus, 2019, 432pp, £20)

Reviewed by Katie Heffner (University of Kent)

Recent cultural representations of *The Handmaid's Tale* (1985) have figured into everything from political protests in support of women's rights to thematic birthday parties by the uber-rich. The iconic image of the red cloak as a symbol of oppression has become more salient following political ruptures such as the 2016 US Presidential election. As our historical moment shares a marked resemblance to the nation of Gilead, Margaret Atwood's sequel provides insights into the demise of corrupt theocratic nations. The follow-up turns away from illustrating the architecture of oppression, and instead articulates the inner work of Gilead's saboteurs.

Three narrators comprise the whole of *The Testaments*; two teenage girls differing in social and cultural upbringing (Daisy and Agnes), and an elderly and lamenting Aunt Lydia. Authorship is attributed to their depositions by identifying Daisy and Agnes as Witness 396 A & B, and Aunt Lydia as the 'Hologram of Ardua Hall.' Their testimonies document their individual involvement in the demise of Gilead. Each voice provides a contour to one another, based upon

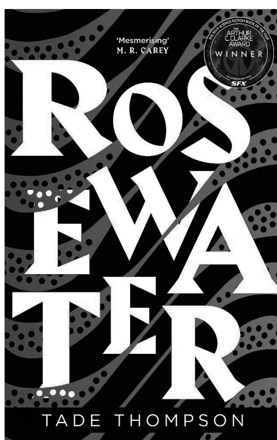
each character's relation to living within the state. Daisy is a young teenager who lives in Canada with her parents who own a second-hand clothing store. In an act of rebellion, Daisy attends a protest and is spotted by Gilead operatives to be the stolen child, 'Baby Nicole'. Daisy's parents are killed and she is forced to go into hiding. Agnes, by contrast, grows up within Gilead. She is sexually assaulted and contemplates suicide when she is offered to Commander Judd as a wife. Agnes is visited by Aunt Lydia who provides an escape from the arranged marriage by recruiting her into Aruda Hall to become an Aunt. These multiple points of view, from within and outside Gilead, provide an insight into its power structures, while the perspective of the youthful characters is counterpointed by Aunt Lydia's tortured – and torturing – character.

Aunt Lydia is the most intriguing figure within the novel. Atwood provides Lydia's backstory of her life as a female judge to the matron of handmaids, troubling our previous concept of her as a sadistic and enthusiastic tormentor. In the early days of Gilead, Lydia along with her female colleagues were captured and brought to a stadium with other women en masse. Forced to witness executions of non-compliant women, living in filth without access to food and basic hygiene, Lydia was subjected to dehumanizing tasks in her induction into Aunthood. Her memories of physical abuse within an isolation cage, referred to as a 'think tank', serves as a testimony of trauma endured. This revealing narrative complicates Aunt Lydia's villainous depiction in *The Handmaid's Tale*. Instead, we see the dehumanization of a powerful woman reconstructed for the cruel purposes of the regime. This revelation asks of readers to no longer position Aunt Lydia as an implacable and uncaring abuser of captured women. The storyline of her ascent into Aunthood provokes readers to examine their own privilege and culpability within racist, sexist and ableist institutions.

Contouring the oppressive structures that situate the novel, the main characters explore their freedom and agency through whatever means are available to them. As Aunt Lydia reflects on her culpability in rearing handmaids, she also proclaims how she has earned the 'freedom to rebel.' While she dutifully earns the trust of commanders through her austere violence towards subordinates, Lydia is able to utilize her power for subterfuge. Agency is also explored and contested by Daisy who, following her identification as the revered 'Baby Nicole' and the death of her surrogate parents, is forced to work with the Mayday resistance group. Daisy is smuggled back into Gilead and lives under the watch of Aunt Lydia and her apprentice Agnes. She complains of the clothing in Gilead, extreme etiquette and the Pollyanna-esque Agnes, with whom she must join forces to leave Gilead with a skin-embedded data chip that contains insider intelligence of Gilead. While there are pangs of teenage protest narrated within their journey, these two adolescents must negotiate their liberties in order to survive.

