Foundation

The International Review of Science Fiction

Alastair Reynolds: Interview and Reviews

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 2016

Individuals (three numbers)

United Kingdom	£20.00
Europe (inc. Eire)	£22.00
Rest of the world	£25.00 / $42.00 (U.S.A.)
Student discount	£14.00 / $23.00 (U.S.A.)

Institutions (three numbers)

Anywhere	£42.00 / $75.00 (U.S.A.)
Airmail surcharge	£7.00 / $12.00 (U.S.A.)

Single issues of *Foundation* can also be bought for £7.00 / $15.00 (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.

Address for subscriptions:
The Science Fiction Foundation, c/o 75 Rosslyn Avenue, Harold Wood, Essex, RM3 0RG, U.K.
Email: Roger Robinson, sff@beccon.org – all messages should include 'SFF' in the subject line.

Back issues can be obtained from Andy Sawyer – see contact details below.

Editorial address (for submissions, correspondence, advertising):
Dr Paul March-Russell, journaleditor@sf-foundation.org

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

Books for review:
Please send to Andy Sawyer, Science Fiction Foundation Collection, Sydney Jones Library, University of Liverpool, PO Box 123, Liverpool, L69 4DA, UK. Please clearly mark 'For Review'.

Reviews (up to 1500 words in length) should be sent to A.P.Sawyer@liverpool.ac.uk

ISSN 0306-4964258

Foundation

The International Review of Science Fiction

Contents

Volume 45.1, number 123, 2016

Features

Book Reviews

Editorial

Paul March-Russell

In a cinema (actually, a vast number) not that far away (there's no avoiding it), a certain film landed on Planet Earth. And, somehow, the internet didn't crack under the weight, first, of expectation and, then, post-credits analysis.

Before its opening last December, *Star Wars: The Force Awakens* had been trailed and dissected for longer, it often felt, than the actual franchise has been in existence. But the welter of commentary since its premiere has been staggering and it seems that everybody has to have an opinion about it. Does the film effectively reboot the franchise for a new audience or merely wallow in nostalgia? Does it have the epic grandeur of the original or is it empty pastiche? Is Rey a feisty new protagonist or an unrealistic superheroine? Is Kylo Ren a suitably menacing villain or a hipster with daddy issues? Is Finn a flawed hero we can identify with or tokenism to tick the diversity box? Is...? And so on, and so on, and so on.

As Andrew M. Butler notes in this issue, social media has become an echo chamber. The blogs, posts and forums that have sprung up around *The Force Awakens* are a perfect example of this phenomenon. I am sure they will provide valuable material for analysts of fan culture. But, what I have read – and, here, I admit my outsider status not only with regards to *Star Wars* fandom but also the blogosphere – has been fairly disappointing. Not necessarily the quality of the arguments but the need to be seen to have an opinion, an interpretation; to act out the role of critic.

It is well-known that the echoing effect of social media has political consequences, deluding us into thinking that the views expressed within an ever-circling network of more or less anonymous friends somehow reflect the views of the offline world. The shock for many in 2015, including the opinion pollsters, when the Conservatives were returned to power in the UK despite the pre-established consensus that the General Election would result in either a hung Parliament or narrow Labour victory was, in part, an effect of this discrepancy between the online and offline worlds.

But, the echo chamber of social media also has aesthetic consequences. As the American cultural critic Susan Sontag observed in her 1964 essay, 'Against Interpretation': 'To interpret is to impoverish, to deplete the world – in order to set up a shadow world of "meanings". It is to turn the world into this world.' The virtual space of social media is, quite literally, Sontag's spectral realm and the mistake of those who inhabit it is to conflate the virtual with the actual. In 'a culture', as Sontag puts it, 'based on excess', 'the result is a steady loss of sharpness in our sensory experience.' Both the act and volume of interpretation, by overproducing the meaning(s) of the art-object, add to this process, blunting

our apprehension of the external world.

In 'The Imagination of Disaster' (1961), Sontag dismissed sf cinema for failing to reflect on real-world conditions that shape Cold War paranoia. I suspect if Sontag was still here she would dismiss *The Force Awakens* for similar reasons. But, in 'Against Interpretation', she moves seamlessly between the avant-garde cinema of Alain Resnais and the equally anti-symbolic qualities of George Cukor and Howard Hawks. So I suggest that sf readers – and more particularly bloggers – should reacquaint themselves with Sontag's arguments. Her appeal for 'an erotics', rather than 'a hermeneutics', 'of art' would not only clear social media of its congested spaces but would also fashion a critique calculated to read against the grain of Disney merchandising (the true Evil Empire). We might even approximate something of the innocent eye, the uncluttered perspective (say) of a ten-year old boy experiencing his first 3-D blockbuster in a Canterbury cinema on the first day of his Christmas vacation. (He gave the film 9½ out of 10.)

Whether or not this edition of *Foundation* achieves that aim is another matter but it is an eclectic issue that ranges from *Justice League Unlimited* to Savoy Books. There is a pleasing mix of older and younger scholars, from Patricia Monk – returning to the pages of *Foundation* after thirty years – to Anna McFarlane, *Vector*'s co-editor. I am delighted that Butler's 'partial history' of the Arthur C. Clarke Award is complemented by Nick Hubble's account of the Award and gender diversity since 2000. Equally, Will Slocombe's interview and reviews of Alastair Reynolds, plus Una McCormack's feature on Sylvia Engdahl, reaffirm our exploration of the writing process in practice as well as in theory.

Lastly, I am pleased to announce that the winner of the 2016 Foundation Essay Prize is Selena Middleton, whose article on Greg Bear's *Queen of Angels* (1990) will appear in our summer issue's special section on utopia and sf. This edition will also feature Paul Kincaid's commemoration of the 500th anniversary of Sir Thomas More's groundbreaking *Utopia* and a previously untranslated essay by Zoran Živković on Clarke's *Childhood's End* (1953). For now, read on…

Justice League Unlimited and the Politics of Globalization

George A. Gonzalez (University of Miami)

Although since the pioneering studies of critics such as Scott McCloud and Richard Reynolds in the early 1990s much attention has been paid to superhero comics and graphic novels, less interest has been given to animated TV series spin-offs. This relative neglect may be due to the latter being regarded as an inferior derivative or more kids-oriented version of the more canonical text. Equally, since by their very nature, animated shows are part of a corporate franchise, the writers and illustrators lack the visibility, prestige and greater artistic licence credited to their print counterparts. However, with an increasing critical interest in the relationship between superheroes and capitalism (cf. Hassler-Forest 2012), it is worth highlighting an exception to this pattern: the TV series *Justice League Unlimited* (2001–6). While American comic book superheroes may tilt toward the nation and even U.S. foreign policy, for example, throughthe figure of Iron Man, *Justice League Unlimited* stands out for its globalism, treatment of neo-liberalism and, in particular, its critique of American militarism. The show draws on the DC Comics stable of superhero characters: Superman, Wonder Woman, The Flash, Martian Manhunter, Batman, Hawk Girl and Green Lantern. Rebranded as *Unlimited* in 2004, the later episodes group together innumerable superheroes.

Jason Dittmer holds that 'superheroes are co-constitutive elements of both American identity and the U.S. government's foreign policy practices.' He adds that 'the nationalist superhero […] speaks most clearly to a phenomenon that has been at the center of work in the field of critical geopolitics: the state-centrism that has become the focus of political thought over the past century' (Dittmer 2012: 2–3). Writing in 1945, Walter Ong gave a similar (but more critically worded) observation of what he identified as a tendency within the superhero genre:

> There are titles like *Captain America* that tie up the destinies of our country with those of a hero […] The comics' habit of tinkering with the notion of the hero as the emotional correlative of the whole nation matches exactly the technique of Hitler, who was the prototype and hero of those who wanted to be 'typical Germans'. (Ong 2013: 37–8)

In sharp contrast to the nationalist superhero outlined by Ong and Dittmer, *Justice League Unlimited* explores a case for global government. Airing in the wake of 9/11, the show, despite or because of the narrative constraints that TV conventions dictate for such series, offers a populist, but not necessarily uncritical, response to geopolitical events. Kevin D. Williams, in comparing the show with an earlier iteration of the Justice League aired in the 1970s, explains

that the contemporary series is more starkly violent:

> There is an odd paradox between the series, in that *Justice League* superheroes are shown taking much more punishment than *Superfriends*; however, *Justice League* superheroes are capable of being bruised and cut (we never see a cut or bruise in *Superfriends*). […] These representations mirror the conducting of military actions during their respective times. […] Both series clearly reflect these differences in action and conflict. *Superfriends* downplays and sanitizes its violence, whereas *Justice League* portrays it as punishing and brutal. (Williams 2011: 1338–9)

As a consequence, *Justice League Unlimited* addresses the ways in which the U.S. is seeking to maintain its hegemony in a neo-liberal world through rampant and ominous militarism. The article explores this political dilemma through the following topics – globalization, democracy, wealth, neo-liberalism and militarism – with reference to a cross-section of episodes from the series.

1. Globalization

According to Albo Regalado, superheroes are a symbolic representation of modernity. As humanity (collectively) gained more and more power through science and industry humans did in a sense garner super or quasi-magical abilities: flight, worldwide communication, advanced weaponry, etc. Richard Reynolds notes that 'science as magic' is 'fundamental to the nature of the universe which the superhero comic portrays': 'Scientific concepts and terms are introduced freely into plots – but the science itself is at most only superficially plausible, often less so' (Reynolds 1992: 16). Roz Kaveney, in commenting on the superhero genre, quotes Arthur C. Clarke's observation that 'any technology sufficiently advanced is indistinguishable from magic' (Kaveney 2008: 4).

The comic-book superhero was created in the late 1930s once sciences and technologies such as aviation, mass communication, chemistry and industrial warfare had been established and popularized. Superman's moniker ('Man of Steel') overtly invokes the analogy with industry. Perhaps no superhero is more a function or product of modernity than Batman, who has no superpowers other than his scientific and technological expertise. Moreover, as the industrialist Bruce Wayne with seemingly unlimited wealth, Batman can directly employ an industrial infrastructure to produce his super-gadgets. Even Wonder Woman, whose origins are rooted in Greek mythology, originally travelled via jet plane.

The creation of the superhero genre also coincides with the rise of fascism. As the political situation deteriorated both in Europe and the Pacific, Americans could readily envision the powers of modernity, as embodied by superheroes, as protecting them from these threats. When the U.S. entered World War Two it deployed its industrial might to fight. One way to conceive of this war machine is through the personage of Captain America, a soldier transformed by advanced

chemistry.

The Justice League reflects the current or highest stage of modernity: globalization. In symbolic terms, superheroes readily travelling all over the world and into space mediate the reality of our globalized world. Indicative of a globalist outlook, the League has its headquarters in a space station (the Watchtower) orbiting the planet; outside the Earth's nation-state system. The Watchtower as the base of operation for the League is particularly significant because historically virtually all American comic-book heroes operate from the U.S., and especially New York City. Reynolds notes that it is 'New York (or Gotham, or Metropolis) that dominates the superhero story and has become its almost inevitable milieu' (Reynolds 1992: 19). Demonstrating how it operates outside of government jurisdiction, the League maintains a space-based weapon in the face of objections from the U.S. President: 'I've repeatedly expressed my strongest disapproval of you guys having that space cannon floating over everyone's heads' ('Flashpoint' (2005)).

Reflective of the global outlook of the Justice League, the 2005 episode 'To Another Shore' has Wonder Woman confronting world leaders for insufficient action on climate change. At an international conference she demands, in response to a sceptical official, 'accept the evidence of your eyes' (the melting ice-caps). Casting climate change as a security concern, Wonder Woman then warns world leaders 'you have to take this seriously' and threatens a 'military solution'. In another episode, 'A Knight of Shadows' (2002), Martian Manhunter is offered his family and homeworld back. Initially, he cooperates with the sorceress, Morgaine Le Fey, but as he is about to hand over the amulet that would allow her to return his family and society, he realizes that to do so would allow her to reign over Earth (and beyond). In crushing the amulet, the Manhunter rejects his private desires in favour of his global responsibilities. Yet, as Wonder Woman's warning of a military response indicates, the Justice League's commitment to a trans-national ethos does not necessarily go hand-in-hand with a commitment to democratic processes.

2. Democracy

In communicating its commitment to globalism, as opposed to local nationalisms, the series also conveys the inherent lack of democracy in the operation of the current world system. The superhero genre *in toto* seemingly suggests that democracy within the context of present-day modernity is impossible; Reynolds observes that the superhero is 'beyond the power of the armed forces, should he choose to oppose state power' (Reynolds 1992: 15). Analogous to the political context of capitalism, in which the forces of modernity are directed by the self-interests of a property-owning elite, in the comic-book world of superheroes, there is no democratic process to determine who will gain superpowers and, similarly, there is no mechanism that would allow the public to take away such powers. The result is that some with superpowers are 'good' and some are 'bad'.

The public, according to Terry Kading, simply has to hope that the superheroes outmanoeuvre the super-villains.

To take one instance, with a real-world analogy, where it is difficult to draw a line between the 'good' and 'bad' motivations of the superhero, in the stories 'Flashpoint' and 'Panic in the Sky' (both 2005), the original Justice League members decide to submit themselves to U.S. authority as a show of good faith in response to an attack from the Watchtower (surreptitiously initiated by Lex Luther): it is Batman, the sole capitalist among the seven, who refuses to surrender. Three years later in the real world, when the sub-prime crisis came to a head, those running our financial institutions were seen to be operating outside of the law, even as the public had to pay for their misdeeds and reckless behaviour in the form of a multi-trillion dollar bailout and widespread home foreclosures. In later episodes, the League overtly takes on the role of a government – identifying risks or crises throughout the world and deploying the appropriate response (other superheroes). In 'To Another Shore', one scene features the League overseeing '23 active missions', whilst in 'The Doomsday Sanction' (2005), they evacuate people threatened by an erupting volcano on a Caribbean island (echoes, perhaps, of International Rescue from the British animated series *Thunderbirds* (1965–6)).

In 'The Ties That Bind' (2005), we see the Justice League making foreign policy decisions. Factions on another planet are engaging in intrigue. Martian Manhunter, representing the political will of the League, decides not to intervene, arguing that intervention could result in 'a dictator who could eventually threaten Earth'; better instead 'to let them fight amongst themselves.' Although The Flash decides to intervene on his own, there is no democratic decision-making process (or appeal to elected officials) to decide these matters. The latent authoritarianism of the League is indicated in the episode 'A Better World' (2003) where, in an alternate reality, we see the League take total state power, and in so doing establish a draconian global regime.

Therefore, in *Justice League Unlimited* we see a world system whereby the public is outside of the framework of political decision-making just as, in the real world, investment decisions are under the influence of the market. The U.S. foreign policy apparatus is the most insulated aspect of government – with the national security state operating under a veil of secrecy and misinformation. In the context of the War on Terror, and the passing of legislation such as the Patriot Act, American elections are no guarantee against tyranny. In the story 'Question Authority' (2005), we see Lex Luther, corporate head and Superman's arch-nemesis, become the leading candidate for the U.S. presidency which, in the alternative reality scenario of 'A Better World', he achieves.

3. Wealth Inequality and Neo-Liberalism

The presentation of globalism in *Justice League Unlimited* highlights the severe economic inequalities which are embedded in the world system. Such

differences are schematically represented in the episode 'Twilight (of the Gods)' (2003) which posits two vastly different planets, New Genesis and Apokolips. The residents of the former are highly affluent whereas the inhabitants of the latter are poor and enslaved. Again, the former is beautiful, with lush greenery and a splendid urban environment, whilst the latter is hellish with virtually the entirety of the planet a barren, fiery red.

In 'War World' (2002), Superman and Martian Manhunter are captured and taken to a far-distant planet ruled by a dictator who oversees gladiatorial games meant to distract the public from their social and economic misery: 'Our nation's food rations is being cut another 15 percent, and then there are the medical shortages and the power blackouts'. Manhunter walks among the crowds attending the games and asks one spectator, 'Don't they have families or jobs to tend to?' She responds: 'Are you kidding? There's no jobs. I haven't worked in years.' By contrast, the underdevelopment of Africa is conveyed ironically in 'The Brave and the Bold' (2002), in which a wealthy and technologically advanced city is discovered in the heart of the poorest continent, disconnected from the world system. Although the story plays upon the lost world narratives historically associated with colonial fictions, the sophistication of the inhabitants suggests that Africa could thrive if it were left to its own devices. That Africa is not allowed to do so in the real world is due to the incursion of a Western neo-liberal consensus, of which wealth inequality are amongst its chief symptoms.

To that end, *Justice League Unlimited* offers critiques of the neo-liberal hegemony within the current global economic system. 'Metamorphosis' (2002), for example, begins with an explosion at an oil drilling site. The next scene shows Simon Stagg, head of Stagg Enterprises, proposing to oil industry executives 'Metamorpho': 'a chemically altered worker who will not merely survive in hazardous environments, but will thrive in them.' Stagg proposes Metamorpho as a cost-saving measure because, as a result of 'unsafe conditions', 'unions are demanding higher wages' and 'insurance companies won't cover your risk.' The executives do not object to Stagg's proposal for moral reasons, only to its feasibility. Once, however, they see video footage of Metamorpho (Stagg's security officer converted against his will) in action against the Justice League, they are convinced. Stagg tells them to 'bring your check book' and raises 'a toast to unbridled capitalism!' Despite the story's implausible science and its exaggerated satire, its humour gains traction when we take into account that, in the real world, workers are more and more frequently being reduced to purely factors of production. We see, for instance, hundred of millions of labourers in China working very long hours, for little pay, and with no workplace government regulation to speak of (cf. Barboza 2012; K. Gallagher 2006; M. Gallagher 2005). In this environment, Stagg's treatment of his employee is not so far-fetched.

4. Militarism

As wealth and power become more global and diffuse, the political and

economic strength of nation-states decline relative to the world system. In the case of the U.S., the centre of the world's industry is shifting away from North America and toward Asiatic economies, most notably China (cf. Shambaugh 2013). Indicative of the profound imbalance in the present world system is the fact that the U.S. has the largest defence budget but also the largest trade and public deficits in the world – with the American government alone owing trillions of dollars to China and Japan (Barboza 2011).

The perception that the aggressive military policies of the 2000s – the invasions of Afghanistan and Iraq, as well as the use of torture – are an attempt to stave off U.S. geo-political decline is given credence in *Justice League Unlimited*. An aspect of this militarism is greater secrecy, necessitating less democratic transparency and more covert authoritarianism. In the series, a secret U.S. government agency (Cadmus) is formed to counter the Justice League which, despite the latter's own lack of accountability, symbolizes a force for trans-national globalization. Cadmus is, variously, involved in 'secret weapons; illegal cloning experiments; bypassing Congress' ('The Doomsday Sanction'), 'a shadow cabinet' and 'a black ops group' with 'legitimate connections to the government' ('Flashpoint'), and a collection of 'power brokers, politicians, criminals, and black ops mercenaries' ('Question Authority'). In this mercenary role, Cadmus is not unlike the Blackwater security outfit, which works closely with the U.S. military and intelligence agencies (cf. Simons 2009; Risen 2014; Risen and Mazetti 2013). Cadmus is headed by Amanda Waller, who 'served in intelligence under three Administrations' ('The Doomsday Sanction'), and General Eiling whilst in 'Question Authority', the U.S. President unilaterally authorizes a Cadmus assault on the Watchtower.

The viewer learns, however, that Cadmus works in alliance with Lex Luther, who 'provides off the books funding for Cadmus' and spends 'hundred-of-millions […] on Cadmus R&D projects' ('Panic in the Sky'). When in 'Question Authority', Luther captures League member The Question and turns him over to Cadmus, the non-superpowered hero is tortured with electric shocks in a clear allusion to the human rights abuses at Abu Ghraib. Furthermore, The Question is held and tortured in New Mexico, a so-called 'black site' or U.S.-owned territory where torture may – and can – occur. The Question's unnamed torturer demands that he divulge what he learned from viewing classified computer files – somewhat presaging the WikiLeaks controversy – but The Question refuses to capitulate. As The Question is screaming in agony, the torturer tells him the electric shocks 'will continue until I break you', and then sadistically adds, 'Perhaps even afterward.'

The wanton violence of the U.S. national security state is represented in 'The Doomsday Sanction' when Eiling launches a nuclear missile that would kill everyone, including Superman and the innocent residents on a Caribbean island: 'We have to sanction Doomsday [a Cadmus weapon run amok]. We were going to get to Superman somewhere down the line. And we've been

trying to stop drug traffic from San Mateo for years. The way I see it – three birds, one stone.' In a subsequent episode, 'Patriot Act' (2006), after Cadmus and its weapons programme have been disbanded, Eiling decides to break into a military facility where an experimental Nazi serum is held. The serum was developed to create a 'Captain Nazi': a counter to Captain America. Eiling injects himself with the serum, and it turns him into a huge, hideous, grayish monster with superpowers. In his ensuing battle with the Justice League, Eiling calls them 'a threat to a safe and stable world' as well as the reason that 'this country is half way down the toilet.'

Quite literally, Eiling embodies the ugliness of militarism: 'In this world, power is the only thing that matters.' Reflecting this fixation on 'power' (i.e. military force), he asserts of the non-superpowered Justice League members: 'Then you're people and like all people you're insignificant.' He discounts innocent victims of war as 'a few eggs' needed 'to make an omelet' (Eiling subsequently describes Star Girl as 'just another egg'). The Valiant Knight accuses Eiling of representing the 'creeping moral decay of over a thousand years' to which Eiling calls him a 'lousy soldier' for disobeying orders. Instead, in a caricature of George W. Bush's geo-political stance, Eiling proclaims: 'I'll waste you and a billion like you before I let any power rival America's – It's my duty.'[1] When civilian bystanders protest against him, Eiling responds: 'You need the likes of me to protect you.'

Mila Bongco has observed that 'Superheroes of today have evolved a great deal from the unabashed patriots of the 1940s and 1950s. Since the early the 1970s, they have been shown routing out scientists, politicians, priests, and other establishment figures who turn out to be in league with criminal elements' (Bongco 2000: 93–4). *Justice League Unlimited* has gone further than simply suggesting that particular individuals, or groups of individuals, are misusing (government) authority/resources. Instead, the claim is being made that the American state is out of control and fundamentally dangerous. This critique is specifically directed at the then Bush Administration, for example in the episode 'Flashpoint'. Although the President's face is not shown, his build, height, skin and hair tone are consistent with that of Bush. He does not does have a Texas accent but his diction is strongly reminiscent of Bush's patois ('sure looked that way from down here'; 'you're not holding a strong hand right now'; 'you guys have saved the world more times than I've shot under par so we give you a lot of slack'). In 'Panic in the Sky', seemingly critical of the Administration's pursuit of space-based weaponry, Green Lantern observes, 'I've seen it on a hundred worlds.Space-based weapons always destabilize planetary politics.'

Conclusion

Marc DiPaolo has outlined how 'politically themed superhero adventures tend to fall into three different categories: establishment, anti-establishment, and colonial' (DiPaolo 2013: 12). While *Justice League Unlimited* could be

characterized as adopting a critical tone toward existing values and policies, my view is that this television series transcends simply taking a negative tack on dominant attitudes and state actions. Instead, following Jacques Rancière, it can be readily cast as 'political art' by giving viewers analytical insight into present-day world politics.

More specifically, the Justice League can be seen as symbolic of globalization, with the League reflecting the need for world government that operates outside of the nation-state system, and as a metaphor for the current globalizing of political and economic power. Interpreting *Justice League Unlimited* as a commentary on the politics of the world system allows us to read the show as rendering critical observations on democracy (or the lack thereof), wealth inequality, neo-liberalism, and militarism. The combination of these elements ultimately describes an increasing and dangerous aggression at the heart of American geo-politics.

Endnote

[1]In 2002, George W. Bush stated: 'We must build and maintain our defenses beyond challenge […] to dissuade potential adversaries from pursuing a military build-up in hopes of surpassing, or equaling, the power of the United States.' In 'Full Text: Bush's National Security Strategy', *New York Times*, 20 September.

Works Cited

Barboza, David. 2011. 'China's Treasury Holdings Make U.S. Woes its Own.' *New York Times*, 19 July.

----- 2012. 'In China, the Human Costs That Are Built Into an iPad.' *New York Times*, 26 January.

Bongco, Mila. 2000. *Reading Comics: Language, Culture, and the Concept of the Superhero in Comic Books*. New York: Garland.

Bush, George W. 2002. 'Full Text: Bush's National Security Strategy.' *New York Times*, 20 September.

DiPaolo, Marc. 2013. *War, Politics and Superheroes*. London: McFarland.

Dittmer, Jason. 2012. *Captain America and the Nationalist Superhero*. Philadelphia: Temple University Press.

Gallagher, Kelly Sims. 2006. *China Shifts Gears: Automakers, Oil, Pollution, and Development*. Cambridge MA: MIT Press.

Gallagher, Mary Elizabeth. 2005. *Contagious Capitalism: Globalization and the Politics of Labor in China*. Princeton: Princeton University Press.

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

Kading, Terry. 2005. 'Drawn into 9/11, But Where Have all the Superheroes Gone?' In Jeff McLaughlin, ed. *Comics as Philosophy*. Jackson: University Press of Mississippi.

Kaveney, Roz. 2008. *Superheroes! Capes and Crusaders in Comics and Films*.

New York: I.B. Tauris.
McCloud, Scott. 2001 (1993). *Understanding Comics: The Invisible Art*. New York: HarperPerennial.
Ong, Walter. 2013. 'The Comics and the Super State.' In Charles Hatfield et al, eds. *The Superhero Reader*. Jackson: University Press of Mississippi.
Rancière, Jacques. 2009. *Aesthetics and Its Discontents*, trans. Steve Corcoran. Malden MA: Polity.
Regalado, Aldo. 2005. 'Modernity, Race, and the American Superhero.' In Jeff McLaughlin, ed. *Comics as Philosophy*. Jackson: University Press of Mississippi.
Reynolds, Richard. 1992. *Super Heroes: A Modern Mythology*. Jackson: University Press of Mississippi.
Risen, James. 2014. 'Before Shooting in Iraq, Warning on Blackwater.' *New York Times*, 30 June.
----- and Mark Mazetti. 2013. 'Case Ends Against Ex-Blackwater Officials.' *New York Times*, 22 February.
Shambaugh, David. 2013. *China Goes Global: The Partial Power*. Oxford: Oxford University Press.
Simons, Suzanne. 2009. *Master of War: Blackwater USA's Erik Prince and the Business of War*. New York: Harper.
Williams, Kevin D. 2011. '(R)Evolution of the Television Superhero: Comparing *Superfriends* and *Justice League* in Terms of Foreign Relations.' *Journal of Popular Culture* 44.6: 1333–52.

Deicide in *Star Trek:* The Ultimate Expression of Humanism?

Victor Grech (University of Malta)

This article investigates the role of humanism in the *Star Trek* franchise by concentrating on three narratives: the original series episode 'Who Mourns for Adonais?' (1967), the movie *Star Trek V: The Final Frontier* (1989) and *The Next Generation* episode, 'Skin of Evil' (1988). I will ask whether the depictions of deicide in these stories may be considered the ultimate manifestation of the liberal-secular humanism that the franchise espoused under Roddenberry's control and, if so, to what extent that declined with Roddenberry's fading health. The article not only contextualizes these stories within Roddenberry's stewardship of *Star Trek* but also draws upon interviews and other known facts about Roddenberry to establish his attitude toward humanism.

Star Trek and Humanism

The future that *Star Trek* portrays 'is by and large a secular place, a representation of Gene Roddenberry's humanistic vision' (Kraemer et al 2003: 220). Roddenberry was an avowed humanist who, when explicitly asked 'you identify yourself philosophically as a humanist?', answered 'yes' (Alexander 1991: 7). From 1986, he was a member of the American Humanist Association, and he was presented with the Association's Humanist Arts Award in recognition of his distinguished contributions to humanism and humanist thought in 1991 (Alexander 1991: 5). After receiving this award, Roddenberry acknowledged that he was unequivocally humanist in outlook: 'My philosophy is based upon the great affection I have for the human creature' (Alexander 1991: 30). He also believed that 'one of the underlying messages of both series [*Star Trek* and *Star Trek: The Next Generation*] is that human beings can, with critical thinking, solve the problems that are facing them without any outside or supernatural help' (Alexander 1991: 8), and that 'through critical thinking and cooperative effort, humanity will progress and evolve' (Alexander 1991: 5).

According to Tony Davies, humanism arose in the Renaissance as a result of cultural and educational reform, and constitutes a philosophical and ethical stance that emphasizes the value and agency of human beings, not only individually but also collectively, through rationalism (critical thinking) and empiricism (evidence-based observations) as opposed to fideism (established doctrine or faith). The precise definition varies according to the intellectual movements that embrace humanism, and that espoused in *Star Trek* is a liberal-secular form of humanism. Liberal humanism broadly refers to the view that the arts, literature and culture are life-enhancing and inspirational practices, and vouchsafes individual freedom, asserting that all have an equal right to liberty including rights to free trade and personal property. Secular humanism engages

a more politically referenced stance and is at best agnostic in its outlook, aiming to establish moral and ethical principles that are conducive to freedom and well-being not only for the individual, but for all. Its basis is that of ethical reasoning independent of supernatural moral sources, offering a rational and logical alternative to traditional conceptions of morality. Human reason, altruistic morality and distributive justice are therefore espoused while explicitly rejecting the supernatural, theistic faiths and other forms of religiosity, superstition and pseudo-science.

Roddenberry's statements strongly support secular humanism, with the absence of the imposition of supernatural dogmas and doctrines while respecting personal beliefs, along with the reliance on science and reason in the search for truths which would lead to the eventual banishment of racism, superstition, conflict and poverty, not only in *Star Trek*, but also in the real world. Humanism is even extended to alien others, such that the 'founding principle of humanism [is] that all species (human and alien, Self and Other) are conjoined in a point of common origin' (Isaacs 2010: 191).

Although several writers contributed to *Star Trek*, Roddenberry imposed his humanist views on *Star Trek* with an iron hand. Humanist values are expressed repeatedly: notions of voluntary cooperation and attempts at non-violent conflict resolution while retaining the right to self-defence, dignity and respect for all life-forms. Roddenberry wrote many of the episodes and was involved with almost every aspect of the show's development (casting, selecting and revising scripts, and so on) in both of its TV incarnations (Bernardi 1997: 214). One writer reminisced, 'you suspend your own feelings and beliefs and you get with his vision – or you get rewritten' (qtd Lundeen and Wagner 1998: 8). Furthermore, 'while some persons involved in the production of Trek may have had misgivings about various aspects of this vision on philosophical or artistic grounds, most admit that it has provided the unifying, hopeful vision that makes Trek so beloved and so durable' (Lundeen and Wagner 1998: 8). Although Roddenberry's input in the storylines declined with his waning health, by the time of his death in 1991, he had 'blazed an indelible trail for all who followed him into the Trek universe, […] humanism – a compassion for our species and a faith in its ultimate wisdom and capacity for self-reliance […] an optimistic view of the human future; an emphasis on the imperatives of freedom, growth, and change; a tolerance of diversity; a central role for the emotions of friendship and loyalty; an opposition to prejudice or tradition-for-its-own-sake; and a visceral rejection of organized religion and divine authority' (Lundeen and Wagner 1998: 8).

Deicide in *Star Trek*

It is therefore unsurprising that in *Star Trek*, beings who pose as gods are, at best, mocked and exposed as having feet of clay, relegated to being mundane and eminently explainable aliens with unusual but profane and certainly not

sacred (albeit superhuman) power/s. As Captain Janeway succinctly puts it in the *Star Trek: Voyager* episode, 'Sacred Ground' (1996), 'I imagine if we scratch deep enough we'd find a scientific basis for most religious doctrines.'

Deicide is defined as the killing of a god. The term and concept is conventionally applied to the crucifixion of Jesus Christ, and was directed at the Jewish nation for their 'collective complicity in the crucifixion', a notion of 'everlasting guilt […] underlined by many authors throughout the centuries' (Rohrbacher 1991: 297) a view that is nowadays eschewed by the Christian community. However, deicide does not necessarily cover all divinities: the Bible, for example, exhorts the denunciation of false gods. This is an important consideration for *Star Trek* producers and directors in that the franchise 'carefully avoids any confrontation with mainstream religious teachings' and deliberately avoids saddling *Star Trek* with 'explicit atheism' since 'its ability to function as an inclusive American mythos would have been severely undercut' (Lundeen and Wagner 1998: 32). Indeed, the virtues that *Star Trek* upholds, such as 'self-control, sobriety, knowledge, courage, friendship and attention to duty, are parallel to many of the ideals that Americans can associate with their moral upbringing as Christians, Muslims, Jews, and so on' (Lundeen and Wagner 1998: 32). This goes against Roddenberry's personal beliefs: as he himself admitted 'it was clear to me that religion was largely nonsense – largely magical, superstitious things […] I just couldn't see any point in adopting something based on magic, which was obviously phony and superstitious' (Alexander 1991: 6). This tension was alleviated by Roddenberry's pragmatic need for 'expediency' so that his brainchild could progress and succeed (Alexander 1991: 8).

For these reasons, the denunciation and eventual destruction of such false gods is arguably the only possible form of deicide realistically available to *Star Trek* since the existence or otherwise of a creator is unknown and possibly unknowable, a non-falsifiable hypothesis that cannot be elucidated through science (Popper 1963: 55). It is also equally arguable that this form of deicide is the mandatory starting-point for any meaningful assertion of humanism. Indeed, the highly pragmatic Klingon race appears to have ungratefully eliminated the very gods that created them, as evidenced in the Klingon marriage rite from the *Deep Space Nine* episode, 'You are Cordially Invited…' (1997):

> With fire and steel did the gods forge the Klingon heart. So fiercely did it beat, so loud was the sound, that the gods cried out, 'On this day we have brought forth the strongest heart in all the heavens. None can stand before it without trembling at its strength.' But then the Klingon heart weakened, its steady rhythm faltered and the gods said, 'Why have you weakened so? We have made you the strongest in all of creation. And the heart said […] I am alone. […] And the gods knew that they had erred. So they went back to their forge and brought forth another heart. But the second heart beat stronger than the first, and the first was jealous of its power. Fortunately, the second heart was tempered by wisdom. […] If we join together, no force can stop us.

> […] And when the two hearts began to beat together, they filled the heavens with a terrible sound. For the first time, the gods knew fear. They tried to flee, but it was too late. The Klingon hearts destroyed the gods who created them and turned the heavens to ashes. To this very day, no one can oppose the beating of two Klingon hearts.

This fantasy of deicide occurs in two *Star Trek* narratives, 'Who Mourns for Adonais?' (1967) and *Star Trek V: The Final Frontier* (1989), which in spanning more than twenty years of the franchise and appearing in two of its media platforms suggest ways in which the fantasy might be taken as being exemplary of the humanist ethos. Both stories expose potent beings as aliens with unfamiliar, powerful and – at least initially – seemingly god-like powers. Humanity, as represented by the ship's crew, prevails, ultimately rejecting and/or destroying these adversaries.

Although not written by Roddenberry, 'Who Mourns for Adonais?' was co-authored by one of his closest collaborators, Gene L. Coon, who rewrote many of the *Star Trek* scripts (often uncredited), and created many of its key antagonists and narrative devices, including the United Federation of Planets, Starfleet Command and the Prime Directive. The Enterprise is stopped in space by 'a field of energy' that manifests as a giant hand grasping the ship's saucer section. A classical figure (Michael Forest) appears in human form, wearing a wreath of laurel leaves, and making a prophetic announcement: 'The eons have passed and what has been written has come about. You are most welcome, my beloved children. Your places await you.' Unable to escape, Kirk (William Shatner) capitulates and the alien resumes, declaring himself to be Apollo. Kirk retorts: 'If you want to play god and call yourself Apollo, that's your business, but you're no god to us, Mister […] you've got a lot to learn!'

Apollo responds by disabling the ship's communicators and transporter, whisking Kirk and other crew-members to what he claims to be Olympus, and enlarging himself several times in an impressive show of power and dominance. The exchange that follows provides one of the strongest humanist rejections of theistic religion in the franchise:

> Kirk: You know nothing about our kind. You know only our remote ancestors who trembled before your tricks. Your tricks don't frighten us.Neither do you. We've come a long way in five thousand years.
>
> Apollo: But you're of the same nature. I could sweep you out of existence with a wave of my hand and bring you back again. I can give life or death. What else does mankind demand of its gods?
>
> Kirk: Mankind has no need for gods.

Apollo ignores him, disdaining argument and returns to his patronizing Olympian manner: 'You will gather laurel leaves, light the ancient fires, kill a deer, make

your sacrifices to me. Apollo has spoken!' Failing to understand the crew's ingratitude toward him, he muses:

> Fools. I offer them more than they could know. Not just a world, but all that makes it up. Man thinks he's progressed. They're wrong. He's merely forgotten those things which gave life meaning.

Apollo longingly recollects that 'we were gods of passion, of love', ironically asserting the primacy of the Dionysian philosophy of the irrational and the chaotic that directly conflicts with the Apollonian traits of reason and rationality espoused by the United Federation of Planets, and which mirror Roddenberry's humanist beliefs (Eberl and Decker 2008; Grech 2013b). He also indirectly confesses that despite the superhuman powers manifested by his species, they were not truly gods: 'In a real sense, we were gods. We had the power of life and death.' He further admits his non-supernatural state by acknowledging his half-human nature: 'Zeus took Leto, my mother.' He then further reminisces:

> The Earth changed. Your fathers changed. They turned away until we were only memories. A god cannot survive as a memory. We need love, admiration, worship, as you need food. […] We could have struck out from Olympus and destroyed. We had no wish to destroy, so we came home again. It was an empty place without worshippers, but we had no strength to leave, so we waited, all of us, through the long years. […] But I knew you would come. You striving, bickering, foolishly brave humans. I knew you would come to the stars one day. Of all the gods, I knew and I waited, waited for you to come and sit by my side.

A plausible explanation for Apollo and his claims is proposed by the landing party: 'Let's assume that five thousand years ago creatures like our friend Apollo did indeed visit Earth and form the basis of the Greek classic myths. […] Most mythology has its basis in fact.' Apollo's confession is bolstered by the landing party's discovery of 'a regular pulsating pattern of radiated energy' that, via 'an extra organ in his chest', Apollo can 'channel […] through his body'. A purely mechanistic elucidation of Apollo's powers is thus available, finally shredding any possible doubt as to his putative godhood. Furthermore, despite powers tantamount to godhood, these aliens are perfectly capable of passing away, in effect dying:

> What happened to the others? Artemis, Hera? […] They returned to the cosmos on the wings of the wind. […] We're immortal, we gods. [But] even for a god, there's a point of no return. Hera was first. She stood in front of the temple and spread herself upon the wind, thinner and thinner, until only the wind remained.

The landing party's attempt to concoct a plan is impeded by a female officer's love for Apollo. Kirk, in an outburst of unadulterated humanism, orders her to reject him:

> He thrives on love, worship, attention. […] We can't give him that worship, none of us can. Especially you. […] Spurn him. Reject him. You must. You're special to him. […] All our lives, here and on the ship, depend on you. […] Reject him, and we have a chance to save ourselves. Accept him, and you condemn all of us to slavery, nothing less than slavery. We might never get help this far out. Or perhaps the thought of spending an eternity bending knee and tending sheep appeals to you. […] Give me your hand. […] Now feel that. Human flesh against human flesh. We're the same.

Kirk thus evokes a communal sense of belonging to the same species, humanity, in the face of alien others, thereby also appealing to his officer's sense of humanism: 'to put it as plainly as possible, a faith in and commitment to shared humanity' (Lundeen and Wagner 1998: 212). He continues in tones heavily tinged with existential angst:

> We share the same history, the same heritage, the same lives. We're tied together beyond any untying. Man or woman, it makes no difference. We're human. We couldn't escape from each other even if we wanted to. That's how you do it, Lieutenant. By remembering who and what you are. A bit of flesh and blood afloat in a universe without end. The only thing that's truly yours is the rest of humanity. That's where our duty lies. Do you understand me?

The officer complies, rejecting Apollo, and Kirk bluntly informs him: 'We've outgrown you. You asked for something we could no longer give.' After this rejection and the loss of his power source, Apollo simply gives up. Heartbroken, tearful and with a choked voice, he sorrowfully tells the crew: 'I would have cherished you, cared for you. I would have loved you as a father loves his children. Did I ask so much? […] The time has passed. There is no room for gods.' Apollo then slowly fades away, leaving the crew to vaguely 'wish we hadn't had to do this. […] They gave us so much. The Greek civilization, much of our culture and philosophy came from a worship of those beings. In a way, they began the Golden Age. Would it have hurt us, I wonder, just to have gathered a few laurel leaves?'

The narrative clearly outlines a possible pitfall for humanism, that the 'deification of the "superior" individual is one extreme to which people can go in the absence of God' (Lundeen and Wagner 1998: 31). However, the ending reaffirms 'Trek's faithful adherence to its modernist-humanist mythmaking project' (Lundeen and Wagner 1998: 148) with only trifling and transient remorse at the demise of a possible godhead. In passing, it is interesting to note that the

name ‘Adonis’, popularized in Shakespeare’s poem ‘Venus and Adonis’ (1593), is a corruption of ’Adonai’, the Hebrew word for god. The title therefore alludes not only to the tragic male figure in Greek mythology of P.B. Shelley’s 1821 elegy to John Keats but also transforms the episode title into ‘Who mourns for gods?’ (Whitfield 1968: 112).

In contrast with Roddenberry’s implicit influence upon ‘Who Mourns for Adonais?’, the fifth film of the series (directed by Shatner) indicates the slow passing of power from Roddenberry to others who would eventually take over the franchise. Although written by David Loughery, the film was dominated by the wishes of its star and director, as Shatner enthused: ‘*Star Trek V* is the epitome of my career, my experiences, my hopes and dreams. It is the quintessential me’ (qtd L. Shatner 1989: 33). Indeed, Roddenberry objected strongly to the script, finding it ‘both insulting and logically inconsistent that the scientifically trained Enterprise crew members could be so credulous’ (Lundeen and Wagner 1998: 36) about the notion of physically finding God:

> The setting changes unexpectedly from that of a biblical wilderness to a dark place […] where a cruel superbeing menaces them. […] At the center of this universe, where God and ultimate meaning are supposed to reside, there is only an impostor who takes the form of our darkest self. (Lundeen and Wagner 1998: 185-6)

To briefly summarize the plot, Spock’s charismatic half-brother hijacks the *Enterprise* to travel to the centre of the galaxy to find God. Sybok (Laurence Luckinbill) is said to have abandoned Vulcan logic and stoicism: ‘He embraced the animal passions of our ancestors. […] He believed that the key to self-knowledge was emotion.’ This emotionalism is equated by Sybok with divine insight: ‘a vision […] given to me by God. He waits for me on the other side.’ Thus Sybok, like the ironic portrayal of Apollo in ‘Who Mourns for Adonais?’, represents the Dionysiac mirror-image of the Apollonian reason of both Spock and the Federation planets. ‘On the other side’ of the Great Barrier that lies at the core of the galaxy, and which supposedly is impenetrable to human spacecraft, there exists a mysterious planet with ‘a power source emanating […] like nothing […] ever seen.’

The members of the landing party are treated to a remarkable series of geological events, a veritable spectacle designed to impress, and they are eventually greeted by a being who appears to resemble the Old Testament God, complete with white hair and beard and a powerful bass voice: ‘Brave souls. Welcome. […] It is I. ...The journey you took to reach me could not have been an easy one.’ When this being asks if the *Enterprise* could ‘carry my wisdom beyond the Barrier?’, Kirk interrupts quizzically: ‘What does God need with a starship?’ The alien reveals himself not to be a god at all, merely an ‘evil pretender’ (Lundeen and Wagner 1998: 36), seeking to escape his imprisonment on the planet. After his eventual defeat Kirk, McCoy and Spock

mull over the events, McCoy (DeForest Kelley) muses ‘we were speculating ... “Is God really out there?”’ To which Kirk, in true humanist vein, replies ‘maybe He’s not out there, Bones. Maybe He’s right here ... in the human heart.’ Such a dismissal implies a shared understanding between protagonists, viewers and director that theism is not to be displayed, and indeed, is simply out of the question in *Star Trek*. The stance taken is more akin to that proposed by Arthur C. Clarke, whose ‘Third Law’ famously states that ‘any sufficiently advanced technology is indistinguishable from magic’ (Clarke 1973: 21), exposing these beings’ powers as profane and not at all sacred.

‘Gods’ in *Star Trek: The Next Generation*

Star Trek: The Next Generation can be viewed as ‘a continuation of the future projected by the original *Star Trek*’, where ‘Roddenberry’s liberal humanistic project is very much alive’ (Kwan date: 62). Perhaps unsurprisingly, then, the theme of deicide recurs in episodes such as ‘Skin of Evil’ (1988). At the centre of this story is Armus, a creature capable of ‘great sadism and cruelty’, created when a race of titans ‘perfected a means of bringing to the surface all that was evil and negative within. Erupting, spreading, connecting. In time it formed a second skin, dank and vile.’ Like the villain of *Star Trek V*, Armus is discarded and trapped on a desolate planet. He admits, ‘I am a skin of evil left here by a race of Titans who believed if they rid themselves of me, they would free the bonds of destructiveness.’ They are now ‘creatures whose beauty now dazzles all who see them. They would not exist without me’, implying that these aliens had somehow perfected the means of discarding their Jungian shadow (Grech 2013a: 18). He demands ‘to leave this place’, holding *Enterprise* crew members hostage in the interim. Picard (Patrick Stewart) dispassionately analyses Armus:

> So here you are. Feeding on your own loneliness. Consumed by your own pain. Believing your own lies […] you will still be here. In this place. For ever. Alone. Immortal. […]. That’s your real fear. Never to die. Never again to be united with those who left you here.

On this occasion, the *Enterprise* simply escapes, leaving Armus trapped, and the planet ‘declared off limits […] to prevent any possibility of Armus leaving the planet.’ While Armus never claims godhood, he clearly acts and represents the very distillate of that which is malevolently evil, the kind of being that the Federation quintessentially resists in its continuing Manichean struggle of good versus evil (Grech 2013b).

Within that context, however, the United Federation of Planets operates according to a set of (mostly) implicit, Kantian moral principles, in which moral worth is an intrinsic feature of human actions, determined by formal rules of conduct, and that moral obligation rests solely on duty without requiring any reference to the practical consequences that these actions may have (Barad and Robertson 2000: 208; Grech 2013c: 20). In ‘Who Mourns for Adonais?’,

the acceptance of beings that transcend such protocols would be tantamount to accepting slavery. By contrast, the refutation and destruction of beings who claim godhood does not lead to moral decline or nihilism in the utopian *Star Trek* future. Consequently, it would appear that the Federation has discovered foundations for behaviour that are deeper and even more fundamental than the Christian values deplored by Friedrich Nietzsche, roots that could be said to be pagan in origin, such as the Apollonian logic that characterizes the Federation and its allies.

It is worth noting, then, that although an omnipotent being is encountered in nearly half of the seventy-eight original episodes, *The Next Generation* only faces this scenario in a small minority of the 178 episodes. Although this absence can be attributed to Roddenberry's diminishing control over the series, and therefore not being a central preoccupation of his successors, it could also be an effect of the Federation's Apollonian hegemony and its ability to supplant gods, false or otherwise. Indeed, 'there may be gods in the Star Trek universe, but they seem to be dying out' (Richards 1997: 161). Nevertheless, there remains a suspicion of those who claim superhuman status, for example, in the various representations of Khan Noonien Singh throughout the franchise. Ostensibly, the brake applied upon Federation representatives filling this spiritual void is the Prime Directive of non-interference although, as McCoy facetiously retorts in 'Bread and Circuses' (1968), 'once, just once, I'd like to be able to land someplace and say, Behold, I am the Archangel Gabriel', thereby acknowledging the perennial temptation.

In contrast, *Star Trek* 'offers an alternative, liberal future that not only has eliminated poverty, racism, sexism, jingoism, and colonialism, but also challenges contemporary society to rectify such unacceptable states of affairs' (Jackson and Nexon 2003: 8). This is in accordance with Roddenberry's vision: 'occasionally scientistic, often humanistic, yet thoroughly *optimistic*. To face the final frontier is to be committed to the idea that one *can* make a difference' (Eberl and Decker 2008: xv). Despite eschewing gods, the series still embraces an overarching assurance, the firm certainty in a 'humanist cosmos […] held together by faith […] a belief in the liberating power of the imagination – of the ability to perceive our limitations, and thereby to move beyond them toward a more inclusive awareness' (Lundeen and Wagner 1998: 220).

Works Cited

Alexander, David. 1991. 'The Roddenberry Interview.' *The Humanist* 51.2:5–30.

Barad, Judy and Ed Robertson. 2000. *The Ethics of Star Trek.* New York: HarperCollins.

Bernardi, Daniel. 1997. '*Star Trek* in the 1960s: Liberal-Humanism and the Production of Race.' *Science Fiction Studies* 24.2: 209–25.

Clarke, Arthur C. 1973. *Profiles of the Future.* London: Pan Books.

Davies, Tony. 1997. *Humanism*. London: Routledge.

Eberl, Jason T. and Kevin S. Decker. 2008. *Star Trek and Philosophy: The Wrath of Kant*. Chicago: Open Court.

Grech, Victor. 2013a. 'The Elicitation of Jung's Shadow in *Star Trek*.' *New York Review of Science Fiction* 26.6:15–21.

----- 2013b. 'Philosophical Concepts in *Star Trek*: Using *Star Trek* as a Curriculum Guide Introducing Fans to the Subject of Philosophy.' *Ad Astra* 2:1–14.

----- 2013c. '*Star Trek*'s Picard: Humanity's Conscience.' *New York Review of Science Fiction* 25.6: 20–3.

Isaacs, Bruce. 2010. 'A Vision of a Time and Place: Spiritual Humanism and the Utopian Impulse.' In Matthew Wilhelm Kapell, ed. *Star Trek as Myth: Essays on Symbol and Archetype at the Final Frontier*. Jefferson: McFarland, pp. 182–96.

Jackson, Patrick Thaddeus and Daniel H. Nexon. 2003. 'Representation is Futile?: American Anti-Collectivism and the Borg.' In Jutta Weldes, ed. *To Seek Out New Worlds: Science Fiction and World Politics*. New York: Palgrave Macmillan, pp. 143–67.

Kraemer, Ross S. et al. 2003. *The Religions of Star Trek.* Boulder CO: Westview.

Lundeen, Jan and Jon Wagner. 1998. *Deep Space and Sacred Time: Star Trek in the American Mythos.* Westport CT: Praegher.

Popper, Karl. 1963. *Conjectures and Refutations: The Growth of Scientific Knowledge*. London: Routledge.