Atwood employs the same narrative strategy of *The Handmaid's Tale* by framing her story with the transcript of an academic symposium of Gilead Studies. As in *The Handmaid's Tale*, Atwood satirizes the non-empathetic behaviours of historians and academics, in which the history of Gilead is reduced to the level of 'cultural events' such as 'historical reenactments' and 'day excursions.' This futuristic symposium is centred on ascertaining the authenticity of the cultural products left from Gilead. Yet, as a team of researchers retrace the journey of Agnes and Daisy, they find the statue of Aunt Lydia with its nose cut off within an abandoned chicken coop, a desecration that points to the more disturbing truth of Gilead and its downfall.

In light of HBO's acclaimed adaptation of *The Handmaid's Tale,* anticipation of *The Testaments* was mired by high expectation (and only added to by its contentious winning of the 2019 Man Booker Prize). As a sequel, the novel is complicated, to say the very least. The absence of Offred's lyrical voice is only made more resounding by the smug and duplicitous rhetoric of Aunt Lydia. While Offred's calculating voice surveys furniture within her cell in the opening pages of the *Handmaid's Tale*, Aunt Lydia begins *The Testaments* by glaring at a statue made in her honour. Atwood wrote *The Testaments* to answer questions raised at the conclusion of *The Handmaid's Tale*, specifically setting out to describe how Gilead fell. (To what extent *The Testaments* was written with the trajectory of the TV series in mind – in contrast with George R.R. Martin's yet-to-be-published end to *Game of Thrones* – is also moot.) While *The Testaments* provides an understanding of the cooperative work of the Mayday collectives, questions still persist. What of the reunion of Agnes, Daisy and Offred? What of the Unwomen who are forced to work with radioactive sludge? What was done to the Aunts and the commanders after the fall of Gilead? In addition to these loose ends, the novel also asks questions of its readers about their own privilege and agency to shape change.



Tade Thompson, *The Wormwood Trilogy* (Orbit, 2019, £8.99/vol.)

Reviewed by Peter Sands (University of Wisconsin-Milwaukee)

Thompson's trilogy, comprising the multiple award-winning *Rosewater* (UK 2018) and its sequels, *The Rosewater Insurrection* and *The Rosewater Redemption* (both 2019), is available both individually and as a three-book bundle. It takes place in a near-future Nigeria, the site of an alien invasion that brings both the possibility of a symbiotic, generative

relationship with the invader and the complete eradication of the human race. This dilemma is further complicated by its setting: a post-American but not post-colonial Africa beset by the legacy of colonialism and the demons of its own struggles to move beyond internecine conflicts and petty rivalries. Throughout, Thompson deploys elements of techno-thrillers and satire, plus cheeky references to sfnal tropes, films and comics, to form a central narrative of resistance to a seductive but ultimately destructive alien presence that is also a figure of colonialism.

The trilogy concerns an alien presence that has inhabited Earth for years, slowly introducing xenoforms that are transforming life on the planet, especially humanity, to make it amenable to the wholesale transfer of the alien consciousness. This is stored as memories on giant servers light years away, their last-ditch attempt at species survival after destroying their native ecosystem. Obvious comparisons to the environmental or anthropogenic destruction of the Earth abound, not least of which is the sense that humans are bent on the same forms of self-genocide that the Homians, as they are ultimately known, performed on themselves. Although the aliens have established seed cultures they think of as 'footholds' in several places around Earth, the one driving Thompson's narrative is set in a remote part of Nigeria where the city of Rosewood springs up around the nexus of the alien intelligence. This parasite has been seeding the atmosphere with its microbes, creating a kind of mesh network across the planet, a database in which the whole of human history and memory is present and accessible to the alien hivemind, as well as to some humans with a genetic variation that permits them to access what is known as the 'xenosphere'. This mesh provides a means for human assimilation, alien manipulation but also resistance to the invasion. But this summary hardly imparts the flavour of the novels. Thompson combines and plays with detective fiction, horror, sf, fantasy, comic books, gender identity, human-alien/human-robot sexual relationships, adventure tropes, Dark Continent tropes, Yoruba mythology and cultural practices, Christian and other narratives of death, rebirth and sacrifice, environmentalism, metaphysical questions about self, memory and identity, and, no doubt, a host of others I missed while noticing something else. The trilogy is a gleefully creative engagement with genre conventions and cultural references lifted from Anglo-American fiction and reinvented for an African – mostly Nigerian – context and story.