Richards, Thomas. 1997. *The Meaning of Star Trek*. New York: Doubleday.

Rohrbacher, Stefan. 1991. 'The Charge of Deicide: An Anti-Jewish motif in Medieval Christian Art.' *Journal of Medieval History* 17.4: 297–321.

Shatner, Lisabeth. 1989. *Captains' Log: William Shatner's Personal Account of the Making of Star Trek V: The Final Frontier*. New York: Pocket Books.

Shatner, William, dir. 1989. *Star Trek V: The Final Frontier.* Paramount.

Whitfield, Stephen E. 1968. *The Making of Star Trek*. New York: Ballantine.

Neal Stephenson's *Reamde*: A Critique of Gamification

Anna McFarlane (University of Glasgow)

Neal Stephenson's writing has helped to shape post-cyberpunk sf as well as influence real-world technology, so his move to realism with 2011's *Reamde* offers an opportunity to understand science fiction's changing relationship to mimesis in the twenty-first century. Stephenson is considered a core cyberpunk writer thanks to 1992's *Snow Crash*, a novel that depicts an online virtual world known as the Metaverse. This novel is based on the premise that the actions of an online world could have a material impact on participants outside of the game: namely, gamers can be brain-damaged by a computer virus. Stephenson has continued to explore these themes throughout his career, but recently through contemporary settings, rather than the futures of his science fiction. Stephenson's *Reamde* could therefore be considered an example, following Veronica Hollinger, of 'science fiction realism'.

Reamde also borrows tropes from the thriller and espionage genres as it spans over a thousand pages and many continents, weaving an international story of adventure, kidnapping and terrorism. The novel tells the story of Zula, an Eritrean orphan who was later adopted by gun-toting parents from Ohio in the USA. Zula's boyfriend Peter sells some credit card data to an unhinged member of the Russian mafia known as Ivanov, only to find that the information has become encoded by a Chinese hacker known as 'the Troll' using a file called REAMDE (a misspelling of the common filename, README). Zula and Peter are kidnapped by the Russians and brought to China where they are forced to help discover the identity of the hacker in order to free the data. The Chinese hacker holds the data ransom until victims agree to pay him in the game world of *T'Rain*, a massive multiplayer online role-playing game which happens to have been the brainchild of Zula's uncle, Richard Forthrast. As the novel continues some of the key events happen within the world of the game as the stakes that have always been real for the Chinese hackers, making their living through online worlds, become real for Richard and his family as they try to save Zula. After escaping the Russians, Zula falls into the hands of Welsh terrorist Abdullah Jones, and his gang who fly her to Canada before a final showdown in the woods of the northern USA. Like Gibson, Stephenson is reacting to a present that changes too quickly for a future to be extrapolated by moving from cyberpunk to realism, but his novel still performs one of the most important tasks of which science fiction is capable: it considers the potential impact of a current trend in order to allow the reader to question their contemporary paradigms.

In *Reamde* Stephenson primarily critiques gamification, the increasingly common application of games and gaming models to 'real' life problems. Gamification's roots are found in marketing as public relations companies

attempt to harness the compulsive nature of games in order to keep consumers engaged with their brands and, ultimately, to sell more products. Although this desire to make gaming mechanisms marketable was the original impetus behind gamification there have been calls from some proponents to use these techniques in every aspect of life. Alongside other advocates such as Jesse Schell and Gabe Zichermann, game designer Jane McGonigal has been one of its most vocal supporters through her book *Reality is Broken: Why Games Make Us Better and How We Can Change the World* (2011) as well as multiple public appearances and a 2010 TED Talk with over three million views. She has since distanced herself from the term in a welcome acknowledgement of some of its problems but continues to promote other tactics of gamification under the rubric of 'gameful design', which seeks to bring the 'feeling' of a game to real-life situations and to use this sensation to encourage the development of life goals or greater social projects (Alexander 2011). While the most visible aspects of gamification in marketing (such as badges and superficial rewards) have been recognized by McGonigal and others as somewhat cynical and potentially exploitative, there is still an effort to salvage the more significant, less visible aspects of gamification, such as its potential to manipulate everyday behaviour and to harness online gamers as a 'human resource' to solve problems such as climate change, obesity, poverty and global conflict (McGonigal 2010). In *Reality is Broken*, McGonigal urges just such a radical use of gaming models to change the ways in which human beings relate to the reality of the world around them:

> What if we decided to use everything we know about game design to fix what's wrong with reality? What if we started to live our real lives like gamers, lead our real businesses and communities like game designers, and think about solving real-world problems like computer and video game theorists? Imagine a near future in which most of the real world works more like a video game. (McGonigal 2011: 7)

The problem that gamification can apparently address is a lack of engagement, or a sense that the 'real' world is not as fun as it should be. This disaffection is attributed to the chaos and complexity of contemporary society. For example, Zichermann claims that:

> Gamification is needed more than ever. We live in a world of increasing distraction and complexity, where organizations need to cut through the noise and users need systems that can help them achieve their full potential. Well done gamification has the power to accomplish that and more. (Zichermann 2013)

By contrast, the biggest meta study so far on the success of gamification has found that its positive outcomes are questionable as studies have been small

and based on subjects self-reporting, often without a control group (Hamari et al 2014). Zichermann's emphasis on cutting 'through the noise' gives little thought to the value of our attention. It assumes that engagement alone is a goal worth striving for. However, in doing so, gamification treats engagement as a commodity. A technique that can force consumers to pay attention to certain brands or encourage employees to be more productive has a high monetary value, and gamification seeks to profit from that value. The applications for gamification are also limited because goal-oriented models, such as those found in video games, can encourage people to meet a pre-assigned goal but not to deal with a complex situation. This is less of a problem if the task is simply to keep a consumer engaged with a brand or to keep an employee engaged in productive labour. Some of these criticisms have been aired by Ian Bogost in 'Why Gamification is Bullshit' (2011). Bogost draws on Harry G. Frankfurt's essay 'On Bullshit' (1988) in which the philosopher unpicks the specific meaning of the term and its importance in our culture. Frankfurt argues that bullshitters, unlike liars, have no interest in the truth and no relationship to it: their words and deeds are designed to create an illusion for their own benefit, to pull the wool over the eyes of their interlocutor in order to achieve their own ends. Through this understanding Bogost concludes that gamification is indeed bullshit as there is no interest in finding out whether gamification has positive potential, only in using it as a marketing tool. This being the case, Bogost suggests the term 'exploitationware' might be more appropriate.

Stephenson's novel performs the very thought experiment that McGonigal suggests and imagines our contemporary world as working 'more like a video game'. He engages with the gamification of our societies, our relationships and our minds in *Reamde*, as we will see from a consideration of Zula as the focalizing character and the primary locus of morality in the world of the novel. Before looking at this more closely however I will explore Stephenson's relationship to science fiction in this novel and how he continues to use the future to analyse the present, even when that future is already upon us. Science fiction has always been used to analyse the present, particularly the impact of new technologies on contemporary modes of being, and Stephenson's novel is no exception, but instead of an explicit engagement with sf Stephenson writes *Reamde* as a thriller, somewhat closer to the realist mode. This decision is an important step in understanding the project he undertakes in the novel and the ways in which he criticizes contemporary society.

Stephenson's science fiction realism

Stephenson's move from sf to realism in this novel as he critiques the very contemporary issue of gamification echoes William Gibson, who also uses contemporary settings in his Blue Ant trilogy (2003–10). Both Stephenson and Gibson have been instrumental in building sf's reputation for not predicting but performatively creating the future. Gibson famously coined the term 'cyberspace'

in *Neuromancer* (1984), while Stephenson's *Snow Crash* uses the word 'avatar' to refer to an online persona for the first time, and describes an online world where avatars could engage with one another: something that, at the time, was only possible in science fiction. Stephenson describes his main character Hiro's experience of this online, immersive environment: 'So Hiro's not actually here at all. He's in a computer-generated universe that his computer is drawing onto his goggles and pumping into his earphones. In the lingo, this imaginary place is known as the Metaverse' (Stephenson 1992: 22). This Metaverse was later credited by Philip Rosedale, creator of the online virtual space *Second Life*, as a key inspiration (Maney 2007) and Stephenson jokes in *Reamde* about his description of a programme strikingly similar to *Google Earth* in *Snow Crash*, years before: 'The opening screen of *T'Rain* was a frank rip-off of what you saw when you booted up *Google Earth*. Richard felt no guilt about this, since he had heard that *Google Earth*, in turn, was based on an idea from some old science-fiction novel' (Stephenson 2011a: 38). The irony is that sf created the future in which we now live, and now it can feed on our contemporary reality while still exploring the same issues. Stephenson's importance in inspiring the structure of the online life as we know it today reflects Gibson's impact on computer programmers by giving them a way to cognitively map how online spaces might be expressed through user interfaces. Other post-cyberpunk writers such as Cory Doctorow often deal with realistic environments that may be set in the immediate future or in an alternate present with only slightly more developed technology than we have today. In some of these novels it is difficult to identify the nova, the changes that have been made to render the novel's genre as science fiction.

In order to describe Gibson's move from sf to realism in *Pattern Recognition* (2003), a novel that functions as a realist text but repeatedly questions the meaning of realism in a world where technology is constantly changing, Veronica Hollinger coined the term 'science fiction realism': a kind of literature which realizes that 'there is not much difference any more between the facticity of realism and the subjunctivity of science fiction' (Hollinger 2006: 452). N. Katherine Hayles also remarks on this trend as she notes that 'science fiction writers, traditionally the ones who prognosticate possible futures, are increasingly setting their fictions in the present' (Hayles 2005: 149). Stephenson is very conscious of the role he has to play, as a science fiction writer, in influencing the future. Not only has he influenced the development of virtual worlds thanks to *Snow Crash*, but he has also helped to set up Project Hieroglyph which aims to bring together science fiction that shows the techno-optimism of the Golden Age and can thereby act as an inspiration to scientists of the future. Stephenson has warned against a genre that behaves as if 'we have all the technology we'll ever need, we seek to draw attention to its destructive side effects' (Stephenson 2011b: 13). Despite this concern with contemporary sf, Stephenson issues exactly this kind of warning about the harmful side-effects of gamification, via the form of

science fiction realism, rather than developing the utopian potential of video games espoused by McGonigal and others. This should not be misunderstood as a mindless attack on a relatively new medium – Stephenson has spoken publicly about his fondness for video games, particularly *Halo 3* (Sinclair 2011) – but rather as a sceptical approach to the extension of gaming behaviours into physical reality.

Stephenson's decision to move to realism may have been influenced by some of the same factors as Gibson's. Gibson is broadly in agreement with Hollinger's understanding of his work as he has repeated throughout his career that all science fiction is about the present and that extrapolation is barely possible when the present is so volatile that we 'have insufficient "now" to stand on' (Gibson 2003: 57). While Stephenson still works to promote techno-utopianism in science fiction he has certainly expressed similar sentiments. At the Game Developers Conference 2011 (a conference that also hosted Jane McGonigal sharing her thoughts on gameful design) Stephenson gave a keynote speech in which he referred to gold farming, the practice of undertaking repetitive tasks in the game for virtual coin that can then be exchanged for real world currency, as 'one of those things that makes you want to quit writing science fiction because you could never think of something that weird' (Sinclair 2011). Gold farming is featured in *Reamde* as a practice that can be undertaken by the Chinese hackers and other third world communities as employment, a topic that has also been explored by Cory Doctorow in *For the Win* (2010). Video games have become real and immersive enough to offer virtual reality in a way that cyberpunk could only imagine in a science-fictional context. They have also been integrated into our cultural understanding so that we can read video game tropes in literature and film as realism without being estranged.

Stephenson's novel, like Gibson's, is 'a story about the problematic impact of the future, the future in/as technoculture – on the present' (Hollinger 2006: 452), but while these novels function as science fiction realism, they also work use aspects of the international crime thriller genre. Gibson uses the format in *Pattern Recognition* as Cayce seeks out the creators of the Footage and the two sequels *Spook Country* (2007) and *Zero History* (2010) are in a similar vein as the main character investigates a mysterious shipping container and then a secret clothing brand. Meanwhile, Stephenson shows an almost outlandish affection for this genre. Zula faces one insane event after the other: capture by Russian mafia, a gunfight, kidnapping by terrorists, murdering a man with a broken DVD of the film *Love Actually*, and finally surviving in the woods of Canada and the northern USA. David Glover describes the genre of the thriller as differentiated from detective fiction by its structure, which affects the reader by piling thrill upon sensationalist thrill: 'set against this kind of psychic and epistemological turbulence, any investigative impulse seems to fall short or to seem woefully inadequate, as if the deductive model cannot contain the implication of its own findings' (Glover 2003: 138). This certainly applies to

Reamde and its series of incredible events. Like science fiction realism, the thriller encourages the reader to recognize that extrapolation is not possible in such a fast-moving world.

Reamde's critique of gamification

Reamde's critique of gamification is woven throughout the various threads of the narrative as Zula and the others captured by the Russians deal with a situation reminiscent of a computer game; violent, action-packed and increasingly dangerous as if each incident leads to a level of higher difficulty. At the same time, the stakes in the virtual world are revealed to be much higher than those of a mere computer game as Richard uses *T'Rain* to trace Zula's last known whereabouts and to attempt a rescue mission. The real and virtual worlds and the tactics demanded by each do not stay where they belong, but bleed in either direction so that the real world is gamified as the stakes in the virtual world grow higher. As in *Snow Crash*, the actions which occur in the virtual world can lead to real death for Zula, Peter and the creators of the REAMDE virus.

Reamde describes gamification as imagined by advocates like McGonigal and Zichermann as Richard Forthrast uses *T'Rain* and its world to make reality more engaging. Richard uses *T'Rain* to make boring jobs more interesting, so that employees can perform better, rather than being bored to the point that they lose awareness. Examples given in the novel are of airport security guards who are paid to watch a stream of people exiting the secure area of the airport all day in order to make sure that no one goes against the tide, or workers paid to spot faulty widgets on an assembly line. Both these tasks can be coded into *T'Rain* so that the worker experiences their job as a medieval combat scenario. The point is made that:

> If their pattern recognition software could identify the moving travellers and vectorize their body positions well enough to translate their movements into *T'Rain*, then it could just as easily notice, *automatically*, with no human intervention, when one of those figures was walking the wrong way and sound the alarm. There was no need at all to have human players in the loop. (Stephenson 2011a: 136)

Stephenson uses the term 'bogosity' to denote the bogus nature of this gamification, a term that can be read as a form of the word 'bogus' but could equally be related to Bogost and his insistence that 'gamification is bullshit'. Richard's response to the critics strengthens this association: 'Did you, or did you not, tell me that this was all marketing? What part of your own statement did you not understand?' (136). Bogost's accusation that gamification is all about marketing rings true here in Richard's attitude. The proliferation of these gamification apps creates an unfortunate side effect as *T'Rain* is 'far more intensively patched into the real world than a quasi-medieval fantasy world [has] any right to be' (138), a factor that spreads the REAMDE virus extremely

quickly to millions of users, even those who are not gamers. Stephenson shows that gamifying tasks and environments can render them weaker as the loss of complexity makes systems open for attack, and human beings less equipped to deal with that attack when it comes.

While gamification argues that gaming tactics should be exported into the 'real' world, *Reamde* shows the reverse of this situation; the regularity with which the gaming environments are used for 'real' world disputes and criminal activity, like that of the Troll and other, lesser gold farmers. *T'Rain* is designed with the kind of libertarianism in mind that expresses itself throughout the Forthrast family in their gun ownership, survivalist lifestyles and associations with drug-running. When Richard begins to design the game he does so with these real world uses in mind:

> Video games were a more addictive drug than any chemical as he had just proven by spending ten years playing them. Now he had come to discover that they were also a sort of currency exchange scheme. These two things – drugs and money – he knew about. The third leg of the tripod was real estate. In the real world, this would always be limited by the physical constraints of the planet he was stuck on. But in the virtual world, it need be limited only by Moore's law, which kept hurtling into the exponential distance. (34)

As he works towards the goal of making video games useful for such traditionally real life pursuits as drugs, currency and real estate, Richard passes around a memo in which he explains to his staff that, 'anyone who feels like it ought to be able to grab hold of our game by the technological short hairs and make it solve problems for them' (131). However, such a strategy allows the Troll the freedom to invent and spread the virus that will ultimately lead to Zula's kidnapping. This is not necessarily an argument against libertarianism more generally – the novel is predominantly kind towards libertarian lifestyles that are often dismissed or derided by liberal thinkers, such as those of the American survivalists – but it does show that the integration of games with other infrastructures can have unintended consequences, such as weakening security systems.

While the gaming world proves effective as an arena for money laundering and blackmail through the Troll's virus, it succeeds less well as a moral space. For example, *T'Rain* allows gamers to choose a 'team', so that they can be 'Good' or 'Evil'. However, as time has gone by the game has become host to a 'War of Realignment' (or, 'Wor') as the characters divide themselves into two groups based on the colours they choose for their avatars. One of the game designers explains to Richard that the fighting based on colour has more power in the game because the labels of 'Good' and 'Evil' had not reflected real moral or ethical positions:

> The people who called themselves Evil weren't really doing evil stuff,

> and the people who called themselves Good were no better. It's not like the Good people were, for example, sacrificing points in the game world so that they could take the time to help little old ladies across the street … we set them certain tasks that had the 'Good' label slapped on them; but, art direction aside, they were indiscernible from the 'Evil' tasks.

Richard responds: 'So the Wor is our customers calling bullshit on our "Good/Evil" branding strategy' (227). The designer explicitly draws attention to the lack of connection between the gaming world's label of 'Good' and an action in the external world: helping little old ladies to cross the road. This exchange shows an important point about the mechanics of the game: they are designed for internal coherence rather than for their impact on external factors so that, while the game can stimulate certain behaviours, this is not based on morality but on the manipulation of the player through rewards and other game mechanics. The player can react to the prompts of the game world without engaging in moral or ethical contemplation.

The amoral construction of the game begins to bleed into real life as reality becomes gamified and goal-oriented behaviour disrupts the characters' moral and intellectual thought processes. Richard feels the effects of gaming on his internal experience of his own cognition. At one point he feels that something is bothering him and as he tries to figure out what it could be he thinks, 'it was like a puzzle in a video game' (30). The Russian gangsters give Zula, Peter and another hacker, Csongor, a goal similar also to a puzzle in a video game; to find the Troll so that the Russians can kill him. The novel uses *T'Rain* as the backdrop for some of the action as characters can meet in the game and communicate through it. Zula has spent time working with the game as a programmer and when she is first kidnapped she tries to locate the Troll in *T'Rain* and finds herself seduced by the game:

> There was something deeply wrong about the situation, and the only thing that had kept her from simply running out the door and flagging down the first car she saw and asking them to call 911 was the addictive quality of the game itself, her own inability to pull herself out of the make believe narrative […] She'd always scorned people who compulsively played these games when they should have been studying or exercising. Now she was playing the game when she should have been calling the cops. (107)

Zula finds that the goal-oriented nature of the task directs her behaviour; closing down options that do not directly lead to figuring out the identity of the Troll, even when the action is no longer taking place in the game:

> There was a moral aspect to this. She'd failed to see it at all […] Now, though, she was being asked to give up another person: a complete

> stranger, somewhere, who had created REAMDE. She had not volunteered for the job. (123)

Zula recognizes the amorality of the game, and of goal-oriented behaviour, as she decides not to be controlled. Her insistence that she has not volunteered makes her self-aware enough to fight the effects of gamification, even as she feels herself compelled to help Ivanov find the Troll. Zula's consideration of the moral aspect of the situation is in stark contrast to the lack of moral consideration found in gamification, even as it seeks to guide the behaviours and the agency of those taking part voluntarily, or being targeted by an employer or a corporation. The search suffers a setback at one point and Zula reminds herself:

> It was *good* luck, not bad, that they couldn't figure it out; turning the troll over to Ivanov would be a *bad* thing. She was a little perturbed by how easy it was for her to get caught up in the excitement of the hunt. (263)

While Zula becomes self-aware about the tunnel vision caused by aiming towards a goal at the cost of all else, Peter and Csongor are completely absorbed in the task. Zula realizes: 'they were actually trying to solve the technical problem of locating the Troll. Which might have been Ivanov's problem, but it wasn't theirs. Theirs was Ivanov' (159). The goal is imposed by Ivanov, who Zula has no wish to help, but the compulsion to rise to the challenge is a strong one that must be fought, like the compulsion to continue playing the video game. In order to keep this in mind, rather than getting carried away like Peter and Csongor, Zula has to set her own goals rather than being distracted by Ivanov's demands:

> That, as she had to keep reminding herself, was the only thing that mattered. Not catching the Troll. But making Ivanov believe that they were making progress towards catching the Troll, stringing him along, long enough for them to think their way out of this. (203)

Zula's self-awareness allows her to hold on to her morality and to maintain control over her own actions as she never falls into the trap of believing that the ends justify the means. She holds this in common with Juanita Marquez from *Snow Crash*, a skilled hacker who helped to create the Metaverse. Juanita invents the technology to reproduce realistic facial expressions but later withdraws from the online world as she believes, 'no matter how good it is, the Metaverse is distorting the way people talk to each other, and she wants no such distortion in her relationships' (Stephenson 1992: 60). Like Juanita, Zula struggles to stay grounded as technology warps the relationships between people. The urge to achieve a goal or to overcome a challenge, a compulsion honed in video games, makes other people easier to control but Zula manages to resist. Through showing the problems with gamifying non-game experiences

the text adopts a moral position: that the ends do not justify the means. Even if a 'goal' has been achieved, this cannot be considered an unambiguous victory because reality, unlike a video game, is not goal-oriented in the same uncomplicated way.

Through this consideration of control and manipulation, Stephenson broadens the critique of gamification into a discussion about the ethics of controlling human behaviour more generally. When Zula is kidnapped by the terrorists their leader tells her that his associate, Khalid, is a rapist who has murdered women before as a result of his warped, fundamentalist beliefs. Jones explains his reasoning for telling Zula about Khalid's past:

> 'You may have *reckoned*, but now you have gone beyond mere *reckoning*. Now you *feel* it so that it will guide your actions.'
>
> 'Guide or control?'
>
> 'That's a Western distinction.' (Stephenson 2011a: 419)

The explicit threat in Jones' discussion of Khalid's violent past draws connections between threats, blackmail and any kind of manipulation that attempts to impact the behaviour of another human being. These different levels of manipulation are equally dangerous and gamification, by attempting to influence human behaviours (even with the best of intentions), is placed on this scale. The grey area that distinguishes control from guidance is really the area where much of the novel's action is played out.

Conclusion

Stephenson's critique of gamification is notable for two reasons. On the level of content, the novel challenges societies and individuals to take a philosophical approach to new technologies and to gamification in particular. While the distrust of gamification began as a reaction to its cynical use as a marketing tool there is arguably now a greater need for a critique of gamification than ever before if one considers the way that social media gamifies personal relationships. Twitter and Facebook encourage users to interact with incentives such as likes, favourites and comments which are translated into notifications, a process that quantifies interpersonal engagement and encourages an entrepreneurial approach to such interaction. While Twitter is not marketed as a game, the satirist Charlie Brooker has argued that the urge to gain more 'points' in the form of followers or retweets constitutes a game mechanic that encourages users to treat their thoughts and their social lives as a game (Brooker 2013). The spread of gamification from the realm of the console to marketing platforms and finally into social media is certainly a cause for further comment, some of which will be carried out in the pages of science fiction novels.

The debate surrounding gamification also feeds into a wider concern about the impact that information technology is having on our cognitive, problem-solving and ethical abilities. Nicholas Carr observes that the change in media is

producing a change in our thought processes:

> Thanks to the ubiquity of text on the Internet, not to mention the popularity of text-messaging on cell phones, we may well be reading more today than we did in the 1970s or 1980s, when television was our medium of choice. But it's a different kind of reading, and behind it lies a different kind of thinking – perhaps even a new sense of the self. (Carr 2008)

These concerns about gamification, changes in reading habits and, as a result, in our sense of self are all connected and a ripe ground for exploration by science fiction writers who have been examining such concerns for (at least) the last thirty years. The form of Stephenson's voluminous novels, particularly when turned to an exploration of how reading and interacting with media shape our relationship to the world, act performatively as a means of reconnecting the reader with the realms of deep thought, even as the heady rhythm of action invoked by the thriller makes the reading experience as fast a process as slipping down a water slide. The form of the novel is even more interesting for its use of genre as Stephenson shows how genre boundaries must continue to blur in a society that experiences technological change as constant and the present as a fluid place. Like Gibson's *Pattern Recognition*, Stephenson's *Reamde* moves from cyberpunk to realism in search of the next thought experiment, the one suggested in McGonigal's ode to gamification: 'imagine a near future in which most of the real world works more like a video game' (2011: 7).

While gaming is an exciting medium that can be used to tell great stories in an engaging way – and it can even be used to make everyday tasks more fun – it cannot be the grounds for a reshaping of reality. While games are often engaging, they are not always engaging in the right way, or guiding attention in the right direction when taken out of the gaming context and applied to real world problems. Reality should not be about achieving specific, pre-ordained goals, but about approaching the complexity of reality with the nuance it deserves. The ends do not always justify the means in real life. Rather than gamifying life, there should be a space left open for play as an alternative to gaming. Play is not goal-oriented; it is experimental and creates new approaches and new ways of thinking. This is the kind of play we find in film, literature and quality video games that play with the concepts of gaming. A good model for a game that encourages genuine play can already be found, for example, in *Minecraft* (2009–15) and other sandbox games which allow players to express themselves and to have some agency in the game environments. *Minecraft* began as a building game in which players can use blocks to build defensive structures, but it has become a creative space where players of all ages can cooperate to build beautiful buildings and children can engage with each other in genuinely free play. Such spaces may, indeed, provide a venue for creative and collaborative approaches to the real world problems that gamification claims to address, such

as political conflicts, global warming or obesity. But mapping game mechanics onto the real world can only guide (or control) behaviour in a direction decided in advance by game designers and those who seek to profit from the human resource of engagement. For this reason the techno-utopianism of gamification must be critiqued and, where necessary, resisted.

Works Cited

Alexander, Leigh. 2011. 'Game Developers Conference 2011: McGonigal Says "Don't Exploit Gamers", Extrinsic Rewards "Missing the Point".' *Gamasutra.com*. URL: http://www.gamasutra.com/view/news/123718/GDC_2011_McGonigal_Says_Dont_Exploit_Gamers_Extrinsic_Rewards_Missing_The_Point.php (accessed 24/02/15).

Bogost, Ian. 2011. 'Why Gamification is Bullshit.' *The Atlantic*, August 9. URL: http://www.theatlantic.com/technology/archive/2011/08/gamification-is-bullshit/243338/ (accessed 18/02/15).

Brooker, Charlie. 2013. *How Video Games Changed the World*, 29 November, London: Channel 4.

Carr, Nicholas. 2008. 'Is Google Making Us Stupid?' *The Atlantic*, July 1. URL: http://www.theatlantic.com/magazine/archive/2008/07/is-google-making-us-stupid/306868/ (accessed 24/02/15).

Frankfurt, Harry G. 1988. *The Importance of What We Care About: Philosophical Essays*. Cambridge: Cambridge University Press.

Glover, David. 2003. 'The Thriller.' In Martin Priestman, ed. *The Cambridge Companion to Crime Fiction*. Cambridge: Cambridge University Press, pp. 135–54.

Hamari, Juho et al. 2014. 'Does Gamification Work?: A Literature Review of Empirical Studies on Gamification.' URL: http://www.researchgate.net/publication/256743509_Does_Gamification_Work__A_Literature_Review_of_Empirical_Studies_on_Gamification (accessed 11/08/15).

Hayles, N. Katherine. 2005. 'Computing the Human.' *Theory, Culture and Society* 22.1: 131–51.

Hollinger, Veronica. 2006. 'Stories About the Future: From Patterns of Expectation to Pattern Recognition.' *Science Fiction Studies* 33.3: 452–72.

Maney, Kevin. 2007. 'The King of Alter Egos is Surprisingly Humble Guy. Creator of Second Life's Goal? Just To Reach People.' *USA Today*, 5 February. URL: http://public.wsu.edu/~fking1/rosendale_2ndlife.doc (accessed 12/03/15).

McGonigal, Jane. 2010. 'Gaming Can Make a Better World.' *TED.com*. URL: http://www.ted.com/talks/jane_mcgonigal_gaming_can_make_a_better_world?language=en (accessed 24 February 2015).

----- 2011. *Reality is Broken: Why Games Make Us Better and How We Can Change the World*. London: Penguin.

Sinclair, Brendan. 2011. '*Snow Crash* Author on the State of Storytelling in Games.'

Gamespot, October 11. URL: http://www.gamespot.com/articles/snow-crash-author-on-the-state-of-storytelling-in-games/1100-6339423/ (accessed 24/02/15).
Stephenson, Neal. 1992. *Snow Crash*. New York: Bantam Spectre.
----- 2011a. *Reamde*. London: Atlantic Books.
----- 2011b. 'Innovation Starvation.' *World Policy Journal* 28: 11–16.
Zichermann, Gabe. 2013. 'Gamification: The Hard Truths.' *Huffington Post*, 23 January. URL: http://www.huffingtonpost.com/gabe-zichermann/gamification_b_2516376.html (accessed 17/03/15).

Ari, Azi, and the Future of C.J. Cherryh's Gengineered Humanity

Patricia Monk

C.J. Cherryh, to be made the 32nd Damon Knight Grand Master at this May's Nebula Awards, came to prominence in the late 1970s and early 1980s, especially with the Hugo Award-winning *Downbelow Station* (1981), part of the multi-volume Union-Alliance universe. Early critical responses tended to focus upon her as a writer of space opera and her possible allegiances with feminism (cf. Williams 1986: 85-92). Following her second Hugo Best Novel Award for *Cyteen* (1988), fresh emphasis was paid to the roles of cloning, genetic engineering and reproductive technology, especially as they disturb conventions of gender and genre (cf. Hayles 1995: 332-4; Wolmark 1993: 72-80). Only more recently has the critical attention turned to questions of ethics in Cherryh's fiction, for example in terms of animality or foreignness (see respectively Turner 2011: 163-75; Clark 2007: 197-214). In particular, chapters by Susan Bernado and Elizabeth Romey in Edward Carmien's collection, *The Cherryh Odyssey* (2004), have debated the moral stance of Dr Ariane Emory-Carnath, the genetic engineer of the azi in *Cyteen*. This article will examine the azi's construction and portrayal in the following novels: *Serpent's Reach* (1980), *Port Eternity* (1982) and *Forty Thousand in Gehenna* (1984) as well as *Cyteen*.[1] Whereas their creator desires for the azi a more altruistic purpose, the Union regards them instrumentally as filling the shortage in Union numbers in their conflict with the Alliance and in compensating for human imperfection in individual, highly specialized tasks. As the narratives proceed, however, it becomes evident that both Union aims are ethically flawed. In this sense, Cherryh makes a significant contribution to the cultural debate surrounding human cloning as described by Maria Ferreira: 'cloning narratives have been […] conjecturing what those changes might be and considering the manifold ramifications and implications of those alterations in the near future' (Ferreira 2005: 14-15).

Azi: The Genetic and Political Context

For readers unfamiliar with Cherryh's novels, Cyteen is one of the Union worlds where the development and production of azi (genetically-engineered, psycho-programmable human replicas) has been taken to commercial levels. It has been settled from Cyteen Station in orbit around it and is now a partially terraformed world, thanks largely to the efforts of Olga Emory-Carnath. The process of terraforming, though, was halted by her daughter, Ariane, who became convinced that terraforming was not the answer to the Union's problems in finding and colonizing habitable planets, and chose to pursue cloning instead. A minority of the population who inhabit Cyteen and Cyteen Station, known as cits, are human descendants of the original settlers and are enfranchised by birth. Azi

themselves form another minority group (disenfranchised and contracted out to employers). The majority of the population are azi-born descendants and are enfranchised. The initial sets of azi were cloned from the original emigrants from Earth in facilities called birthlabs of which Reseune on Cyteen is the earliest and is responsible for all research, development and production in Union space.

Anatomically and physiologically, although they remain within the parameters of the human norm, azi are not clones in the strict sense of being genetically identical copies as defined by the *Oxford English Dictionary*: 'An animal or (theoretically) a person that is developed asexually from its parent to whom it is genetically identical. In later use esp.: an animal, embryo, etc. developed from a denucleated egg cell into which nuclear material from a somatic cell has been transferred.' Identical genesets are genetically tweaked ('gengineered') to produce viable embryos through a process requiring highly specialized and advanced techniques of replication, to which radical psychological modification is added in the search for improvement. Although the replication process is the same for all embryos, the genetic material comes from different sources. For cit replicants, the cloning of citizens is an alternative to natural reproduction and replication is readily available. Genetic material for a parental replicate is either taken from two individuals who want to share a child or from an individual who wants a personal twin using only his/her own genetic material. This latter process is known as 'vanity cloning' and is expensive: 'except for the rare genotype Reseune finds of commercial or experimental interest' (*C* 40). These processes of replication are dramatized through the re-doubling of Ariane: Ari1, the child of Olga Emory and James Carnath; Ari2, the psychogenetic parental replicate of Ari1; and Ari3, the replicate of Ari2.

Replication of azi embryos comes from the genebanks of the birthlabs. Reseune operates genebanks of already replicated and modified genetic material in the form of genesets for azi, which are stored by cryogenesis after reproduction in quantity. A geneset is essentially a DNA molecule obtained from a tissue sample, such as a white blood cell, with the full diploid set of genes of which the DNA coding has been modified into a specific combination by manipulating the genes already present. This geneset constitutes the template to reproduce a particular version of replicant, classified from A to Z according to their intelligence levels asrecorded on the Union's Rezner Scale. Replicants with the same geneset appear physically identical since genesets reproduce only physical characteristics.

The procedure for replication involves implanting a geneset into an enucleated egg. Together they produce an embryo which is implanted and brought to term in a wombtank, an artificial womb:

> The womb into which each egg goes is bioplasmed and contractile, the whole environment closely duplicating a specific natural pregnancy which has served Reseune for forty-nine years: it replicates all the movements, the sounds, the chemical states, and the interactive

cycles of a living womb. (*C* 38)

The wombtank replaces natural or *in utero* gestation with *in vitro* gestation. Once born, all azi are 'raised in crèches' where they are psychologically programmed: 'The voice is tape. As yet it is only subliminal, a focus of confidence' (*C* 119). This 'voice' implants the required psychset into the azi brain. Azi receive both psychset (hormone and blood chemistry system) learning and informational learning; according to the azi Grant: 'I've got two processing systems. The top level I've learned in the real world; endocrine system learning. The bottom, where my reactions are, is simple, damn simple, and mercilessly logical' (*C* 194).

Just as azi genesets are designed by manipulation of the genes which make up their DNA, so their whole psychsets are designed by tape: a complex process of conditioning that relies upon Reseune's theory that the human brain is computer-like in its programmability. The process imprints patterns of thought and behaviour on the mind in altered states of consciousness using techniques refined and derived from early Earth experiments with sleep-teaching and drug-assisted hypnosis. Recorded voice instructions are read into a mind which has been put in a sleep-like trance induced by 'a cataphoric' (*C* 69). Basic tape is repeated and new tape introduced into the azi's psychset throughout his/her life, and is also used to reward and punish. In addition to tape, azi have to undergo varying degrees of socialization in order to work alongside cits, so that by the time they reach physical maturity they will have acquired the necessary and appropriate behavioural and work skills that will allow them to be contracted out to employers.

Psychologically, in spite of their similar anatomy, physiology and experience of wombtank gestation, azi and cits are fundamentally different as a result of tape-psychsetting. When the expectation to treat azi with care and respect is not met, their programmed psychsets destabilize under stress and they are required to report immediately to their supervisor. In extreme cases, if restabilization is not possible, mind-wipe (axe code) or euthanasia is required. Furthermore, azi are rarely permitted to live beyond the age of forty. This negative eugenic solution to the azi is justified by the Union on the basis of the genetic differences between real-born humans and birthlab clones. Cherryh's dramatization of human cloning reveals it to be not only unethical but also potentially destructive of humanity as a species. As the haematologist, Michael Dexter, has said: 'Our genes make us what we are as human beings […] this code [the genonme] is the essence of mankind' (quoted Wellcome Trust Sanger Institute 2000). If the existence of the genome can delineate an essential difference between the human and a cloned replicant, then this difference needs to be examined in terms of what future legal rights and ethical frameworks can be established between humans and their genetically engineered counterparts. It is to this debate that a reading of Cherryh's fiction can contribute.

To clone is a transitive verb – it requires an object. Should humans choose to clone other humans, the object would become in respect of their actions a *thing*. Although the actual process would consist of bits of organic material that would not literally *be* a 'human', these parts would have come from a human source, whether stolen, requisitioned or volunteered. Before Cherryh published her clone narratives, this point had already been noted in science fiction. For example, when Nick Haflinger, in *The Shockwave Rider* by John Brunner (1975), enters the office of his supervisor at the state think-tank, Tarnover, he is immediately confronted by 'a *thing*':

> It had a face. It had a torso. It had one normal-looking hand set straight in at the shoulder, one withered hand on the end of an arm straw-thin and almost innocent of muscle, and no legs. It rested in a system of supports that held its overlarge head upright, and it looked at him with an expression of indescribable jealousy. It was like a thalidomide parody of a little girl. (Brunner 1976: 60)

'It' is a clone, whom her creators call Miranda, and boast 'We built her' (61). Later in the novel, Nick confides his belief that 'If there is such a phenomenon as absolute evil, it consists in treating another human being as a thing' (228). Techniques have improved between the production of Miranda and the physically normal azi of the colonization of Cyteen, but both begin with the denucleation of the egg into which a geneset is then transferred. The leftover nucleus from the egg – human potential – is mere waste.

The Four Faces of Azi (1): *Cyteen*

In *Cyteen*, the azi are not citizens. In theory at least, they are neither slaves nor indentured labourers, although they may earn citizenship. They are initially the property of the vast scientific complex, Reseune, which produces and owns them, and are then transferred by individual or group contracts from Reseune to their employers who may be government agencies (the Department of Defense), corporate firms (as workers of all kinds) or individuals (as companions, bodyguards or servants). Their genesets, unlike cit genesets, are engineered and patented; their psychsets are intensively programmed from the moment of fertilization. Within the parameters of their genesets, psychsets and contracts, however, azi live and work freely and productively. Those who work with them are required to treat them with care and respect for their status as living, feeling, intelligent beings (see, for example, the five sections in *Cyteen* entitled 'Verbal Text: From Patterns of Growth – A Tapestudy in Genetics').

The contract is the final programming which turns the azi over to his or her employer. The programming instils, along with everything else, the imperative desire for the approval of the born-man to whom the azi is contracted so that most azi show signs of a limited autonomy. The results, however, are

ambiguous. There can, for example, be a problem with azi morality: after Ari1 sexually assaults Justin with the assistance of her azi Florian and Caitlin, it is clear that the modifications to the azi psychset involve the loss of moral sense:

> 'I'm really sorry,' Florian said, and met his eyes with an azi's calm, anxious honesty: at least it seemed to be and probably it was very real. There was not a shred of morality involved, of course, except an azi's which was to avoid rows with citizens who might find ways to retaliate. (*C* 93)

Elsewhere, Grant says specifically, 'I don't understand good and evil' (*C* 289), and this runs as a subtext in all relations between azi and born-men. Moreover, although theoretically there is 'no identity transference' (*C* 40), even this theory is called into question after Ari1's death. Her personal guards, Florian and Catlin are apparently replicated directly as the same pair for Ari2 but without psychogenesis (mind-cloning). Florian2, however, seems to have at least an echo of his previous existence when he and Catlin2 first meet: 'He thought he had seen her before. She stared at him, the way you weren't supposed to stare. Then he realized he was doing it too' (*C* 306).

Even Grant, created as a special project by Ari1 and contracted as a companion to Justin Warwick (himself a cloned parental replicate of his father Jordan Warwick), is subject to doubt. He is clearly positioned in *Cyteen* to be the ideal azi, with an Alpha classification and the intellect of a genius. Stable enough to be allowed access to his own programming manual, he is free to take tape at his own discretion. He survives psychological bullying better than Justin, who is the more emotionally volatile of the two, and he even shows signs of a sense of humour. Other advanced and stable Alpha azi who figure prominently in the narrative, for instance Paul, Jordan's companion, are subject to varying degrees of stress. Yet, as discussed by Justin and Grant, the tipping point in the difference between human and azi appears to be the inversion of flux-thinking and logic:

> I'll have all this endocrine learning. That's why some old azi get more like born-men. And some of us get to be real eetees. That's why old azi have more problems. (*C* 194-5)

Grant himself appears to think that there is a crucial difference between azi and human arising from the way their minds are trained from birth: 'You [humans] get your *informational* learning through tape and your psychset through senses […] through natural cataphorics' and what makes the difference is that 'hormones work in learning […] blood chemistry reacts – to the environment' (*C* 193). He goes on to explain:

> Our early memories did not come from endocrine-learning; we have

> no shades of truth. You're averaging and working with a memory that has a thousand shades of value. […] You can come up with two contradicting thoughts and believe both of them because there's flux in your perceptions. I can't. (C 193-4)

The term 'flux' or 'flux-thinking' identifies a state of consciousness subject to the natural influx of major stress hormones from the autonomic nervous system (Klein 2013). Flux-thinking, according to Grant's view, is a normal if not always desirable irrational state in born-men psychsets, but if it occurs in azi can cause their psychsets to destabilize or crash completely. Tape prevents its normal occurrence in azi: 'Knock the damn thresholds flatter than anything in nature' (*C* 193). Grant has, however, already raised another effect of tape: 'I think there is something about creativity and tape – that we don't have it to the same degree' (*C* 191). Justin disagrees, but Grant persists and illustrates precisely where the contrast between azi and human minds signifies a possible difference between human and azi nature (*C* 192).

The Four Faces of Azi (2): *Forty Thousand in Gehenna*

In *Forty Thousand in Gehenna*, the difference between the essentiality of the human and the essentiality of the clone is explored chiefly through the point of view of the azi, Jin 458-9998, alternating with the viewpoint of the human characters. Jin has been chosen to become one of the azi colonists of a planet distant from Cyteen, to be governed by a military and scientific cadre of born-men. Whereas the Union intends the colony to act as a block on Alliance expansion in that particular region of space, Ari1's envisioning of the colony is as a developed population of azi and their descendants taking over the planet and by their programming keeping the planet ecologically unharmed. So, on Cyteen, Jin has been selected from an agricultural background and shares with all the azi colonists the deepteach instruction of their designer, 'the world is to be loved' (*FTG* 58), hidden from the humans.

Initially, the azi are lacking in psychological flexibility and are reliant on continued tape programming with the result that Jin's psychological development is traced throughout the novel. To begin with he does not react well when 'the orderliness in his world [has] been upset' (*FTG* 17), demonstrating that even an Alpha is not impervious. He suffers being shaved and vaccinated and is comforted by the technician, but immediately suffers another mild 'panic' when he realizes on saying goodbye, that 'he was never again going to see this man who solved all his problems' (*FTG* 12). Having been told that Cyteen Station is the star he could see in the sky, he also suffers a childlike confusion because, when he gets there, he walks 'not into the shining heart of a star, but into a very large and very cold place […] which suggested that even solid realities could be revised like tape' (*FTG* 15). He is more at ease when the routine of the voyage begins and he is the midst of the early days of the colony.

Jin, like the other azi, looks forward to the scheduled return of the ship to

provide assistance when the colony runs into trouble from weather, technological breakdown and the presence of an indigenous species – the calibans – that may be sapient. The ship, however, does not return as they expect and the increasing failure of the tape machines that the azi rely on adds psychological pressure. Although in the view of the human administration 'the azi showed no appreciable strain' (*FTG* 109) and plans for the colony go ahead, this assessment is inaccurate. The azi are now encouraged to mate and have children (the azi-born, as they are called) who will carry (according to Ari1's design) azi values as well as azi genes. By the time Jin's son is born, it is clear that even he is under strain. He has already developed the consciousness of being azi and he knows that the azi-born are different: 'the baby was a mixing of gene-sets […] the first one of his kind in the wide universe, this mix of 9998 and 687 […] Jin himself looked down on the small mongrel copy' (*FTG* 109). For him, the mixing of genes in his child makes it born-man, although born of azi, because azi come from a single geneset. As time passes he even becomes frightened of his son, blaming the fear on the loss of the tape machines and wonders if 'somehow an azi was supposed to have the wisdom to control this born-man child' (*FTG* 125). He himself suffers in the absence of tape: 'He doubted now. He was no longer sure of things' and he 'wished forlornly to lie under the deepteach and have the soothing voice of the tapes tell him he had done well' (*FTG* 124-5). Jin is now more like the born-men: 'Jin wept. That was his answer now that he was like born-men and on his own. He mourned without confidence that there would be comfort – no tapes, now; nothing to relieve the pain' (*FTG* 144). But his need for tape persists.

With the loss of his certainties, Jin acquires a new function in Gehenna among the population of the crashed colony. His sensitivities become a sort of litmus test for the future direction of the colonists. He has already responded to the calibans with more than just the usual apprehension about fearsome animals. The colonial authorities, however, consider this indigenous species merely a dangerous nuisance to be driven off or shot:

> He was troubled at the idea. He had never gotten it settled in his mind about intelligence. What animals were and what men were, and how one told the difference. They said the calibans had no intelligence. It was not in their gene set. He could believe that of the giddy ariels. But these were larger than men, and grim and deliberate in their movements. (*FTG* 116)

Their grim deliberate movements strike him as more than merely animal. He does not attempt to persuade anyone else of his intuition about them:

> He never felt quite secure after that, in the night […] although the calibans did not come back. Whenever the fogs would come, he would think of them ghosting powerfully through the camps, so still, so purposeful. (*FTG* 117-8)

By identifying them as purposeful he bestows a human attribute on them. Later he observes that his first son has some attraction to the patterns of stones that calibans make. Moreover, his youngest son, Green, is one of the first azi-born children to become a Weird (an azi-born child unable to communicate with humans but linked mentally with the calibans). The azi-born of Gehenna, Jin's descendants, are the conduit leading towards the human recognition of the calibans as a sapient species. Some of them have an increased sensitivity to the calibans; a few eventually become part of the Tower communities whilst a minority are selected by the calibans to become caliban riders. To do this, the calibans are able to differentiate the psyches of the azi-born from those of the born-men. The alteration from the human to the azi includes this telepathic capacity to conjoin with other minds.

In addition, when Alliance scientists arrive on Gehenna they can find no trace of Union values or anything else. Since the azi-born reproduce freely, they do not continue either the parental psychset of one or other parent or a mixture of both parental psychsets – the mixing of two azi genesets does not carry forward the characteristics and values of the manufactured azi-psychset. Instead, the azi-born children have reverted to the original human arrangement of emotion first, then logic. In addition to Green becoming a Weird, Jin's daughter, Pia, knows she is not an azi. Yet although Gehenna comes nearest to fulfilling the utopian dreams of Ari1, the social hierarchy of human worlds remains untouched by the introduction of azi-born humanity. Here, the azi continue to reside at the bottom of the social scale because unmodified (wild) humans will always take advantage of domesticated (and hence weaker) ones. Even if all Union worlds were to consist of azi-born descendants, the unchanged propensities of the original human will not alter the Union-Alliance situation.

The Four Faces of Azi (3): *Port Eternity*

In *Port Eternity,* the essence of clone consciousness is offered as nearly as possible through the perspective of a first-person azi narrator, Elaine. She is one of a collection of azi males and females who, with names and personalities taken from Alfred Tennyson's *Idylls of the King* (1869), form the Lady Dela's staff (Elaine, Lancelot, Vivien) and crew (Percivale, Gawain, Modred, Lynette) on the *Maid of Astolat*.

Elaine knows that her personality in the group is that of innocence; she knows who and what she is, and she reveals what she knows in her opening remarks:

> My name is Elaine […] I have a number on my right hand, very tiny and tasteful, in blue; and the same number on my shoulder, 68767-876-998, which I am, if anyone asked […] I was made 68767-876-998. Born isn't the right word, being what I am, which is a distinction I don't fully understand, only that my beginning was in a way different than birth, and that I was planned. (*PE* 6)

That is: she knows that she is azi (being made and numbered) and that she has a name (Elaine) which was given to her by her human owner, the Lady Dela Kim; that she 'cost my lady a lot' of money; and that she did not have a name before then. She does not remember being anywhere before Lady Dela owned her, except the 'farm' where she was made; and that 'On the farms they lock you up and you spend a lot of time doing repeat work and a lot of time exercising and a lot of time under deepteach or just blanked, and none of it is pleasant to think back on' (*PE* 6). Her self-reflective qualities are encouraged by her liking for entertainment tapes just as reading books is supposed to encourage flexibility in humans.

Nevertheless, throughout the story, both her azi status and nature are clear to Elaine. She knows she is expendable:

> [Born-men] take us when we get a little beyond forty and put us down. […] But they made us on tape, feeding knowledge into our heads by that means, while they grew our bodies, so I suppose they have the right to do that, like throwing out tape when it gets worn – or when we wear out, beyond use. (*PE* 6)

Although here Elaine seems to be on the brink of questioning the human right to own and terminate azi at will, she does not quite achieve that. Elaine later observes that 'Our purposes are always small. We're small people, pale copies, filled with tapes and erasable' (*PE* 80), and by acknowledging azi as 'copies' and that 'Born-men feel; we react; so the difference runs' (*PE* 18), she is revealed as being still azi in her consciousness.

In particular, the emotions of humans such as Dela and Griffin, and of the personalities portrayed in the *Idylls,* are out of azi range. Elaine observes with reference to her feelings for Lancelot that:

> I liked him, in a different way than I liked anyone else. I would have called it love, but love – was for the likes of the lady Dela, who could fall into and out of grand and glorious passions, sighing and suffering and flying into rages. We just blank when we're upset. The least anguish of an emotional sort turns us off like a light going out. (*PE* 20)

She reveals here what may be the key difference between azi and human – the absence of passion in the former. But when the mysterious attacks on the ship continue, the psychological pressure on them increases and the overlaid psychsets of their various personalities from the *Idylls* begin to bleed into their basic azi psychsets and to play out in their behaviour. It is not clear, then, whether Lancelot's excessive feelings for Dela constitute a breakthrough of passion into azi sensibility or a mere glitch that imposes the Lancelot figure on his basic programming. At the end of the story however, when the hostilities are over and after they have been released from their mandatory death sentences

at forty years of age, both humans and azi settle to a life where 'time […] is different […] But we don't age' (*PE* 191). The anomaly in the space-time continuum does not apparently obscure or erase differences between human and azi consciousness although it releases them from social structures. Outside this protective anomaly, in the world from which they have been ejected, azi must be different, be subordinate and be 'put down' like worn-out pets (*PE* 11). This future is also a dead end.