Rosewater begins *in media res*, on what is known as 'Opening Day 2066', an annual event at which the large, alien biodome in the centre of Rosewater opens and heals the sick and infirm. And also sometimes creates horrific genetic maladaptations. The alien presence, called Wormwood, in reference both to the Book of Revelation and the name the alien was called by the British

when it first attempted its earthly invasion in England, is a sentient being sent to prepare the way for the transmission of the alien consciousness. The novel introduces the main characters Kaaro, Aminat, Femi Alaagomeji and Oyin Da, as well as a host of minor characters, both human and alien, whose narratives intersect and intertwine throughout the trilogy. The protagonist of the novel, Kaaro, is a former small-time criminal and current secret agent who is also part of the subset of humans who can access the xenosphere. The novel charts his transformation into a key figure at the nexus of human-alien interaction, as well as the personal crises and losses the other characters experience as they come to terms with the presence of an alien being which appears so benign that the city of Rosewood is first known as 'Utopicity', for its abundance of electricity, clean water, food and life-extending healing Wormwood confers on those who live near it. There are intimations that all is not as good as it seems – the United States has walled itself and its population off from the rest of the world in a xenophobic (and ultimately correct) response to the alien presence. The time-shifting, sometimes hallucinatory, first volume concludes with the observation that the aliens are slowly replacing human biology with their own:

> I don't know what will happen when we all become full xeno, but it's like climate change or that asteroid that will collide with the Earth and wipe us out. We all think we'll be dead and gone by the time the carnage begins.
>
> The alien in me says that is delusional thinking. For this disaster we will all be present. For this we will all have front row seats.

The Rosewater Insurrection begins in 2055, eleven years before the events that bookend the first novel, and ends in 2067. As with the first novel, the action moves back and forth in time and through the xenosphere, as more of the alien plans are revealed and the tension between Rosewater and the state of Nigeria, anxious to incorporate and control the apparent bonanza represented by an all-knowing alien and wary of an increasingly independent and uncontrollable city in its midst. But, as befits act two in a three-act drama, this middle novel is fast-paced and more linear, taking the characters introduced in the first novel and putting them on a collision course with Nigeria that develops into a full-scale rebellion and secession, even as the alien intent to simply eradicate humanity becomes clear to most of the players. By the end, the mayor of Rosewater, the charismatic Jack Jacques, has reached a stalemate with Nigeria and negotiated a settlement with Wormwood in which the bodies of the dead are available for occupation by alien minds transmitted from their home planet. That world has been destroyed by the extractive zeal of the aliens, an allusion to the environmental destruction of Earth's present, and part of the set-up for the final confrontation.

The Rosewater Redemption picks up not long after the end of *Insurrection*. Jacques is still mayor, Nigeria's president still opposes him, and the aliens have sped up the rate at which they are transferring the stored consciousness/memories of their billions of beings into reanimated human bodies. Kaaro, long retired from active duty in the secret police, is one of the last two 'sensitives' able to access the xenosphere. Rosewater is a large, functioning city that appears to have reached detente and symbiosis with the alien at its heart. But continuing petty grievance disputes, international jockeying for access to Wormwood, and the slowly accelerating alien invasion collide in an out-and-out war for the survival of the human race. The final battles bring shifting alliances, revelation of internal disputes among the aliens themselves, and a clearer understanding of the environmental and political disasters on the alien home-world that set into motion their efforts at colonization.

What to make of these novels? Comparisons that come to mind include Junot Diaz's *The Brief Wondrous Life of Oscar Wao* (2008) for similar mining of pop culture tropes and use of a language other than English without always bowing to a reader's need for translation. Another easy comparison is to Cixin Liu's *Remembrance of Earth's Past* trilogy (2006–10), with its threat from a mostly unintelligible and non-commensurate alien intelligence bent on a decidedly hostile takeover. A third obvious comparison is to the novels by Octavia Butler collected as *Lilith's Brood* (1987–9), in which a spacefaring race roam through the galaxy, absorbing the genetic material and consciousness of all intelligent species they encounter. As with those other works, Thompson takes seriously the existential threat posed by an alien invasion while also not shying away from the complexities of the situation, including the affective response the aliens themselves might have to their own encounter with our civilization. In Thompson, the aliens, advanced well beyond humans, also intend to take over the planet by occupying its bodies with their minds, but some of them are sometimes surprisingly empathetic to and even in some cases sympathetic to human concerns.