The Four Faces of Azi (4): *Serpent's Reach*

In *Serpent's Reach*, Raen a Sul hant Meth-maren has come to the planet Istra, an illicit loophole in the quarantine boundary of the so-called 'Hydri Reach'. There she is the only Kontrin (or long-lived human aristocrat) and her purpose is to break the hold of the Reach's Kontrin authorities over Istra. She intends to set up her own government over the inhabitants – betas, who originated from a stock of human eggs brought to the Reach in cryostasis with the original human settlers, and azi – and live in cooperation with the Blue Hive of majat – huge, insect-like, hive-minded species indigenous to the Reach with whom she has previously been affiliated. Seen from Raen's perspective, azi are cloned (from beta DNA not Kontrin) to be slaves working mostly as servants, labourers and guards. They are bred and 'warehoused' in the 'pens' in the 'Labor Registry' (*SR* 161) until they are needed and sold, some into the majat hives (where they become apparently subhuman), but mostly to betas. They are carefully programmed for specific functions, both individually and in groups, and their conditioning makes them docile, efficient, hardworking and obedient to authority. They are sterile and they can be terminated at any age once Kontrin have done with them although as a matter of enforced policy they are terminated as unemployable at the age of forty. Their azi programming, moreover, is unstable: azi are subject to psychological breakdown under stress, from ill-treatment, from unusual events and from exposure to unsuitable tape. Other than Jim, azi are not shown to be capable of introspection.

Raen's human perspective, however conditioned she is to the cloned and programmed nature of azi, is at the same time shown to be self-questioning from the beginning of the novel when she recognizes, apparently for the first time, the humanity in her azi nurse, Lia. Nevertheless, it is through her relationship with Jim, an azi whose services she commandeers on the ship to Istra (and purchases on arrival), which begins to raise her consciousness about azi slavery. Raen continues to recognize in him behaviour characteristic of his azi programming and to treat him more and more as a companion and less as slave, until eventually, after the war that puts Istra under her control, she sees him as fully human. At the same time, whilst Raen socializes Jim as her companion and lover, an azi perspective on clonehood is introduced. Jim's azi mind shares basic human emotions (fear and anxiety) but he begins to react more variously with awe, for example, at the sight of a ship from 'beyond the

Reach' berthed at Istra (*SR* 101).

Cherryh contrasts Jim's consciousness with that of Tom Mullen whom Jim sees as 'a born-man who had gone mad in the pens, listening to azi-tapes' (*SR* 209). In the immediate aftermath of Mullen's breakdown, Jim asserts 'I *am azi*' (SR 202), revealing a sense of his own consciousness. But he is changing – from knowing himself as azi, he recognizes he is human and having realized this, in an attempt to help Raen in her campaign, he deliberately takes the forbidden 'black tapes' and suffers what is effectively a reconstruction/ replacement of his azi programming (*SR* 237-8). His survival implies that he has become fully human, as Raen later sees him. Nevertheless, at no point before or after this does Jim himself give evidence of his essential nature as either azi or human or bring into question the ethical acceptability of slavery. In the epilogue, Raen (with Jim) has become part of the majat Blue Hive, turning Istra over to majat control. The scattered beta population does not need slaves, and without capacity for off-world trade, does not need azi as trade-goods. Those azi who survive Raen's revolution die off naturally because they are sterile and do not reproduce, and when an Alliance ship eventually returns, the reader is told that 'the azi had gone long ago' (*SR* 282).

The Futures of Azi

At the end of *Cyteen*, the azi have not yet been perfected. The azi psyche has been modified to the extent that it is prevented from responding automatically to emotionally determined flux (in the form of stress hormones) from the Autonomic Nervous System (ANS), which is blocked or shunted aside or muted, and replaced by logically programmed responses to stimuli (see Klein 2013). The programming can be designed to permit low levels of sexual libido, feelings of friendship and liking, or to allow love to turn into desire; to be passive or to permit strong loyalty and mild anger; to deaden fears of death in oneself or in others; to pacify criminal tendencies; to feel fear but not to panic, to recognize symptoms of flux-thinking and seek assistance from supervisors. The aim then is the creation of an individual who is less volatile temperamentally than a real-born human and can raise his/her offspring with the same values.

Serpent's Reach, *Port Eternity* and *Forty Thousand in Gehenna* illuminate possible destinies for the azi. Given that humans can be engineered as people with directly modified genesets and implanted psychsets in these worlds, they are severely limited. They can remain azi – sterile slaves, always cloned directly from altered human genesets and not reproducing. They can become freedmen – an earned status, not for all of them and also not reproducing; they can become azi-born reproducing naturally with each other in continuing generations but subject to decline if left without tape. They can become betas originally reproduced from human genesets, reproducing naturally in continuing generations or they can become beta-clones, clones reproduced from beta genesets, and deteriorating when sold to the alien majat. Or, in *Forty Thousand*

in Gehenna, they can become symbionts of the alien calibans.

None of these futures are what Ari1 had in mind for them. She worked to produce azi to be what she calls 'the vectors of […] diversity' (*C* 234), who are designed to avoid 'potential evolutionary catastrophe in a relatively small number of generations – either divergence too extreme to survive severe challenge or divergence into a genetic crisis of a different and unpredictable outcome – certainly the creation of new species of genus homo and very probably the creation of genetic dead ends and political tragedy' (*C* 234). It is a powerful vision which, however, is simultaneously vitiated by the metaphor of azi as 'vectors' – no more important in themselves than the viruses or insects that act as vectors of disease – and the uncertainty as to whether or not azi remain human if the human genome has been significantly altered.

Azi-born humanity, in the end, constitutes a patch on original humanity, and if patched humanity is established in the form of their azi-born descendants, and spreads out across the Union worlds and is stabilized, then the azi themselves will no longer be needed:

> Someday there will be no more azi […] They will have fulfilled their purpose, which is to increase, and multiply, and fill the gaps in the human record as the original genepool disperses to a mathematically determined population density – as it must disperse, for its own future well-being, its own genetic health. (*C* 234)

The purpose of azi creation is, according to Ari1, more than designer babies and the new revised, improved and stabilized human cultivars that will populate the Union sphere; it is the future of all humanity. On the evidence of the novels, the azi are not a new humanity, and they and the azi-born descending from them never can be. For it is clear that in treating humans unethically as things to be redesigned, Reseune has allowed itself to cut deep into human nature. In particular, it is clear that in tampering with the human ANS responses, it has succeeded in eliminating passion and, along with passion, the creativity that originally conceptualized and brought azi into existence. Grant, the most advanced and self-aware azi of Reseune, has already voiced this loss of creativity. If Northrop Frye is correct when he says that 'There has never been a thinker whose thoughts were not driven by passion and desire toward an end seen in the imagination' (Frye 1959: 13), azi or azi-born cannot survive as a new humanity.

Endnote

[1]The following abbreviations have been used in the text: *C* – *Cyteen*; *FTG* – *Forty Thousand in Gehenna*; *PE* – *Port* Eternity; and *SR* – *Serpent's Reach*.

Works Cited

Brunner, John. 1976 [1975]. *The Shockwave Rider*. New York: Ballantine Del

Rey.
Carmien, Edward, ed. 2004. *The Cherryh Odyssey*. Maryland: Wildside Press.
Cherryh, C.J. 1980. *Serpent's Reach*. New York: Nelson Doubleday.
----- 1982. *Port Eternity*. New York: DAW Books.
----- 1983. *Forty Thousand in Gehenna*. New York: Doubleday.
----- 1988. *Cyteen*. New York: Warner Books.
Clark, Stephen R.L. 2007. 'C.J. Cherryh: The Ties That Bind.' *The Yearbook of English Studies* 37.2: 197-214.
Ferreira, Maria. 2005. *I am the Other: Literary Negotiations of Human Cloning*. Westport CT: Praeger.
Frye, Northrop. 1959. *By Liberal Things*. Toronto: Clark, Irwin.
Hayles, N. Katherine. 1995. 'The Life Cycle of Cyborgs: Writing the Posthuman.' In *The Cyborg Handbook*. Ed. Chris Hables Gray. New York: Routledge, pp. 321-35.
Klein, Sara. 2013. 'Adrenaline, Cortisol, Norepinephrine: The Three Major Stress Hormones Explained.' URL: http://www.huffingtonpost.com/2013/04/19/adrenaline-cortisol-stress-hormones_n_3112800.html
Turner, Lynn. 2011. 'Animal Transference: A "Mole-like Progression" in C.J. Cherryh.' *Mosaic* 44.3: 163-75.
Wellcome Trust Sanger Institute. 2000. 'The First Draft of the Book of Humankind Has Been Read.' URL: http://www.sanger.ac.uk/about/press/2000/draft2000/mainrelease.html
Williams, Lynn F. 1986. 'Women and Power in C.J. Cherryh's Novels.' *Extrapolation* 27.2: 85-92.
Wolmark, Jenny. 1993. *Aliens and Others: Science Fiction, Feminism and Postmodernism*. Iowa City: University of Iowa Press.

The Rhetorics of Futurity: Scenarios, Design Fiction, Prototypes and Other Evaporated Modalities of Science Fiction

Paul Graham Raven (University of Sheffield / Institute for Atemporal Studies)

In this article I wish to consider the outputs of the practice of futurology and/or futurism and their relation to science fiction texts. Rather than simply describe that relationship, it is my intention to outline an analytical framework through which they might be subjected to structural critique. It is beyond the scope of this article, however, to explore the practice of futurology in any detail; for my purposes here, 'futures outputs' are portrayals or representations of future situations, regardless of a) their medium (which might be text, photography, CGI, video, or a mixture of these and more) or b) the rhetorical purpose to which they are put. I have attempted elsewhere to address the arguments below specifically for futurological practitioners (see Raven and Elahi 2015); readers interested in a more detailed argument for the establishment of the meta-category 'narratives of futurity' (and its inclusion of both science fiction texts and futures outputs) may find it of value.

1. The Plurality of Futures

Our collective future is – or certainly should be – a matter of immediate concern. But 'The Future' is always-already encased in quotation marks: any future presented or perceived as a certainty is the ultimate fiction. Whenever you hear or read someone say 'in the future, we will – !', they are a fool or a charlatan, or possibly both.

The *immanent* future however – namely that future we will actually end up inhabiting, which is always-already coming into being, and which is implicit in and emergent from the present, which in turn is itself implicit in and emergent from the past (whose territory may or may not correlate to the map of history as currently drawn) – is not a fiction, nor a narrative, but a plastic possibility moulded continually by economics, politics and technoscientific production, among other forces. The immanent future is illegible, unknowable in all but the broadest sense. Prediction is not just bunk, it is wishful thinking.

So there is no 'The Future' – but *narratives of futurity* (hereafter referred to as *futures*, plural) are proliferating. This is in part because it is much easier to create and disseminate narratives than ever before (viz the internet's partial democratization of the means of semiotic (re)production and distribution), but also due to an increasing engagement with notions of futurity in general, which seems to have some correlation with periods in which the present is considered increasingly unstable. Or, to put it another way: the more uncertain the immanent future looks, the more futures we produce.

But whatever the reasons, futures now come in many forms and formats. The following list is not exhaustive; nor are all the examples *necessarily* futures, though most that deal with any timeframe beyond the immediate moment probably are:

> Short stories, novels, cinema, TV, video games, advertisements, billboards, infomercials, advertorials, tech 'journalism', defence department research proposals, arms company catalogues, technologist discourse, transhumanist propaganda, speculative architecture, critical design, 'design fictions', scenarios, political manifestos, policy documents, IPO reports, business plans, sales projections...

There are a lot of futures out there, and I think it's important that we learn how to read them. Science fiction and futures often function as engines of technoscientific desire, but there is also a way in which narratives of futurity perform a function akin to collective cultural dreaming. To quote from an essay about Charlie Brooker's TV series, *Black Mirror*:

> Comparing this sort of science-fiction to dreams is not an idle analogy. Freud, one of the most influential theorists of dreams, was the first to suggest that it is not necessarily the *content* of dreams that we should be paying the most attention towards, but it is the *mechanism* of how dreams work that tell us the most about our internal thought processes. Similarly, certain instances of science-fiction tell us more about ourselves through their function, rather than via the specifics of their plot. (Rothstein 2013; emphasis mine)

Adam Rothstein's point is that futures like those of *Black Mirror* tell us far more about *how we relate to the immanent future* than they tell us about the immanent future itself; they are critical texts, in other words, when read in the right way. As such, by focusing on the *mechanics* of narratives of futurity rather than on their *content*, this framework attempts to explore the rhetorics implicit in the narrative strategies deployed, and how they shape the ways in which we dream our collective future(s).

2. The Subjectivity of Futures: Narration = Curation

First of all, it is necessary to quickly recap the distinction between story and narrative: a story (or plot) is a sequence of events in time and space, while a narrative is *a subjective account* of that sequence of events. So, for example, this is a story: 'A knight rescues a princess from a tall tower in a forest.' But this is a narrative: 'Sir Gawain, his chest heaving beneath the bulk of his breastplate, raised his sword and resumed hacking at the endless undergrowth, always heading – or so he hoped – toward the tall tower at the tangled heart of the Forest of Bleeaaaaaurgh.'

The important point is that a narrative has one or more *narrators*: each narrator gives an account of the events of the story as they perceived or experienced them. This means the account is inherently subjective (even, or perhaps especially, when the narrator appears to be making their best effort to be objective), and will almost certainly be incomplete. The narrator chooses which elements of the story to include in their account, and may sometimes choose from which viewpoints other than their own the account will be delivered (as in a situation where a character recounts something another character said or did, 'off camera'). The narrator has not created the story, but they have *curated* their narrative: picking certain exhibits from the story which they present to the reader, choosing the angles from which the reader sees them, the light in which they are sat, the thickness of the protective glass behind which they are displayed, so on and so forth.

Note that in a story with multiple narrators, those narrators may appear to tell completely different stories. So, returning briefly to brave Sir Gawain, his narrative (as told by him) might be much like the standard fairy tale: he struggles manfully against hazards natural and otherwise, reaches his goal, and liberates his future bride from the tower in which she's imprisoned. But the princess might give us a very different narrative: perhaps, after years of refusing to be married off to some minor duke for the sake of politics and empire-building, she finally convinced her father the king to let her retreat into the forest and study magic, only to have some meat-head barbarian from the other side of the continent blunder his way through all her defensive spells, throw her over the back of his horse and ensconce her in some backwater court where she's expected to do embroidery in the few spare moments when she's not birthing a dynasty.

The example above is deliberately facile for the sake of illustration, but we see this sort of narrative disparity all the time in the real world; the events of any story are always interpreted and narrated subjectively. To use a more concrete and non-fictional example from the real world, consider the Western intervention in Iraq: the most basic facts and events of the story are not in dispute, but the interpretation of them – their *meaning* – is chosen by the various narrating actors within the conflict.

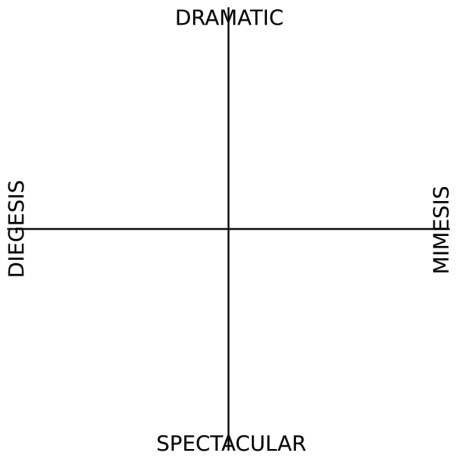
The narrator is not always a character in the story, however. Indeed, the narrator may never manifest as anything more than their narration – as in an omniscient, third-person written narrative, say, or in certain sorts of cinema. This *implicit narrator* gives the greatest impression of having the least curatorial influence on the narrative, but it is illusory, because the implicit narrator is the ghost of the author, haunting the text (*pace* Roland Barthes). This, however, is not an argument about intentionality. The author has total influence over the creation of the text, insofar as anyone does; that's the job description. The text, like any other, is open to a plurality of readings – but it is nonetheless invested with intrinsic meaning by the structural narrative strategies chosen by its creator(s), whether deliberately or accidentally. It is my contention that, due

to their innate properties, certain narrative strategies have come to be the go-to choice for certain broad rhetorical positions regarding the framing of futurity.

I would argue that *all futures can be read as science fictions*, or perhaps that 'science fiction' is just one genus of the meta-category narratives of futurity (see Raven and Elahi 2015), and this means we can directly appropriate much of the critical toolkit developed for sf for use in the critique of futures. Futures shape technoscientific desire; technoscientific desire shapes technoscience (through cultural influence over the individual actions which aggregate into market forces such as demand), and technoscience shapes the immanent future. Hence, to an as-yet unquantified degree, futures contribute to shaping the immanent future: 'Science fiction plays an important role in the shaping of desire […] because it supports a vision of the present world as being evanescent and contingent, subject to, or calling for, dramatic change' (Bassett et al 2013). Futures are manifestations and conjurings of desire, even when that desire is negative – as in a cautionary dystopia, wherein the desire is (presumably) for the depicted situation to be avoided. Futures are future desires presented as *faits accompli*, as myths of consumptions (or, more rarely, conservations) which might (be made to) come to be. They are inherently political, given they are contestations of the immanent future; as such, we need tools to critique them which nonetheless avoid the intentional fallacy flagged-up by Barthes.[1]

3. Modality Matrix: A Typology of Futures

In the course of developing this analytical framework, I make use of one of the standard tools of futures work, namely the '2x2 matrix'. These are frequently used as a precursor tool for designing scenarios that capture divergent trends, but they are also ideal for mapping two continuums in interaction with one another and thinking about the mix of qualities that results. The complete matrix is shown below in Figure 1.



X Axis (Narrative)

The X axis of the matrix is the Modal Axis, which captures the tension between two fundamental narrative modes as originally identified by Plato: *diegesis* and *mimesis*. In Book III of *The Republic*, Plato explains that diegesis is a report, a narration, a telling of the tale as in the form of epic poetry, wherein the narrator recounts the actions of others to us. On the other hand, mimesis is an imitation, a representation, an acting-out of the tale as in the form of drama, a stage-play. These two modes are not mutually exclusive, even in Plato's original formulation.

Diegesis has been further developed by film studies in a way that is particularly helpful: for cineastes, *the* diegesis (used as a noun) is the storyworld, the universe wherein the story (though not necessarily the narrative) plays out. When a film critic talks of 'diegetic sounds', they mean sounds that come from the storyworld (e.g. the background chatter in a restaurant scene) as opposed to, say, the melancholy strings of the soundtrack, which the characters in the scene usually cannot hear.

This leads us to David Kirby's notion of 'diegetic prototypes': technological artefacts depicted in cinema which imply details of the storyworld which would take too long to explain any other way. Sf author-cum-design-critic Bruce Sterling defines diegetic prototypes as being 'not objects that tell stories, but objects that tell worlds' (qtd Bosch 2012). He uses the example of the retinal scanner from *Blade Runner* (1982), which implies a lot more about that movie's world than Deckard's dialogue in the same scene: it suggests the existence of certain infrastructural capabilities – not to mention a concomitant culture of ubiquitous surveillance and falsifiable identities, which feels a lot less science-fictional from our current historical standpoint.

Kirby is specifically interested in diegetic prototypes which end up acting as 'pre-product placements', as engines of technoscientific desire. In such situations, the Hollywood studio hires a design consultant for a movie to get the gosh-wow future-stuff looking right, and the consultant goes on to design on-screen (hence diegetic) objects which, it is hoped, will create a market for real versions of themselves. Kirby uses the example of the touchscreen and gestural interfaces seen in the movie *Minority Report* (2002), which contributed significantly to consumer expectations regarding the user interfaces of the touchscreen technologies which, at the time, were just coming to market.

We can draw these ideas together in order to make our first definition: in narratives of futurity where the diegetic mode prevails, novums in the foreground are dominant, and the storyworld is subservient to their narrative agency. The novum (or the prototype, in Kirby's taxonomy) implies a world in which its thingness is possible – even, or perhaps especially, when it is anything but possible. The novum is a pseudo-protagonist, portrayed as having its own agency, sometimes at the expense of human agency; in a sense, the novum is the hero. Furthermore, the implied narrator generally does their best to stay invisible – which is to say that *diegetic futures attempt to pass off a narrative*

as purely objective reportage, whether for artistic, political or mercantile purposes. By way of analogy, there is an element of the street magician to a diegetic future: the hypnotic patter and the flashy performative bits of the 'trick' – the novum – are expressly designed to keep you from noticing what the magician/narrator's other hand has to be doing in order for the trick to work. Diegetic futures are a narrative sleight-of-hand, then, although they can be deconstructive of themselves at the same time. So, for example, although the movie *Minority Report* can be happily filed in the 'diegetic futures' box, Philip K. Dick's original story belongs at the other end of the scale – although the prose narrative is perfectly capable of doing diegetic work. It may help to think of diegesis as a generic mode that focuses on the foreground of the story: a mode more interested in the novum than the context, more interested in what things do than what they mean.

In mimetic futures, however, the novum is either subservient to the storyworld or integrated within it. Mimetic futures are not stories about cool new technologies; they are stories about worlds in which cool new technologies – and perhaps some not-so-cool ones – disrupt or otherwise interact with the storyworld. (Or it may be that the nature of the storyworld itself is the novum, and that the gadgets in the story are implicit in the set-up of that storyworld; same difference.) If diegetic futures *tell* future worlds, per Sterling, then mimetic futures *show* future worlds. The guided-tour-of-somewhere-else structure of the archetypal utopia is an extreme but illustrative example of the way this mode manifests in the structure of a text: namely as a narrative which privileges the exploration and/or exposition of the storyworld over the delivery of the plot/story in the foreground.

Darko Suvin once defined sf as the literature of cognitive estrangement; by jolting us out of the familiar, and thus making our own world feel suddenly unfamiliar, science fiction engages metaphorically with reality. More recently, however, Seo-Young Chu has proposed an update of Suvin's definition which, while not necessarily definitive, offers an interesting new way to think about what science fiction (and, by extension, any narrative of futurity) actually *does*. According to Chu, science fiction is not metaphorical or antirealist; instead, it is 'a *mimesis of cognitively estranging objects*, an "acting out" of things which are in a sense real, but as yet only partially thinkable by human minds' (Chu 2010; emphasis mine).

While the classic Gernsbackian gadget story is an almost purely diegetic form, much contemporary hard science fiction writing – arguably the most direct descendent of the Gernsbackian form in epistemological terms – leans more toward mimesis, and more so as time goes by. While the fictions of authors such as Stephen Baxter or David Brin may foreground speculative actualizations of technoscientific or sociopolitical shifts, the aesthetics of the form increasingly involve maintaining the impression of diegetic coherence *despite* the intrusion of one or more novums. Which is to say: such texts are interested in the effects

of the novum on as coherent a storyworld as possible, where that coherence is a function which expressly contains the novum, even (or perhaps especially) if that containment destabilizes the coherence. Or, more simply: the evolution of what Samuel R. Delany called 'the science fictional reading protocol' has made it less artistically acceptable to fudge the storyworld in order to crowbar in a neat idea.

So, to reiterate: in diegetic futures, the storyworld is subservient, shaped so as to accommodate the novum; what context there may be is purely instrumental. Conversely, in mimetic futures the novum is subservient, a goad to the storyworld, or a tool for probing or testing its coherence; the context governs the discourse. So if diegesis can be compared to a magic act, then mimesis is more like a documentary about how magic is done.[2] The novum may have some degree of autonomous agency in mimetic futures, but not at the expense of the agency others: the novum is, very literally, *not* the hero.

This modal dichotomy has been observed and called out by practising futurists, albeit using different labels: Noah Raford draws on the sociological notion of 'thick description' to talk of 'thin futures' and 'thick futures' (which correlate to the diegetic and mimetic modes respectively), while Scott Smith has coined the term 'flatpack futures' to cover the highly diegetic style of consumer tech advertisements whose sets resemble nothing more than the pseudo-showrooms of Ikea: an off-the-peg perfect new life, with the Brand New Shiny Thing in the foreground of the narrative. Thick futures are mimetic because they include context, the messy 'dark matter' of life-as-lived (Hill 2012); flatpack diegetic futures, meanwhile, are little more than a glossy CGI sales-pitch.

Y Axis (Logic)

The Y axis of the matrix is the Logical Axis, a duality drawn from film studies which distinguishes between *dramatic narrative logic* and *spectacular narrative logic*. Delving into the history of these terms is beyond the scope of this paper, but their use in this context is fairly simple: a film (or any other type of text) rooted in the narrative logic focuses on character interiority, on emotion, motivation and drama; texts rooted in the spectacular logic, by contrast, focus on flashy action, melodramatic push-button pathos and breathtaking set-pieces: 'The narrative and spectacular logics of science fiction operate very differently, and can be said to variously find their force through persuasion or insistence, argument or presence, poetic imagination or visual feast' (Bassett et al 2013). Although the vast majority of texts deploy a mixture of these two logics (and some may even switch between them in order to leverage effects from both sides), that is reflected in the way this typological matrix works: each axis captures a continuum of possibility, rather than a binary opposition of absolutes.

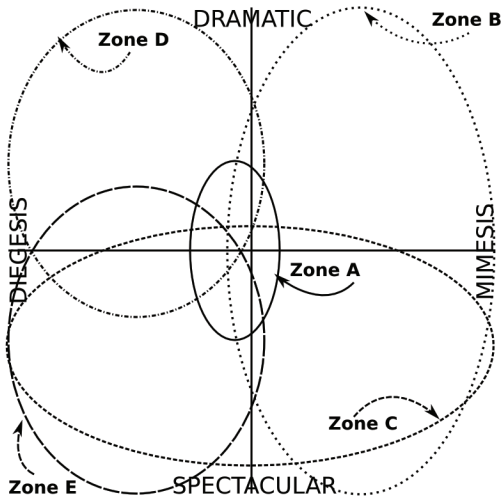
The dramatic narrative logic is most frequently found in prose texts, but not exclusive to them; it seeks to convince the reader of the story it recounts through poetics, persuasion, discourse and argument. It is didactic, as futures always

are, but it is still a dialogue (albeit a Socratic one, with the reader or viewer's responses inferred or assumed); science fiction driven by the dramatic logic is 'the impossible presented as everyday' (Bassett et al 2013). Meanwhile, the spectacular narrative logic is rooted in cinema – indeed, it is the dominant logic of cinema due to the nature of that medium – but not exclusive to it; the 'page-turner' and airport thriller genres of literature, for example, frequently partake of the spectacular logic to a greater or lesser degree. The spectacular narrative logic seeks to convince through insistence, authority, coercion, presence and sheer visual stimulation: it is 'the impossible presented as spectacle' (Bassett et al 2013), meaning that the *sine qua non* of the spectacular logic is a Michael Bay movie. It is also didactic, but in the manner of a monologue, a sermon in simplex: the only engagement required – perhaps even the only engagement desired? – is uncritical acceptance and awe (and, optimally, the purchase of officially licensed merchandise).

A Modality Matrix for Narratives of Futurity

Figure 2 below reproduces the modality matrix, and maps onto it a set of zones within which broad categories of texts might be presumed to be located. At present theoretical, this framework requires empirical validation, which would involve assembling a canon of appropriate forms (e.g. science fiction books, movies, futurological texts, adverts, etc.) and plotting their positions in accordance with their narrative logics and modes; the zones indicated in Figure 2 should be understood as approximations of the distributions which might plausibly result from such an exercise.

Zone A indicates the territory of the Gernsbackian gadget story: the form is reliant on the diegetic mode, because the novum is the star of the show,



but it could conceivably partake of either of the narrative logics, given the flexibility of prose as a medium. (In practice, most Gernsbackian tales tend toward the spectacular, as pulp literatures nearly always do; the work of Dick and the John W. Campbell stable of writers at *Astounding* could perhaps be seen as having expanded the potential of the gadget story form in more mimetic and dramatic directions.) Zone B, meanwhile, indicates the far broader territory which contemporary written science fictions might occupy; prose sf has gradually become more mimetic in mode, possibly as a response to the mimetic bias in the broader literary culture. This is also the zone in which most prose futurological outputs would occupy, as they rely on the same narrative tool-kit that makes the writing of science fiction possible.

Zone C indicates the territory of science fiction cinema, which is biased strongly toward the spectacular logic by merit of the nature of the medium itself; cinema struggles with the believable portrayal of character interiority due its restricted options viz narrative voice, which makes spectacular melodrama far easier to achieve than 'true' drama. (Indeed, choice of medium is hugely influential on the rhetorical affect of any given text for exactly this reason.)

Zone D indicates the fairly new territory occupied by critical design or design fictions. It is beyond the scope of this article to explain the critical design paradigm in detail, not least because it is a young paradigm in a state of flux, though the core ideas (and points of contention) are introduced in the recent work of designer-academics Anthony Dunne and Fiona Raby. (The subtitle of their 2014 study recalls Rothstein's comments regarding sf as a form of collective dreaming). For the purposes here, critical design might best be described as the (predominantly visual or material) presentation of products and/or services designed for a speculative future use-case. They exploit the same narrative mode as the diegetic prototypes described above, in that the novum is not only the star of the form, but often comprises the sum total of the text; to reiterate Sterling, design fictions are 'objects that tell worlds' – things whose existence implies a context in which certain capabilities or restrictions have been normalized. However, design fictions and critical design are, as the name of the latter implies, critical – instead of *distracting you from* an incoherent storyworld, the reader's innate awareness of the diegetic sleight-of-hand is used to *draw your attention to* an incoherent storyworld, and thence to a critique of the assumptions embedded in the design (which are often themselves a critique of the assumptions of contemporary design practice).[3]

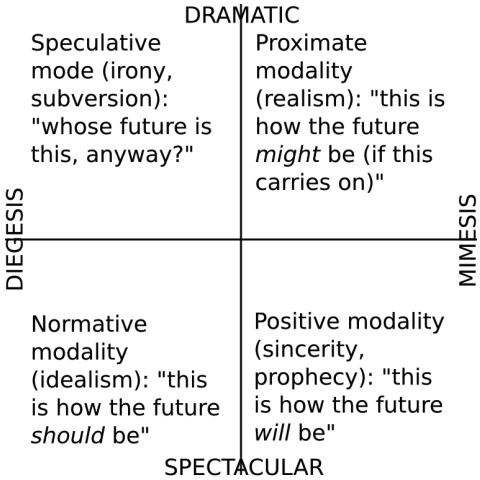
Zone E represents the territory occupied by aspirational technology advertising (the thin or flatpack futures defined above), and other more obscure genres of technoscientific propaganda (think of the glossy renderings of as-yet-non-existent products to be found on a certain high-ticket sort of Kickstarter campaign, for instance); these forms tend to rely partly or wholly on video content, which biases them inevitably toward the spectacular narrative logic, and they always make the product (the novum) the hero of the piece. Here also

can be found a minor futurological form known as ‘science fiction prototyping’ (Johnson and Frenkel 2012). This half-baked methodology proposes the use of science fiction narratives as a way of developing potential products and services from new basic research findings; sf prototyping’s relentless emphasis on the novum puts it clearly in the diegetic camp while its aims – which are to ‘talk-up’ the potential of a particular research avenue – force it toward the spectacular logic.

The Rhetorics of Futurity

By extrapolating from the broad typology above, we can return to the modality matrix and populate it with an approximation of the rhetorical affect achieved by the combinations of narrative logic and mode indicated by each of the four quadrants, as illustrated in Figure 3.

These, then, are the rhetorics of futurity: the persuasive strategies inherent to certain combinations of narrative logic and mode. Note, however, that this is a rhetorical typology entirely based on objective criteria. The *content* of the text



is entirely secondary to *the way in which that content is framed and reproduced by the narrative strategies inherent in the text itself*, which may be the inevitable result of a choice of medium (such as the bias in video media toward spectacle), or what seems to be a purely aesthetic decision on the author’s part (such as the choice of past tense over present, or first-person narration over third-person narration), or both.

The utility of this framework is that, through it, all narratives of futurity – not just science fiction texts, and not just futurological texts, but any and all texts which narrate a speculative future – can be examined for the structural evidence

of diegesis and mimesis, of narrative and spectacular logic; to do so is not an act of arbitrary or subjective categorization. As such, this typology is a first step toward a critical architecture, a framework within which deeper readings might be made. An objective typology pre-empts accusations of the intentional fallacy; we can ask solid, testable questions about how the rhetorics of futures are shaped by the modes and logics used in their construction, without having to get entangled in the polarized politics of interpreting the messages themselves; we can ask whether a particular rhetorical attitude to the future will be best served by a certain medium or set of narrative strategies.

With the caveat that this framework requires more empirical work before it can be considered anything other than hypothetical, there are some clear correlations on display. Note how futures with commercial and/or corporate authors (e.g. adverts, technological propaganda, science fiction prototypes) cluster in the bottom left-hand quadrant, which is the quadrant least concerned with persuasion and dialogue; the rhetorical mapping exposes the unavoidably normative rhetorics of texts located in this quadrant. While it is hardly novel or even controversial to suggest that marketing, PR and advertising are essentially industries of coercion, the map shows a clear correlation of rhetorics to purpose: those with something to sell are less worried about persuasive arguments than they are about getting you to swallow the spectacle whole. (This is the quadrant where one would expect the majority of explicitly political futures to cluster also.)

Note also that the bottom left quadrant is 'populist', in the sense that it is home to those narratives of futurity which have the widest audience reach (sf cinema, advertising), and in the sense that it is the quadrant which demands the minimum of active or critical engagement from the reader/viewer. This is in stark contrast to the upper-right quadrant, which (at the risk of oversimplification) might best be represented by the well-established 'if-this-carries-on' science-fictional plot engine; this framing requires the slower, interiority-rich medium of prose in order to achieve a more speculative and thoughtful engagement with futurity than the bottom-left quadrant's normative proclamations (or, for that matter, the bottom-right corner's blinkered insistence on its predictive power – a time-worn but seemingly deathless rhetorical position which is surely as familiar to veterans of futurology as it is to veterans of sf).

This framework was originally conceived as for the purpose of analysing the rhetorics of existing texts, but it might also serve as a guide to selecting those narrative strategies most likely to achieve the rhetorical effect desired in a text yet to be written: one simply reverses the analytical process by picking the quadrant which represents the desired rhetorical effect, and then determining which of the narrative strategies to be found in that quadrant are best suited to the materials and resources available. The above example of science fiction prototyping demonstrates the utility of such an approach: running this reverse analysis on SFP reveals that it is attempting to work in the rhetorical quadrant to which its chosen media and strategies are least suited.

At the risk of repetition: this framework is very much hypothetical and under development, and would benefit hugely from a decent chunk of empirical follow-through. As such, I welcome and encourage other scholars to pick it up and run with it, or to attack it with (metaphorical) pointed sticks, or to extend and expand it in other directions.

With regard to the latter, it seems possible that a third dimension might be added to the matrix in order to handle the variable of the coherence or incoherence of the storyworld; this would extend the range of the framework to include texts whose futures are more metaphorical than literal. By way of example, Neal Stephenson's *Snow Crash* (1993) portrays a metaphorical future but is nonetheless mimetic in character; in mimetic narratives, the *coherence* of the storyworld is more important than its *plausibility*. This may explain why such novels are frequently and enthusiastically mistaken for plausible futures by wishful thinkers and techno-fetishists; Caroline Bassett and others have named this phenomenon 'the over-reading of epistemological gravity' (Bassett et al 2013), which deserves to become a term-of-art in sf criticism. Meanwhile, mimetic futures with incoherent or implausible storyworlds wear their fictionality proudly, thus declaring themselves upfront to be either (u/dys) topias, allegories of the present, or critiques or pastiches of 'The Future', as opposed to speculations about the immanent future. Such metaphorical futures sit awkwardly in this typology at present, and addressing this lack would go some way to broadening the value of the framework as a whole. Lastly, it lacks a more detailed examination of the role of narrative voice or point of view in the rhetorical framing of any given narrative (but see Raven 2015).

4. Conclusion

I have proposed that science fiction might be gathered alongside any and all other texts which portray imagined futures, and that as such certain critical tools may be found which operate across the resulting meta-category of narratives of futurity. I have made a further argument to the effect that certain choices of medium and narrative strategy made in the production of any given text can be seen to produce certain types of rhetorical framing as regards the future they portray, and that the structural traces of these choices and strategies provide objective evidence with which narratives of futurity might be sub-categorized on that basis. Or, more simply: I have proposed that science fiction is actually a subgenre of a far larger, medium-agnostic genre of stories that portray imagined futures, and that by looking at the choices and strategies used during the production of these stories, we can get an insight into the way they frame the futures they present.

The framework is based in a 2x2 matrix in which two continua of narrative strategy are entangled: the first dichotomy is that between the diegetic and mimetic modes, and the second is that between the dramatic and spectacular logics. By positioning a given text on this typological map, it becomes possible to

broadly predict the rhetorical frame in which that narrative's future is presented. Given the inescapably political nature of any and all narratives of futurity, the resulting modality matrix offers a first step toward an objective critical analysis of the rhetorics of futurity.

Endnotes

[1]A similar argument could be made by explicitly examining the role of science fiction and other non-technical narratives of futurity in the construction of what sociologists refer to as the 'technological imaginary'; see Goss and Riquelme (2007) for an example of this concept in dialogue with sf texts.

[2] Note that this is not a claim for a greater objectivity which is somehow inherent in the mimetic mode: it bears repeating that even a documentary with no voiceover is still the result of a curation process, and has its own implied narrator, whether they are visible or not. Rather than avoiding the traps of subjectivity, we might say instead that mimesis embraces and admits of subjectivity in a way that diegesis is unable to do, lest it undermine its own rhetorics.

[3] It should be obvious that design fiction is somewhat hampered by its reliance on the form-specific literacy of its audience – which is to say that it doesn't work properly unless there are sufficient clues which highlight the fictionality of the design and allow the 'sensawunda' effect to kick in. This challenge has put design fiction on the back foot in recent times, but it is interesting to note that a similar problem has always plagued science fiction, as addressed by Delany and others in the form of the reading protocol (cf. Raven 2015).

Works Cited

Bassett, Caroline et al. 2013. 'Better Made Up The Mutual Influence of Science Fiction and Innovation.' Working paper no. 13/07. NESTA, March. URL: http://www.nesta.org.uk/publications/better-made-mutual-influence-science-fiction-and-innovation (accessed 29 September 2015).

Bosch, Torie. 2012. 'Sci-Fi Writer Bruce Sterling Explains the Intriguing New Concept of Design Fiction.' *Future Tense*, 2 March. URL: http://www.slate.com/blogs/future_tense/2012/03/02/bruce_sterling_on_design_fictions_.html (accessed 29 September 2015).

Chu, Seo-Young. 2010. *Do Metaphors Dream of Literal Sleep?: A Science-fictional Theory of Representation*. Cambridge MA: Harvard University Press. E-book.

Delany, Samuel R. 1984. *Starboard Wine: More Notes on the Language of Science Fiction*. Pleasantville NY: Dagon Press.

Dunne, Anthony, and Fiona Raby. 2014. *Speculative Everything: Design, Fiction, and Social Dreaming*. Boston: MIT Press.

Goss, Theodora and John Paul Riquelme. 2007. 'From Superhuman to Posthuman: The Gothic Technological Imaginary in Mary Shelley's *Frankenstein* and Octavia Butler's *Xenogenesis*.' *Modern Fiction Studies* 53.3: 434–59.

Hill, Dan. 2012. *Dark Matter and Trojan Horses: A Strategic Design Vocabulary*. Moscow: Strelka.

Johnson, Brian David and James Frenkel. 2011. *Science Fiction Prototyping: Designing the Future with Science Fiction*. San Rafael CA: Morgan & Claypool.

Kirby, David. 2009. 'The Future Is Now: Diegetic Prototypes and the Role of Popular Films in Generating Real-world Technological Development.' *Social Studies of Science* 40.1: 41–70.

Plato. n.d. *The Republic*. *The Internet Classics Archive*. MIT. URL: http://classics.mit.edu/Plato/republic.4.iii.html (accessed 29 September 2015).

Raford, Noah. 2012. 'On Glass & Mud: A Critique of (Bad) Corporate Design Fiction.' *NoahRaford.com*, 2 February. URL: http://noahraford.com/?p=1313 (accessed 29 September 2015).

Raven, Paul Graham. 2015. 'Imagining the Impossible: The Shifting Role of Utopian Thought in Civic Planning, Science Fiction, and Futures Studies.' *Journal of Futures Studies* (in press).

----- and Shirin Elahi. 2015. 'The New Narrative: Applying Narratology to the Shaping of Futures Outputs.' *Futures*. URL: http://dx.doi.org/10.1016/j.futures.2015.09.003

Rothstein, Adam. 2013. 'Anxiety Dream.' *Cyborgology*, July. URL: http://thesocietypages.org/cyborgology/2013/07/08/anxiety-dream/ (accessed 29 September 2015).

Smith, Scott. 2013. *Scott Smith (Changeist) @ MFW13*. MediaFutureWeek. URL: https://vimeo.com/66727608 (accessed 29 September 2015).

Underground Assemblages: *Savoy Dreams* and *The Starry Wisdom*

Mark P. Williams (Johannes Gutenberg-Universität Mainz)

This article deals with two key countercultural sf/fantasy anthologies which explicitly draw upon the British New Wave of the 1960s and partake in the tendencies which build towards the emergence of what has been termed 'New Weird'. It will discuss the importance of the concept of assemblage to the anthologies *Savoy Dreams* (1984) and *The Starry Wisdom* (1994). My concept of assemblage comes via Manuel De Landa, partly from his readings of Gilles Deleuze and Félix Guattari's *A Thousand Plateaus* (1982), from his online lectures for the European Graduate School (2011), and particularly from *Towards a New Philosophy of Society: Assemblage Theory and Social Complexity* (2006). I draw more on this latter text to show how it is particularly useful for considering the politico-cultural interventions of small-press speculative fiction anthologies in 1980s and 1990s Britain.

I want to use the two examples of *Savoy Dreams* and *The Starry Wisdom* to argue for the cumulative reception of the publishers and the milieu of the Eighties-Nineties counterculture as a collectively coherent tendency of assemblage texts within contemporary fiction, which links or fills in the conceptual space between the New Wave and the New Weird. This tendency expresses itself through corpuses of textual fragments, experiments and divergent elements unified more by the overarching attitude and negation of dominant literary cultures than by coherent aesthetic or specific cultural politics. Nevertheless, from a common emphasis on eclecticism, on outsiders, on mixed media, and on divergence and dissonance as well as on resonance, an effective coherence emerges:

- Dominant themes of escape: predominantly from everyday life, or sometimes from a threat which comes from 'outside', but always linked to some concrete, negative aspect of the everyday
- Stories concerned with the simultaneous fragmentation and reassemblage of bodies and of psyches, of texts and concepts
- Prose stylization and mixed media illustration dripping with dark inks, and often using unusual angles, defying panel/gutter separations and employing page bleeds right to the edges of the textual surface
- Texts which effectively split their own textuality between surface and concept using a literalized metaphor and the thing the metaphor refers to simultaneously.

These dimensions feed into the New Weird in direct and indirect ways. I argue

that the primary linkage between the New Wave and the New Weird comes from the shared and submerged territory which is occupied by occasional countercultural writing found in small presses and anthologies which I will characterize here as 'underground' because of its anti-authoritarian sensibility and interest in a countercultural heritage leading to the formation of a wider field of alternative fiction-making (Williams 2012a). I wish to emphasize that it is significant that the elements, stories and details discussed here within *Savoy Dreams* and *The Starry Wisdom* expressly thematize the processes of cultural assemblage: formation and decomposition of dissonant or distinctive parts.

In their anthology *The New Weird* (2008) Jeff and Anne Vandermeer collect a number of exemplary texts which they say aided or inspired the development of the New Weird from its New Wave roots – among them fantasy and sf stories by Michael Moorcock and M. John Harrison, horror fiction by Clive Barker and, at the back of the volume, outsider texts by Savoy: David Britton's first two novels *Lord Horror* (1989) and *Motherfuckers* (1996). To these we could also add *Reverbstorm*, published in seven parts periodically throughout the 1990s and now collected with a concluding eighth part as *Lord Horror: Reverbstorm* (2013). Rather than addressing Britton's idiosyncratic and controversial texts directly however, I am going to look at the aesthetic milieu and social field they emerge against and their textual precursors and conditions of production. This includes the problematic recovery of Weird writers that Benjamin Noys terms the 'Neo-Weird' (Noys 2013), which *The Starry Wisdom: A Tribute to H.P. Lovecraft* is central to, and the preconditions for Britton's offensive anti-narratives to be found in *Savoy Dreams*.

Savoy Dreams and *The Starry Wisdom* form a tendency within the 1980s and 1990s milieu of countercultural publishing that I would describe as 'Decadent Surrealist' (see Williams 2012b), that has become codified as part of what makes New Weird: how they work as texts is manifold and dependent upon a sense of their emergent qualities as assemblages. The texts themselves create intersections of countercultural reading and writing practices through play with the textual surface which, taken cumulatively, develops an aesthetic coherence. This might be simply expressed as Lovecraftian writing meets New Wave writing: two culturally resonant corpuses of speculative fictions coming together in specific ways. Thinking through the processing of such a reductive summary may be critically useful here for addressing the central challenges of work like this: the clearest points of the aesthetic are its extremes, which can be used to orientate the whole text, yet they must necessarily imply reduction of the complexity of the whole.

De Landa begins his discussion of assemblages by emphasising the importance of the capacities of components of a given assemblage to interact with each other and with external things:

> Allowing the possibility of complex interactions between component parts is crucial to define the mechanisms of emergence, but this

> possibility disappears if the parts are fused together into a seamless web. Thus, what needs to be challenged is the very idea of relations of interiority. We can distinguish, for example, the properties defining a given entity from its capacities to interact with other entities. While its properties are given and may be denumerable as a closed list, its capacities are not given – they may go unexercised if no entity suitable for interaction is around – and form a potentially open list, since there is no way to tell in advance in what way a given entity may affect or be affected by innumerable other entities. (De Landa 2006:10)

I wish to suggest that the anthologies I am placing in context with one another possess the critical capacities to interact with other social assemblages and between themselves. They are more than collections of texts; the elements within them expressly interrelate, implicitly and explicitly, as well as interpellating their readerships within specific communities and engaging with those communities as assemblages of dissonant parts.

The internal diversity of anthology texts cannot be reduced any more than the problematic but resonant creative heritage of Lovecraft-inspired fiction can be reduced to a 'Lovecraftian' formula, or writers inspired by innovative approaches to sf can simply characterized as post-*New Worlds* fictions through a uniform construction of 'New Wave': this problem can stand in for the wider critical problems that the concept of assemblage throws towards the reader. When addressing single texts, particularly when the contributors may not be widely known or may not have written or published widely, a degree of reduction is difficult to escape – there is little by way of wider corpus to compare the individual stories to; instead, the reader must consider them in relation to the other stories within the anthology. Additionally, there is always the possibility that more than one story within the anthology may be written by a single writer using pseudonyms, or that the contributor may have collaborated with another writer or artist to produce a story, or may have written the story as a response to another writer within the collection if the writers involved form a close group. Respective examples from *Songs of the Black Wurm Gism* (2009) include D.M. Mitchell's pseudonymous contribution that eventually formed part of *The Seventh Song of Maldoror* (2009), or the collaboration between James Havoc and Mike Philbin, and Mitchell's 'Ward 23' that makes clear allusion to Havoc, even including a character called James in *The Starry Wisdom* (1994). When these sorts of characteristics manifest within an anthology already aimed towards a self-selecting group the effect is to make the text as a whole return to itself, to the density of its own references again and again; it invites a readerly involution which plays off the comparable reading of the Yog-Sothoth Cycle/ Cthulhu Mythos. It assumes a readerly circle who will have similar interests and offers the fictive object of a coherent imaginary writers circle that can span the diverse interests of the counterculture.

Savoy Dreams links Edgar Rice Burroughs to William S. Burroughs via

Michael Moorcock, Samuel R. Delany, Ishmael Reed and M. John Harrison with a structure of feeling that cuts across differences of writing. Britton says of this:

> We're basically Rock 'n' Roll publishers. Most of the books we're doing are in essence nearer to Rock 'n' Roll than to literature. It's a stance – Mike Moorcock is Rock 'n' Roll. M. John Harrison is Rock 'n' Roll. (qtd Darlington 1984: 14)

This is a crucial point for it supplies a counter-method of reading, transversal to generic or modal traditions. *The Starry Wisdom* employs the Yog-Sothoth Cycle/ Cthulhu Mythos to achieve a similar transverse movement, linking otherwise distinctly non-Lovecraftian J.G. Ballard with William Burroughs via the suburban uncanny of Ramsey Campbell.

Savoy Dreams

David Britton and Michael Butterworth both contributed to *New Worlds*, Britton as an illustrator and designer, Butterworth as a writer; between them they co-edited *New Worlds* #215 (Spring 1979) as well as producing *The Savoy Book* (1978), which included Harlan Ellison's prequel to *Vic and Blood* (1987), titled 'Eggsucker', and Harrison's suburban London séance story 'The Incalling'. This anthology begins a process of drawing in clear connections between modernism, psychedelia, Burroughsiana, rock 'n' roll and some more distinctly Northern and provincial English contexts; *Savoy Dreams* is a follow-up which became part of its own story.

Savoy Dreams opens with a non-fiction piece by Andrew Darlington called 'Doin' That Savoy Shuffle', about Savoy's brushes, intersections and collisions with the law, initially over bootleg music, then for selling a combination of cling-wrapped 'soft-porn' magazines (i.e. nudity and 'erotica' but not hard-core 'men's magazines'), and remaindered erotic novels. It tells the story of Savoy having erotic novels seized under the Obscene Publications Act, among them 2000 copies of Delany's *The Tides of Lust* (1973) and 3000 copies of Charles Platt's *The Gas* (1980). Charges were ultimately laid for distributing what Butterworth describes in an interlude within the essay as 'a series of 10-year-old Grove Press paperback readers which have gone past their day and which were bought many years ago at "remainder" prices. The charges are for the storage and sale-for-gain of titles that have been erotically equalled by the contents of ordinary mass market best sellers' (Darlington 1984: 22). The next section, an open letter titled 'Savoy Under Siege', states it still more plainly: 'Our "offence" was the sale *of paperback novels*' (Butterworth 1984: 26) and further points out that these had been returned after previous raids when other police officers from the same squad had found them not to be obscene. This is where we have the prime motor for so much of the anarchic fury of *Savoy Dreams*, and for the *Lord Horror* and *Meng & Ecker* fictions: rage against the arbitrary use and abuse of power by authority.