Thompson's use of Yoruba mythologies in sf also has a history, and not just with contemporaries such as Nalo Hopkinson and Tomi Adeyemi – William Gibson's *Neuromancer* (1984) brings trickster *orishas* into the mix as part of its exotic depiction of the quasi-mystical elements of cyberspace. But Thompson most definitely is not playing for exoticizing effect; the very setting is Yorubaland, and includes a metatext of references to the symbolic importance of twins, albinism, witchcraft and other elements most likely accessible even to white Anglo-American audiences, while also presenting a distinctly non-white view of the alien encounter.

That view explicitly engages with the colonial past of Nigeria, from satirical references to white foolishness and impotence, to serious questions of what

it would mean for the entire planet to be the target of a colonizer bent on replacing humanness with alienness. Echoes of supplanting indigeneity with colonial usurpers abound, frequently lifting the humour and pathos of the novel to a serious reflection on the continuing, bidirectional effects of colonialism and imperialism. These overlays of critique enrich the text: the aliens first land in England and possibly also in the Americas, but the action takes place in Western Africa, in a region whose history and present are so completely shaped by that other invasion and those other thefts of resources and people that they are inescapably part of Thompson's fiction. For how can one read a novel written by an Englishman of Nigerian descent, set in a contemporary Afrofuturist Nigeria, and in a genre long dominated by and participating in colonialist fantasies, without also encountering, as it were, the narratives of colonialism? Here, the central characters and concerns are almost purely African: the United States has taken itself off the board as a global player to avoid contact with the aliens; England responds to the alien presence with military force just short of nuclear bombs; the aliens have established their beachhead in a risen Nigeria, and so on. Nigeria in the novel is only a normal human country: corrupt, dependent of military power and secret operations by its intelligence services, and largely in thrall to China's economic and technological largesse. The very normality of the jockeying for power and the heroic effort to stop an alien invasion, located in a technologically rich African future both rife with utopian possibility and human failings, is in itself a rewarding element of this most striking trilogy.

Call for Submissions
Decolonising Science Fiction

In the wake of the worldwide protests after the killing of George Floyd, and the toppling of statues implicated in the legacy of the slave trade, we propose a special issue of *Foundation* on the topic of 'decolonising science fiction'. As John Rieder and others have argued, the emergence of sf as a genre is embedded in colonial discourses of the late nineteenth century. The pursuit of new frontiers in outer space, within the Earth or under the oceans not only mirrored 'the scramble for Africa' but was also informed by the racialist and pseudo-scientific ideologies of the period. In more recent years, authors such as N.K. Jemisin, Jeannette Ng and Tade Thompson have sought to confront sf with the racist legacy of its origins. Afrofuturism, expressed popularly in films such as *Black Panther* and the music of Janelle Monáe, is only one of the ways in which artists of the African diaspora are reimagining sf. We argue, though, that the decolonisation of sf goes beyond Afrofuturism and necessitates other indigenous futurisms. At the same time, we also need to consider the work of white authors (Gwyneth Jones' *White Queen*, Geoff Ryman's *Air* or Lavie Tidhar's *Central Station*) who are engaged in critiquing the Anglo-American tradition. Lastly, the intersectionality of critical race studies necessitates that we also consider decolonisation not only in terms of race but also in the intersections with gender, sexuality, class and the (dis)abled body.

Topics may include (but are not limited to) the following:

- Race and racism in science fiction
- Critical race studies and the history of science fiction
- Institutional racism in awards, publishing, fandom and sf criticism
- Afrofuturism and indigenous futurisms
- Utopia and the 'decolonisation of the mind'
- Hauntology and 'lost futures'
- 'Womanism' and Fourth Wave Feminisms
- Intersectionality – race, gender, sexuality, class, disability
- Sf and border theory
- Teaching a decolonised science fiction curriculum

Submissions should be approximately 6000 words long and written in accordance with the style guide (see www.sf-foundation.org/journal). This special issue will be published in August 2021; entries should arrive *no later than* Monday, 4th January 2021. Please send your article to the journal editor at paulmarchrussell@gmail.com