This theme becomes part of the whole *Savoy Dreams* anthology; it is

continued in Moorcock's review of William Burroughs' *Cities of the Red Night* (1981) where he describes finding the novel 'predisposed towards those anarchist ideals of self-determination which are directly opposed to any notion of license, inhuman cruelty or self-indulgence which a literal emulation of some of his characters might lead to' (Moorcock 1984: 56). A short prefatory note indicates that Savoy had purchased the right to publish the novel but had been forced to give up the copyright during one of their legal wrangles (Butterworth gives more detail on this story in Mitchell's history of Savoy Books, *A Serious Life* (2005)).

Moorcock's review is followed by an extract from Burroughs' *The Place of Dead Roads* (1983) about the gunslinger Kim Carson, 'a morbid, slimy youth of unwholesome proclivities' such as 'unspeakable rites, diseased demon lovers, ancient ruined cities under a purple sky' (Burroughs 1984: 59). The extract is followed by the introduction to *The Bernard Manning Blue Joke Book* written by Michael Ginley. This text is a defence of 'Blue' comedy whose frame of reference now reads as dated, to say the least, in its assumptions and cultural politics; however, it does draw a suggestive parallel which is useful for considering the role of class and culture in the propagation of underground culture. Ginley argues that the Northern working classes endure dehumanizing working conditions daily and therefore their humour will reflect and magnify this dimension of their lives *as a deliberate affront* to the authority of the social classes whose comfortable lives maintain this inequity of experience. Divorced in this way from the Manning text it refers to, Ginley's short essay seems to act as a free-floating explanation for the function and techniques of the present assemblage of *Savoy Dreams* and the subsequent direction of Savoy as publishers. In his lecture on 'Assemblage Theory' for the European Graduate School, De Landa says that assemblages are more than mere collections because their parts undergo an ongoing interaction. For an assemblage to be an assemblage the parts have to 'interact together' in such a way as to 'yield a whole that has properties of its own' but always remain decomposable into their respective parts (which can be 'plugged into' a different assemblage) (De Landa 2011). Parts such as Ginley's short piece invite reassemblage into the wider whole of Savoy's later publications.

Ginley's introduction to Manning's *Blue Joke Book* is followed by two more substantial fiction pieces which are directly recognizable as being stylistically and visually related to *New Worlds* under Moorcock's editorship: first, Butterworth's 'A Hurricane in a Nightjar' illustrated by Britton; second, Tom Thompson's 'In The Gas Oven'. We then get a lengthy extract from Moorcock's correspondence that became *Letters from Hollywood* (1986), about his time strolling the valley and pounding the keyboards for movie types, followed by an essay on Tarzan by Burne Hogarth discussing the mechanization of everyday life. There is then a sequence of sexually-themed and provocatively-titled poems by Heathcote Williams which aim at an aesthetic of transgression, again recalling Burroughs.

What most clearly links all this wilfully divergent material is the underlying complaint about the conditions of everyday life and a demand for escape that invokes a sort of disjunctive Romantic imagination. This is perhaps clearest in the diagonal columns of all-caps text that slide across the pages of Butterworth's 'Hurricane in a Nightjar' in sections titled 'The 1980s – Part One' and 'Part Two'. After these variegated texts the anthology then includes a peculiar little story by Charles Partington called 'Confusing the Cunning Cortex' which encapsulates the qualities to be found in the anthology.

'Confusing the Cunning Cortex' is a fictionalized version of Savoy's legal problems: their repeated raiding by the Greater Manchester Police and the financial difficulties that repeated stock seizures placed them in as booksellers and publishers. It treads the lines between truth and fiction, genres and modes of representation: Partington was Britton's original business partner and, as a science fiction writer, a fellow contributor to *New Worlds*. Partington's story describes the stock seizures of Savoy Books under the Obscene Publications Act from the hands of fictionalized entrepreneur and psychoanalytic experimenter, Eddie Albion. This character name is an assemblage: Britton's artworks from the late seventies and early eighties include the creation of a dandyish caricature, clearly related to Moorcock's Jerry Cornelius and Jherek Carnelian, called Lord Perfidious Albion, who features in an illustration from *The Savoy Book*; additionally, linking the wordplay of 'Britton' and 'Albion', Britton's middle name is Edward.

The novum of Partington's story is simple: what if it were possible to produce books specifically calculated to reprogramme ordinary 'decent' people to become unconscious sex-fiends by reading/viewing them only once? Albion has, through research into experimental psychological techniques, succeeded in creating magazines which will produce this effect. Partington's narrator, Charles, is exposed to a single issue of these titles, called Savoy Sex Publications, and finds himself as a result losing time and waking up naked in extremely compromising positions. Albion then contrives to 'accidentally' reveal the existence of the Savoy Sex Publications just as the next police vice-squad raid takes place on Savoy's shop. As an increasingly desperate Charles, whose blackouts are getting worse, tries to catch up with Albion he witnesses him being washed away on a river of effluent from Deansgate's overburdened sewers, suggestive of William Burroughs' 'river of excrement' described as 'one of the deadliest obstacles' of the Land of the Dead from *The Western Lands* (Burroughs 1987: 155). The story ends with no answer as to whether there is a cure for Charles and thus leaves hanging the question of what will happen to the forces of law and order tasked with confiscating and then, by implication, reading and examining many more copies of the same potent material.

As a satire of the definition and selective interpretation of the Obscene Publications Act in Manchester, Partington's story could effectively stand alone, outside *Savoy Dreams*, but as both a forceful social critique and an

underground publication it benefits from sharing space with Darlington's essay and Butterworth's open letter. The combination of letter and story encourages reading *Savoy Dreams* as an assemblage, a body of fragments or a self-fragmenting body that invites the reader to construct not just a narrative of unity, such as the selection procedures or themes which unify other anthologies, but also a view on the world within which the text itself will circulate; it implicates its reader, says to the reader '*as a reader*, you are already involved'. One way in which the anthology reinforces this effect is through design and artwork as an aesthetic context which contributes to the reading process.

As with defences of controversial literature from D.H. Lawrence's *Lady Chatterley's Lover* (1928) to Hubert Selby Jr's *Last Exit to Brooklyn* (1964) and Britton's later *Lord Horror* itself, context and the eye of the beholder are everything. 'Confusing the Cunning Cortex' is prefaced by pages of press cuttings about breaches of conduct, corruption, abuse of power, and even sexual assault, committed by serving police officers, all collaged across a background showing Adolf Hitler walking up the steps at Nuremberg. This background has been employed to divide sections earlier in the book but there are two sections where this becomes more accentuated: initially, when it appears close to the open letter it is implicitly related to several other pages of press cuttings concerning Savoy's trials as booksellers. Later, after the story by Butterworth, and the sexually explicit poetry of Williams, these inserts become double-page spreads featuring stories of police misconduct including cuttings titled 'Nicked! A Cop in Child Porno Hush-up', 'Policeman Dad "Raped Foster Girl 130 Times"'. Then, immediately before Partington's story, the motif occurs with large cuttings titled 'Unmasked: The Hooded PC Who Preyed on Young Girls' and 'Boozy Cops Go On Wild Spree: Drinkers Flee Terror Orgy'. The first page of Partington's story is faced by a page with cuttings titled 'Chopped, The Vice Squad Boozers' and 'Boozing Vice Squad Gets the Chop' which explicitly refer to the Manchester police and mention their Chief Constable. The provocation of placing the story of Eddie Albion's Savoy Sex Publications in this context is obvious; its implied readership includes the vice squad.

This combination foregrounds the social components of two forms of networks which De Landa identifies as types of assemblage which operate in tension with one another which are both assumed and interpellated by this juxtaposition: 'community networks and institutional bodies are assemblages of bodies' (De Landa 2006: 12), specifically, *the bodies of readers* circulating in independent book shops and *the bodies of police* exercising censorial powers over what *can physically* be circulated as objects (another type of body) within such a community network. The collage aesthetic deployed in *Savoy Dreams*, in its relationship to this specific story, is specifically targeting its implied readers as an assemblage of conflicting interests belonging to different social assemblages.

The graphic surface of the page, together with the material context of the

book *as a Savoy publication* – an object highly likely to be subject to the kind of seizure by the police detailed in the story – invites a complex set of readerly confrontations. It transgresses conventions of style such as taste, mode, fiction and non-fiction, journalism, true crime and speculative fiction, as well as transgressing the conventions on representation by which the forces of law and order are treated with respect or, if portrayed differently, are framed explicitly either as fictions or as specifically verifiable examples – it risks transgressing the law while not actually doing so. Part of this compound transgression is a kind of confrontation between *unlike* reading practices: reading like rock 'n' roll versus reading like Literature; reading like a fan versus reading like a policeman, or like a legal professional.

It is encouraging a very different way of thinking about 'escape'; here escape is a malign psychic depth-charge or a dangerous plunge into a radically reprogrammed unconscious. After 'Confusing the Cunning Cortex', *Savoy Dreams* turns still darker (literally, more ink-covered), with Kris Guidio's comic strip based on gender-ambivalent and sexually provocative rockers The Cramps. Guidio's dark pen transforms Lux Interior into the vector for a *voudoun* zombie uprising while The Cramps are followed by Harrison's story 'Lords of Misrule' about the house of the Yule Greave on the edge of the hills, far from the fantastic city of Uriconium.

Although on the fringes of the city's reach, the house is still within its purview and so an agent from Uriconium has come to oversee its defences as it seems to be about to fall to an unspecified external force. The house is part-ruined and it seems unable to hold back whatever is threatening it; as in so much of Harrison's later work, there is a lot that seems to be very specifically not said yet no way for the reader to fill in the gaps; ambiguity and uncertainty hang over every line.

At the end of the story the reader is left to puzzle as to whether the siege is against a physical threat, or a more metaphysical one, perhaps with entropy itself, as in Harrison's seminal story 'Running Down' (1975). We also see an intriguing mummer scene acted out with a horse-skull puppet that seems somehow both full and empty of meaning simultaneously:

> This one had been made long ago […] it was lacquered black, its jaw was hinged with massive silver rivets, and somehow the inside of a pomegranate had been preserved and inserted, half in each orbit, so that the seeds made bulging, faceted eyes. (Harrison 1984: 207)

The puppet, itself an assemblage of dissonant parts, is called a Mast-Horse and we are told 'predated not only the Yule Greave but his house'; it foreshadows the enigmatic skull-like Shrander from Harrison's more recent sf novel *Light* (2002) which also seems to have an intimate relationship with entropy, but within the story the purpose of the Mari/Mast-Horse seems only to give threatening time a momentary pseudo-life and potentially symbolic focus. This contribution

is followed by an interesting essay on Harrison by Colin Greenland and Nick Pratt, and the remaining pages of the book by promotional material for other Savoy publications; it makes Harrison's haunting anti-fantasy the final *story* of the collection. So what is it that can possibly bring all those things together; that haunting liminality with all the other transgressive and disparate modes? Harrison dedicated his second Viriconium novel, *A Storm of Wings* (1980) to David Britton, so let's go back to Britton's characterization of the contributors to *Savoy Dreams*: 'Jack Trevor Story, despite his age, is Rock 'n' Roll. He stands outside the establishment, and I think we do the same' (qtd Darlington 1984: 14). The eclecticism is underpinned by a sense of what Guattari would call an existentialist universe; something you can adopt a stance from: Negation – whatever this is it is *not* central culture.

The Starry Wisdom

The Starry Wisdom, in its original 1994 edition, contains twenty-three tales by different authors who each appropriate strong elements of Lovecraftian fiction for their own purposes. As the presence of the number 23 suggests, they link the experimental heritage of Burroughs with conspiracy theory parodies inspired by Robert Anton Wilson's *Illuminatus Trilogy* (1975) as a means of engaging with contemporary social and political issues from an outsider perspective. Common points of reference are explicit sexuality, racism, religious cults, ecological disaster, and the end of all human civilizations. It opens with Grant Morrison's 'Lovecraft In Heaven' where a dying Lovecraft imagines his spirit journeying through his grotesque universe; Morrison parodies psychoanalysis and pastiches many of Lovecraft's most famous creations by mapping them onto the inner surfaces of his body and those of his parents. Here the problem of escape is that of a terrible ambiguity between the fear of the outside/outsider and the surrender to the Weird; it plays with visceral responses to hate and fear.

The anthology is an assemblage of short stories which manipulate text, concept, and readerly position through a Lovecraftian frame of reference. It places Weird but non-Lovecraftian stories by Ballard and Burroughs in a Lovecraftian context to demonstrate their similarity while also including work by writers such as David Conway (see Williams 2011)drawing explicitly on these sources. Other stories include Michael Gira's 'extracted from the mouth of the consumer, rotting pig', written in fragmentary blocks of brutal, viscerally descriptive text in all-caps. Contrastingly the equally fragmentary prose poetics of Adele Olivia Gladwell in 'Hypothetical Materfamilias' are hauntingly quiet. In this narrative Gladwell formulates a conceptual relationship between Lovecraftian entities and language, creativity and birth, miscarriage and loss, and the unrecallable memories of sensation and sound from the womb as 'a distorted recording of Lovecraft in utero' (in Mitchell 1994: 139).

Simon Whitechapel's 'Walpurgisnachtmusik' concerns an English Industrial Metal and 'Second World War enthusiast' (in Mitchell 1994: 108), who collects

WWII memorabilia, accounts of Nazi abuses, and has a disturbing obsession with atrocity imagery – *The Starry Wisdom* includes a note emphasising that neither Whitechapel nor the editor sympathizes with this troubling narrative voice, this emphasizes for the reader that his attitudes are part of the Lovecraftian horror. In Whitechapel's story Cthulhu's R'lyeh is rendered phantomatically as 'the Reylechsberg experiments', suggestively still continuing in former Yugoslavia; Yog-Sothoth spawns 'Jogsottsheim […] in the Carpathian Mountains' (108). D.F. Lewis contributes a parody of stock market futures based on the investment of belief in Lovecraftian entities while Ramsey Campbell's story 'Potential' has a meeting of a secret millennialist cult whose reading matter prominently includes *New Worlds Speculative Fiction* alongside their Lovecraftian texts.

It is the relationship between prose and graphic narratives that most clearly demonstrates the assemblage function of *The Starry Wisdom* anthology as an object circulating within a specific set of cultural milieu. The comic book narratives by underground artists and writers such as John Coulthart, Mike Philbin (Herzen Chimera, Michael Paul Peter) and Rick Grimes, and the stories from comic book writers Alan Moore and Grant Morrisonput the components of the anthology in contact with anthologies of contemporary underground comix such as the collectively produced *Taboo*.

Taboo was a serial anthology published in Canada and the United States in the late 1980s and early 1990s that employed diverse styles of graphic narratives, from line drawing to mixed media, to push the boundaries of the comic book form; it included two now highly-regarded series written by Alan Moore: *From Hell*, illustrated by Eddie Campbell, and *Lost Girls*, illustrated by Melinda Gebbie. *Taboo* itself was a reflexively internationalist concern, including infamously grotesque Belgian comic book narratives alongside adaptations of Franz Kafka's 'Odradek' (1919) and new work from writers such as Neil Gaiman and writer/artists such as Rick Grimes.

Grimes' elliptical and grotesque contribution to *The Starry Wisdom* is a story of mental estrangement and breakdown under the pressures of mundane everyday life (office cubicles, factory work) and is closely related to his work from *Taboo*, while Moore's prose story 'The Courtyard' is a murder narrative which explores subjective time through meta-textuality in a way which links it conceptually to his work for *From Hell* which he was writing throughout the 1990s. I will conclude with a brief discussion of 'The Courtyard' and Coulthart's graphic adaptation of Lovecraft's 'The Call of Cthulhu' (1928) as a means of understanding *The Starry Wisdom* as a work of assemblage that draws attention to its material construction through reference to the graphic surface of the page.

'The Courtyard' is a postmodern-inspired detective story about the unrepresentable site of murder, occluded from the reader by its expression in abstract Lovecraftian language called 'Aklo'. (It has since been adapted into a comic book and synthesized into the longer work *Neonomicon* (2010) but its most effective form remains the original prose narrative.) The plot is very

strongly related to the hard-boiled style of American detective fiction, but set in a Lovecraftian universe in the (then) future of 2004. Narrated by a jaded and racist FBI agent named Sax – an allusion to Sax Rohmer – the story is an investigation into a series of identical murders committed by people who did not know one another. A street drug is called 'The White Powder' after Arthur Machen's story, a nightclub is called 'Club Zothique' after the work of Clark Ashton Smith, the name of the street dealer, Johnny Carcosa, refers to Robert W. Chamber's *The King in Yellow* (1895) and so on, but throughout the story the reader is left with the possibility that these details could be evidence of either the reality of Lovecraftian entities or a subculture knowingly referring to Lovecraftian stories. The narrative of 'The Courtyard' remains similar to Partington's 'Confusing the Cunning Cortex': it blends the boundaries of a realist, albeit grimy and relentlessly unpleasant, cityscape with Weird effects through textual reference with the potential to be either diegetic or extra-diegetic.

In employing Lovecraftian language in this way it points towards an anti-realist narrative but without absolutely committing to a non-realist epistemology. Even the final twist reinstates the significance of language in a way which enacts a style/content juxtaposition similar to that of Pamela Zoline's 'The Heat Death of the Universe' or Delany's 'Aye, and Gomorrah…' (both 1967) within a Lovecraftian framework. It collapses the distinction between Lovecraftian entities and Lovecraftian fictions by collapsing character and story back into textual surface – Realist and Lovecraftian elements become an assemblage rather than a synthesis. Against the grain of linear progression, 'The Courtyard' presents the narrative as already existent through the first-person voice itself in the process of remembering and/or telling the story: 'I am a memory of myself, trudging a memory of Court Street, this construct encysted within a much larger Yr Nhhngr where I'm already in Clinton Street'. This then becomes a direct address: 'We're both merely part of a brief verbalized reconstruction I'm making to you, Germaine, as I kneel here in your room, bent above you' (in Mitchell 1994: 153–4). At the moment it becomes apparent that it is Sax's audience who is being killed the language of story becomes an incomprehensible textual surface, foregrounding the assemblage qualities of this story within the larger assemblage of the Lovecraftian anthology by concluding with a hanging line of Aklo 'H'rrnai Cthulhu nnh'gtep…' (154). The reader is left on the textual surface once more, ungrounded from narrative and grounded onto the newly suggestive blank spaces of the page.

Coulthart's 'The Call of Cthulhu' deploys visual collage to recreate the 'unknowables' of Lovecraft's unrepresentable horror through an assemblage of artistic allusions to symbolist painting and literary modernism. He uses mixed media and unconventional page and panel layouts linking diamond-shaped and triangular panels, page bleeds via arabesques, spirals and patterns derived from African and Polynesian designs. The effect of fragmented and holistic compound imagery reflects the Lovecraftian premise of the story: it asks the

reader to correlate all the dissonant contents of the page into the framework of the storyworld much as Lovecraft's narrator asks his reader to correlate the contents of the mind (and other narrators) in the prose.

In addition, Coulthart's use of art and design history embeds a series of visual correlates from outside the scope of the Lovecraftian text: he casts Lovecraft's Professor Angell with the likeness of the real Joseph Conrad, adding a troublingly reflexive critical dimension to Angell's mysterious death after being 'jostled by a Negro'. The persistent presence of symbolist imagery adds a certain psychoanalytic charge to the narrative which is alluded to by the presence of Odilon Redon's eye imagery and the presence of Henry Fuseli's *The Nightmare* (1791) on the wall in the background of a panel where the narrator sits reading. Redon's floating eye is appropriated directly, its presence suggesting psychoanalytic content made explicit, part of the visible surface. This is then echoed repeatedly by the floating eye images of Coulthart's protagonist.

Most importantly, Coulthart brings the historical context of the origin story and the graphic surface of the page together to achieve his central effect in combination with his use of collage and appropriation. A cover of *Weird Tales* appears on a table and the presence of newspaper reportage within the story appears both as a double-column of the narrator's own voice (similar to the column layout of *The Starry Wisdom* anthology itself) and also as a newspaper page background against which the angular panels float encouraging the reader to view pages as pages, and as essential parts of the storyworld. This floating effect is taken further by the presence of statuettes which appear on the page in liminal positions suggesting the function of both design and content simultaneously without being fully resolvable to a given position within any panel. Most notable among these objects is a female statue which unites the style of the Art Nouveau images in the narrator's office with the elongated and sexualized skulls of the contemporary artist H.R. Giger, whose artworks were collected under the suggestively Lovecraftian title of *Necronomicon* (1977).

Conclusion: Going Underground

Anthologies like *Savoy Dreams* and *The Starry Wisdom* are stylistically and conceptually *out of step* with the interests of contemporary fiction, in the sense of always being *outside* or on the periphery of major or dominant culture while moving – whether in parallel, or transversally – with it. These anthologies articulate a position of being permanently fraught, flexible and anarchic as a key dimension of the lasting impact of the New Wave visible from the 1980s and 1990s: it is not just the alternative or the counterculture but *the underground* (see also Fountain 1988). Finally, these anthologies reveal how textual assemblages relate to the social assemblages of the underground culture.

My key point of articulation in drawing attention to these two anthologies is that they are aesthetically linked texts, produced by personally networked writers and publishers, which self-consciously formulate this underground

position of becoming outsiders within contemporary fiction which are *influenced* by the New Wave and, crucially, have *influence* upon the New Weird. This comparison can be extended into twenty-first century minor literatures which also add new avant-gardist inflections to the mix: this might extend from Steve Beard and Jeff Noon's online experimental fiction *Mappalujo*, to Savoy's own *Adventures of Little Lou* (2007) and even China Miéville's *Kraken* (2010), which makes reference to this milieu through the various magical churches of his Alter-London, in particular, the Church of the God Squid, and assassin cults, such as the absurd but dangerous Chaos Nazis. These points of contact never ended with the New Wave, and are not reducible to the New Weird, they are still active: we still live in its wake, among the components which will form, which are already forming, the assemblages of whatever comes next.

Works Cited

Burroughs, William S. 1984. 'The Place of Dead Roads.' In David Britton and Michael Butterworth, eds. *Savoy Dreams*. Manchester: Savoy, 59–64.

----- 1987. *The Western Lands*. London: Viking.

Butterworth, Michael. 1984. 'Savoy Under Siege: A Report from Prison.' In David Britton and Michael Butterworth, eds. *Savoy Dreams*. Manchester: Savoy, 24–54.

Darlington, Andrew. 1984. 'Doin' That Savoy Shuffle.' In David Britton and Michael Butterworth, eds. *Savoy Dreams*. Manchester: Savoy, 13–23.

De Landa, Manuel. 2006. *A New Philosophy of Society: Assemblage Theory and Social Complexity*. London: Continuum.

----- 2011. 'European Graduate School Video Lecture: Assemblage Theory, Society and Deleuze.' URL: https://www.youtube.com/watch?v=J-I5e7ixw78 (accessed 08/01/2016).

Fountain, Nigel. 1988. *Underground: The London Alternative Press, 1966-1974*. London: Routledge.

Harrison, M. John. 1984. 'Lords of Misrule.' In David Britton and Michael Butterworth, eds. *Savoy Dreams*. Manchester: Savoy, 202–9.

Mitchell, D.M. 2004. *A Serious Life*. Manchester: Savoy.

----- ed. 1994. *The Starry Wisdom: A Tribute to H.P. Lovecraft*. London: Creation.

----- ed. 2009. *Songs of the Black Wurm Gism: Hymns to H.P. Loveccraft, The Starry Wisdom 2*. London: Creation Oneiros.

Moorcock, Michael. 1984. '*Cities of the Red Night*: A Review.' In David Britton and Michael Butterworth, eds. *Savoy Dreams*. Manchester: Savoy, 55–8.

Noys, Benjamin. 2013. 'Full Spectrum Offence: Savoy's Neo-Weird.' URL: leniency.blogspot.com/full-spectrum-offence-savoys-neo-weird.html (accessed 25/05/2014).

Williams, Mark P. 2011. 'The Superheated, Superdense Prose of David Conway:

Gender and Subjectivity Beyond *The Starry Wisdom*.' In Sara Wasson and Emily Alder, eds. *Gothic Science Fiction: 1980-2010*. Liverpool: Liverpool University Press, 133–48.

----- 2012a. 'Alternative Fictioneers.' *Alluvium* 1.1. URL: https://www.alluvium-journal.org/2012/06/01/alternative-fictioneers/ (accessed 09/01/2016)

----- 2012b. 'Insurgent Subcultures: Fictions of Resistance.' *Alluvium* 1.7. URL: https://www.alluvium-journal.org/2012/12/09/insurgent-subliteratures-fictions-of-resistance/ (accessed 09/01/2016)

The Arthur C. Clarke Award: Thirty Years On

Andrew M. Butler (Canterbury Christ Church University)

There is a moment at each Arthur C. Clarke Award ceremony when the audience is silent. There will have been various speeches of thanks and the proceedings passed over to the person with the envelope. Then there is a moment of tension.

The award is announced.

And then there is that silence – sometimes broken by tumultuous applause, sometimes a more measured response. I suspect that silence feels far longer than clock hands would measure. And then the response – celebrations or recriminations – continue, having rumbled since the announcement of the shortlist.

The origins of the Clarke Award lay in plans for a magazine. Maurice Goldsmith ran the International Science Policy Foundation, an independent non-profit making company and educational charity. Noting the success of *Isaac Asimov's Science Fiction Magazine*, Goldsmith suggested to Clarke he might want to fund a British sf magazine. Clarke had been part of early British fandom and the fanzine that became the magazine *New Worlds*. This had long since ceased publication, the vacuum most recently being filled by *Interzone*. But the market would not sustain a second magazine. So what about sponsoring an award instead?

Goldsmith talked to Foundation – established by space advocate George Hay with Clarke as patron – to engage their help and they pointed to the British Science Fiction Association Awards, given more or less annually since 1969 by an organization of which Clarke was president. Could the ecosystem of British science fiction support a second prize?

A meeting chaired by Prof John Radford from the North East London Polytechnic (then the home to the SF Foundation Collection) brought together Hay and Goldsmith, Mike Moir and Paul Kincaid of the BSFA, and John Clute and Edward James of Foundation, to consider the possible purposes of such an award. The two most prominent sf prizes were largely American-based: the Hugo for members of the World Science Fiction Convention and the Nebula for members of the Science Fiction and Fantasy Writers of America. One is a readers' award, the other a peers'. But the Clarke could be a juried award, on the model of the Booker and Whitbread Prizes, or, more to the point, on the Philip K. Dick Award.

Kincaid claims that Clarke wanted the award to 'encourage British science fiction' (Kincaid 2006a: 12) and James argues that 'it was intended to bring sf to the attention of the public and point them in the direction of the best science fiction' (James 2002: 69). These are not incompatible aims. The aims could be met by making it an award for British writers – especially as the major existing ones were then dominated by American writers. There had been a retreat from

the high watermark of professional British sf writers in 1979 and the generation of writers nurtured by *Interzone* was yet to fully emerge. There was a worry that the talent pool was not big enough to create a credible shortlist. The three organizations were to supply two judges each – in fact the six people at the meeting aside from Radford – to judge the best sf novel published in Britain. Clarke put up £1000 as prize money.

As Kincaid notes, 'At no point did we decide what was meant by "best", by "science fiction", or even by "novel"' (Kincaid 2006a: 12). These days, the rules of the award make it explicit that we have no official definition of the terms. Publishers do submit fantasy and horror, although clearly these are cognate genres that have much in common with sf; they sometimes send volumes that appear to be collections of short stories rather than 'novels'. And the varied noises of those silences at the announcement testify to the slippery nature of 'best'.

It was arguably only with the fourth and fifth winners that the award hit its stride. The first two winners in 1987 and 1988, Margaret Atwood's *The Handmaid's Tale* (1985) and George Turner's *The Sea and the Summer* (1987), were controversial and the third, Rachel Pollack's *Unquenchable Fire* (1988), was a challenging read. *The Handmaid's Tale* was a dystopia about the oppression of women by a feminist Canadian novelist from outside of the genre. James claims that this was the wrong book to win: it 'did nothing to present science fiction to the British public because they did not recognize it to be science fiction' (James 2002: 70). Kincaid argues that to some it felt like the 'award was deliberately turning its back on the core of the genre' (Kincaid 2006a: 12). This exposes a tension that remains at the heart of the award. When it privileges the literary, it is perceived as making grand claims for the genre as more than just gosh-wow escapism. Claims of maturity for the genre may do more to reassure insiders than to persuade outsiders.

The standoffish reaction of Atwood, who apparently did not see her novel as sf, did not help. There was a suspicion, perhaps, that Atwood did not *need* the award and thus did not *deserve* it. Atwood's publisher, Jonathan Cape – who had published sf – had not marketed her novel as sf and did not refer to the award. This was read as a slap in the face. I suspect we were talking past each other; Atwood, when young, had clearly enjoyed pulp sf, but had moved on before the New Wave had made its impact. Her sf was not the bug-eyed monster type hence she did not write it – but little sf was like that anymore anyway. The following year Turner, arguably then Australia's leading sf writer, albeit one who had been critical of much genre work in the past, won the Award. Again, Faber had not published his novel as sf but they had consented to submit it to an sf award. James suspects it 'might be the best sf novel ever produced by an Australian' (James 2006: 31). It has not remained in print, unlike *The Handmaid's Tale.*

Geoff Ryman's *The Child Garden* (1989) and Colin Greenland's *Take Back*

Plenty (1990) were popular winners by major talents who were integral to the British sf scene. The latter novel was a variation on space opera, post-Iain M. Banks and, indeed, Lewis Carroll. It was also a popular book – one of the few Clarke winners to have a spaceship on the cover –clearly of and in the genre as it also won the BSFA Award. The following year, Pat Cadigan took the award for her complex *Synners* (1991), and then controversy struck again in 1993 with Marge Piercy's *Body of Glass* (1991). Piercy had written sf previously, but it was felt by many that Kim Stanley Robinson's ambitious *Red Mars* (1992) was the more appropriate winner, especially as it had a cover quote by Clarke, although Clarke later admitted to liking what he had read of the Piercy. On the other hand, Amitav Ghosh's *The Calcutta Chromosome* (1996), a distinctly outsider choice, seemed to cause little fuss. The community seemed pleased to be introduced to a book that might otherwise have passed them by. Indeed, I get the sense that it has become one of the award's more successful choices, whereas there has been a backlash against the following year's then-popular choice of Mary Doria Russell's *The Sparrow* (1996).

The award had become a gathering of the fleets, bringing together publishers, authors, readers, critics, fans, scientists and academics – the stakeholders of British sf. There was a sense of a collective ownership of the award. Tricia Sullivan, who won for *Dreaming in Smoke* (1998), says in a personal communication that she 'was one of those winners nobody expects; my work hadn't a snowball's chance in hell of being noticed for a big popular award. My novels have never sold well, but having the Clarke on my CV has given me confidence to persist with publishing.' She remains deserving of our attention. Similarly, Cadigan feels elated by her two awards: 'For me, personally, the Clarke Award is my pride and joy — or maybe that should be *are* my prides and joys. My Clarkes were awarded by two completely different juries — that meant a great deal to me each time, and it still does' (personal communication). The winners, and the shortlists, offer a sounding of the state of the current field of sf for each year.

But if the award was generating less controversy within the community, it now faced structural problems. The International Science Policy Foundation was struggling to provide judges – Lord Mark Birdwood was the last and, despite my being a judge for the 1997 award, I have no memory of Goldsmith's involvement. The ceremony had moved to the Science Museum – whose attendances apparently had been damaged by having to charge entrance fees – and between the 2000 and 2003 awards Doug Millard, who worked for the Science Museum, acted as judge. Clarke had increased the prize money to £2001 in honour of his most famous work, and by another pound each year after that, but it was not clear that the money would continue. It had been channelled through Rocket Publishing, but resources were finite and Clarke was aging. Meanwhile, the Science Museum wanted to charge for use of the venue.

In 2003, a council of war was convened, with then chair of the award Paul

Kincaid, Maureen Speller, Paul Billinger, Elizabeth Billinger and myself. (Angie Edwards, Clarke's niece, was also involved but did not make every meeting.) We set up a company to give the award a legal existence – I suggested Serendip Foundation as a nod to Clarke's adopted country of Sri Lanka. Speller formalized her role as awards assistant and Elizabeth took over the accounting. Thanks to the generosity of the BSFA and the (renamed and reconstituted) Science Fiction Foundation in lending money, we made it through. To mark two decades of the Clarkes, Paul Kincaid edited a collection of essays on the twenty winners with myself as junior editor and Speller as excellent copy editor and proof reader.

When Kincaid decided to step down, having been chair since 1996, Paul Billinger took over dealing with the judging, whilst Tom Hunter, editor of *Matrix* (the then news magazine of the BSFA), came in as Director of the Award. The financing could be kept at arm's length from the judging. We began an association with Louis Savvy and Sci Fi London, a film festival; the ceremony was held at a Piccadilly cinema and the organization also started to provide a fifth judge from 2012.

Paul Billinger stood down in 2012 after five awards, in my favour. At first things were quiet – a *Guardian* journalist tried to manufacture a story out of the fact that Terry Pratchett had not been shortlisted – but then Christopher Priest wrote a blog attacking the award: 'Of the six shortlisted novels, I can find only one which I think is something we should be proud of.' He asserted that this was 'a set of judges who were not fit for purpose' and 'Andrew Butler [sic] […] reveals himself as incompetent as the others' (Priest 2012). When I had been a judge in the mid-1990s we all had email, but almost all of the deliberation was held in person; feedback was at conventions and in print. By 2012 we had the echo chamber of Twitter, broadband and blogs, and it felt rather like being at the eye of a storm for the judges. Priest has since made his peace with the authors, if not necessarily with the judges, and Jane Rogers won for *The Testament of Jessie Lamb* (2011) to her obvious pleasure.

The following year there was further controversy – for the first time since 1988 there were no women on the shortlist. As four of the five judges were women, it was hard to accuse them of sexism. It was obvious when tallying up the judges' votes prior to the shortlisting meeting that the shortlist was going to be all male and we discussed the implications. There was no novel by a woman that they felt would take a fifth or sixth place – the titles were either too far into the realms of fantasy or horror, or parts of series or not good enough. The jury stood by their judgement on quality alone, as is perfectly within the rules. Former judges Niall Harrison and Farah Mendlesohn observed that few female sf writers had British book contracts; Mendlesohn read the sf submissions by women and averred that there were none that she would have shortlisted. But the important thing was that people were talking about sf in Britain.

In 2013 we released the submissions list of books written by women before that of the men – this unfortunately had the impact of making some commentators

believe we had split the award into two; one for women, one for men. We have not had another all-male shortlist; indeed the last two awards have been made to women. Ann Leckie's *Ancillary Justice* (2013) subverted the subgenre of space opera in the tradition of Banks, Greenland and Anne McCaffrey. Emily St John Mandel's *Station Eleven* (2014) was again from outside the genre family, but she was more than happy to win the award.

Almost a decade after stepping down from chairing the award, Kincaid still notes in a personal communication the importance of the Clarkes:

> It seems to me that the Clarke award is now firmly established as one of the major genre awards, the only one of the top flight awards that isn't primarily American (I count the Hugo as an American award). The BSFA Award, and other Australian and Canadian awards get noticed, but don't get the same degree of respect. So, again, the Clarke Award puts British sf on the top table for an international audience.

Positive promotion and publicity both for the award and the genre have been very important over the most recent decade, with winners and the shortlisted authors now consistently featured in UK and international news. In the internet age, the discussion can involve more people than ever before and everyone has their opinion. It should be no surprise that winners of the Clarke Award in recent years have reported sales increases of over 200%. Gwyneth Jones observed in a personal communication:

> I think it's changed, in the past few years and is still changing: becoming more competitive in the global sf awards calendar, so to speak, & this is no bad thing. But I hope the prestige element survives the new approach. It's good for the field to have an award that's regarded as being for quality rather than for popularity.

We hope that through promotion we can make quality titles become popular. Outside the award itself we have worked to positively promote sf literature, organizing writer events, conferences and publications as well as working directly on audience engagement projects with other prestigious institutions such as the Royal Society, the British Library, Tate Britain and Birkbeck College, London, perhaps most notably on the Geek Pound project.

And what of the future? In 2015 we moved to an events space at Foyle's after two years at the Royal Society; it is likely that our thirtieth will be there as well. Nothing lasts forever, of course, but Tom Hunter and I are committed to the award, with Steph Holman joining us and working largely (for now) behind the scenes. We are no closer to defining 'best', 'sf' or 'novel', but the increasing significance of e-publishing questions the notion of 'published in Britain'. So far we have allowed e-books that are to get paper editions; currently we are unable

to provide e-readers for the judges. Do electronic texts feel as substantial as paper books? At the moment we do not accept self-published novels, but the ecosystem of e-publishing may shift – although in recent year our judges have dealt with over a hundred print volumes. We have discussed a return to six judges, perhaps from a fourth organization. The role is an honour, but is of course unpaid and takes thousands of hours.

Pat Cadigan told me that 'I get the idea that the Clarke Award is very well thought of by the rest of the field […] you could accuse me of bias, wishful thinking, or both. Still, I feel that I'm more visible than I would have been if I hadn't won.' I think it is those positive feelings that mean people across the broad church of the sf communities care enough about the award to have opinions – it *matters* to them if their favourite doesn't win, and they are ready to argue their case. Authors such as Lauren Beukes and Chris Beckett have seen spikes in their sales in the month after their award; Leckie was also riding high in the charts but she was also winning the other genre awards. 'If you look at the list of all the nominees and winners since the beginning (other than my own books),' Cadigan suggests modestly, 'I think you'd have to admit that more often than not, it shows off the best of our field.' And in the years to come, it will be such books we reach for to recommend to friends, relatives or co-workers who want to try that sf stuff. So long may that silence at the announcement be unpredictable and the discussion that follows rich.

Nick Hubble (Brunel University London)

The Arthur C. Clarke Award will be presented for the thirtieth time in May this year and we can expect extensive analysis and debate surrounding this anniversary. Perhaps, in some ways, Emily St John Mandel's success in 2015 with her elegant literary dystopia, *Station Eleven*, came a year too early. To be able to point to both the fourth victory by a woman writer in five years and the obvious symmetry with the first ever Clarke Award going to Mandel's Canadian compatriot, Margaret Atwood, in 1987 for *The Handmaid's Tale*, would have suggested the award's ongoing standing as both an arbiter of cultural value and a beacon of liberal feminist sensibility. The 2016 winner might not provide such a neat story.

However, the emergence of such a positive narrative is not merely the by-product of a happy accident or the award's relative longevity but also stems from hard work in establishing and administering the award, intelligent marketing, and growing press coverage, especially by the *Guardian*. The report of Mandel's victory, which appeared online within minutes of the announcement, quoted the award director, Tom Hunter, on the importance of diversity and the broadening of interest in the award:

> One of the reasons for this continuing growth is the rise in submissions, and recognition of the award from more mainstream publishing houses

> – and of course the attraction of science fiction and fantasy stories to an ever-growing fanbase. Publishers know that the barriers between genres are coming down. (*Guardian* 2015)

Nevertheless, the rise of what we should specify as gender diverse, mainstream-friendly sf is not as straightforward as this suggests. Mandel, herself, sounds a more sceptical note, 'If you write literary fiction that's set partly in the future, you're apparently a sci-fi writer' (*Guardian* 2015). On one level, this is the response of a writer who, understandably, does not want to be stereotyped or limited by the demands of a specific marketing category but it also indicates a wider problem of the relationship between gender and genre. For example, the all-male Clarke shortlist of 2013 was described by the *Guardian*'s Alison Flood as 'reinforcing science fiction's image as a boys club' (Flood 2013) but prompted a public confession of envy from Man Booker Prize judge, Stuart Kelly, who noted that 'all the titles deploy techniques from literary fiction […] The false dichotomy between "literary" and "genre" has never seemed so slight' (Kelly 2013). Generally, critics – especially male critics – are still more likely to award 'literary' status to men and so it makes sense for women writers with literary ambitions to resist genre labels.

Hence the almost unique significance of Atwood, who is referenced by both Kelly's blog and the *Guardian* report of Mandel's Clarke win, as a kind of implicit guarantor of the award's status. This is unsurprising given that *The Handmaid's Tale* is widely accepted as a canonical text and taught across school and university curricula. However, what makes it problematic as a role model for sf has been Atwood's periodic insistence that she writes no such thing and that the novel should be regarded as a work of speculative fiction. While, in practice, Atwood's position can be ignored because, whatever she might say, later novels such as *Oryx and Crake* (2003) and *MaddAddam* (2013) clearly demonstrate that she does write sf, her example neatly demonstrates the double-edged nature of the term 'literary sf' and its potential to signify different things to different people. As Paul Kincaid noted when reflecting on administering the Clarke for its first twenty years, giving Atwood the inaugural award was presented by critics 'as the Clarke jury turning its back upon traditional science fiction, a stance that they see replicated throughout the Award's history in the crowning of Marge Piercy and Amitav Ghosh' (Kincaid 2006b: 5). Although Kincaid points out that the motivation for these decisions was the desire to applaud something new being brought to the genre, the fact that he nonetheless feels the need to clarify that these decisions were not intended 'to ingratiate ourselves with the mainstream' (Kincaid 2006b: 6) indicates the strength of feeling on the issue.

The term 'literary sf' rarely functions as a neutral guarantor of a certain level of quality in terms of writing style and characterization but instead serves a political purpose. Adam Roberts only exaggerates about the level of diversity involved in most such texts and not the current oppositional intensity of the term when he defines it as the marker of one camp in an ongoing culture war:

‘the Literary SF, “science fiction is about the encounter with otherness”, lovin-the-alien, polymorphous, feminist, queer, coloured, trans and politically liberal crowd’ (Roberts 2015: 9). However, the problem with such a stance is the persistent idea that there is something essential to sf that distinguishes it from ‘literature’. From this perspective, a ‘literary sf’ undermines the diverse, radical potential of sf rather than exemplifying it.

Fredric Jameson suggests that it is this radical capacity of sf that arouses a specific ‘generic revulsion’ stemming from a ‘literary “reality principle”’ that is neither ‘a matter of personal taste, nor is it to be addressed by way of purely aesthetic arguments, such as the attempt to assimilate selected SF works to the canon as such’ (Jameson 2005: xiv). It is an oft-repeated truism that sf is really concerned with the present rather than the future but as Jameson argues, drawing on the ideas of Jürgen Habermas, what it really does is question that present and thereby generate a sense of the possibility of a ‘future as disruption of the present’ (Jameson 2005: 228). It is this capacity of sf – whether through style, plot, or combination of both – to represent the possibility of transformative change that triggers the ‘generic revulsion’ of those who are unprepared to countenance any significant alteration to property and gender relations, or, indeed, to societal norms in general. In this context, the significance of *The Handmaid’s Tale* being the first Clarke winner lies not in its canonical status, which actually serves to enable the downplaying of its material effects by disguising them as ‘literature’, but its ongoing capacity to disrupt the gender relations of the present.

By imaginatively demonstrating the links between radical feminism, religious fundamentalism and patriarchy, Atwood contributed to the development of third-wave feminism and helped create a space of public reception for it amongst her large readership. Where she was once an outlier, the success of novels such as *Station Eleven*, 2012 Clarke-winner Jane Rogers’ *The Testament of Jessie Lamb*, and the 2015 Clarke-shortlisted Emmi Itäranta’s *Memory of Water* indicate that her approach has become more widespread as cultural practice in the second decade of the twenty-first century. Similarly to *The Handmaid’s Tale*, all three of these texts turn to a greater or lesser extent on the struggle of younger protagonists to free themselves from – as opposed to establishing themselves among – a parental generation compromised by association with dystopian social structures. As Roberts comments, reflecting on his experience as a judge for the Kitschies in 2015, lots of ‘really good stuff is being written at the moment – especially (but not exclusively) by women, especially (but not exclusively) in YA and what we could call “near future dystopia”’ (Roberts 2015: 14). However, Chris Beckett’s *Dark Eden*, which won the Clarke from the 2013 all-male shortlist, also fits much of this template with the difference that its protagonist is a young alpha male. This novel highlights gender in a very contemporary manner but it is difficult to decide whether the effect of this is to critique or reinforce essential difference. There are passages which

could come straight from a Heinlein juvenile, which begs the question as to how far such new-generation fiction has really advanced from that written in the Fifties and Sixties beyond simply gender-flipping. One of the key points made by Christopher Priest in his savage critique of the 2012 Clarke shortlist is that while he considered *The Testament of Jessie Lamb* to be the only novel worthy of victory, he still argued that 'to be fully realized as a work of speculative fiction it needs a wider canvas, a sense that larger events are mounting in the background' (Priest 2012). The problem with this absence, which exists to a greater or lesser extent in all three of these books and others like them, is that it leaves their radical charge open to appropriation by more totalizing narratives.

As soon as one thinks about the Clarke Award in these political terms it becomes impossible to think of it as a straightforward tale of progressive 'literary' evolution from Atwood onwards. This is a point that is also immediately evident from the statistics. The fourteen awards made from 1987 to 2000 were split evenly between female and male writers despite a respective 31:69 ratio across all of the shortlisted novels. In contrast, the fifteen awards since 2001 have yielded only five wins by women writers from an equivalent shortlist ratio of 27:73. Given that four of those five wins have come since 2011 and that the shortlist ratio for this latest period is 30:70, the question arises as to what happened in the decade between 2001 and 2010 when only one woman writer won and only fifteen novels by women made the shortlist (and five of those were in 2001 and 2002)?

There is no definitive answer but a number of factors can be identified which acted and interacted across that decade in a way that they had not previously. These include the decline in publication of sf relative to the publication of modern fantasy, the tendency to blend fantasy with sf, the rise to prominence of British as opposed to American sf, and the emergence of China Miéville – who won the Clarke in 2001, 2005 and 2010 – as the star of the new century. The problem with Miéville's unprecedented success, as Priest noted in 2012, was that it came close to sending out 'a misleading and damaging message to the world at large […] that not only is Mr Miéville the best the SF world can offer at this moment, he is shown to be more or less the only writer worth reading' (Priest 2012). The attraction of Miéville is easy to see. The powerful blend of sf and fantasy that he achieved in *Perdido Street Station* (2000) was perfectly fitted to explore the intersectional ethics and politics of urban identity in the new millennium. But, as a consequence, comparable, albeit less urban, works such as Mary Gentle's *Ash*, which mixed alternate history and fantasy and was also shortlisted in 2001, have not had the critical attention they deserve. It is true that in the following year Gwyneth Jones' equally genre-fusing *Bold as Love* did win the Clarke but that was to represent the high point for women writers in the decade. While Jones, the most shortlisted writer in the history of the Clarke, would be in contention twice more during the decade, others such as Gentle, former winner Tricia Sullivan, Liz Williams and Justina Robson only made the

list once. One assumes that their other books were either considered not literary enough or too fantasy-inflected or both of those. It is not clear if the novels of Steph Swainston, whose *The Year of Our War* (2004) was one of the most feted debuts of the decade, and whose work is every bit as elegantly weird as Miéville's, were even entered by her publisher.

Meanwhile, British sf was apparently booming which, as Kincaid has explained in an email to Andrew M. Butler, had been one of the founding aims of the Clarke:

> When we set up the award, the one remit we set ourselves was to encourage British science fiction. […] When we started the award, a British writer on the shortlist was a rare event […] By 2001, there were 5 out of 6 British writers on the list. I'm not claiming that the Clarke Award was responsible for the British boom, but it was certainly part of the mix of things that were going on between the late-80s and the turn of the century that encouraged British writing.

However, none of the six women winners of the Clarke before 2000 (Pat Cadigan won twice) had been born or brought up in Britain (although Cadigan and Sullivan both relocated there in the mid-1990s) and, with the exception of Rogers, none of the women winners since 2011 have been British either. Statistically, it is very difficult for a woman raised in Britain to win the Clarke Award, which indirectly indicates just how largely Jones looms in British sf. In contrast, three of the seven male winners of the Clarke before 2000 were born and brought up in Britain and a fourth, Geoff Ryman, had lived in Britain since the early 1970s. In the Noughties, when Ryman made the list of winners again, alongside Jones, Miéville, Priest, M. John Harrison, Richard Morgan and Ian R. MacLeod, the only international name to join them was Neal Stephenson.

An interesting analysis of what was happening can be found in James Lovegrove's 2007 review of four novels: Ryman's *Air*, which had won the Clarke in 2006, Morgan's *Black Man*, which would win in 2008, Ken MacLeod's *The Execution Channel*, which would be shortlisted in 2008, and Ian McDonald's *Brasyl*, which would not be shortlisted. Lovegrove suggests that these novels show that sf, which is 'written predominantly by white Western males', is starting to turn away from a preoccupation with using space settings to examine the world as it is and instead focusing on the 'others' around 'us' – those with 'a different language, skin colour, set of cultural signifiers, even gender' (Lovegrove 2015: 143). While the encounter with otherness has always been a part of sf, it arguably had not been the dominant collective preoccupation of major male sf authors until this time. However, once this cultural shift had happened in Britain, it heavily influenced prizes such as the Clarke and raised the standing of British sf internationally.

One negative consequence of this phenomenon was that it probably contributed to the dearth of women being shortlisted for the Clarke during the

decade because men had now occupied the territory of difference. However, most of the writers involved had honourable records of working with these kinds of themes and, moreover, many of the key novels were not written from the viewpoint of a white male protagonist. For example, *Black Man* is unambiguously about a black man, *Air* and Ian MacLeod's *Song of Time*, the 2009 winner, are both long, complex novels woven around the perspective of non-white women, and even Stephenson's *Quicksilver* includes probably his most complex and satisfying female protagonist. *Brasyl*, with its three intercut narratives and range of protagonists, including a bisexual transvestite, is as pluralistic as any of the above but its non-appearance on the 2008 Clarke shortlist was seen at the time as a perverse product of the jury's desire to include seemingly mainstream texts such as Mathew De Abaitua's *The Red Men* and Sarah Hall's *The Carhullan Army* in its place. Because of its quality and embrace of diversity, it is difficult to argue that *Brasyl* lost out to more literary sf, but equally, given both that De Abaitua has continued to work in the field and *The Carhullan Army* went on to be voted the decade's top sf novel by a woman in a 2010 poll run by Niall Harrison on the *Vector* editorial blog, it can no longer be said in retrospect to have lost out to texts that are somehow more marginal to the genre. This is an example of how the debate and developments surrounding the award can be mobilized to equalize the momentary hierarchies created by the mundane fact that only six people can be shortlisted in any one year and only one of those can actually win it.

There is little question that the Clarke has been influenced by such debates. For example, the *Vector* poll originated from the commentary on an interview with Sullivan concerning how difficult it was for women to win the award and went on to generate wide discussion (see Harrison 2010). Subsequently, the 2011 Clarke jury shortlisted both Sullivan and Lauren Beukes, the latter winning with *Zoo City*, an sf/f blend as uncompromisingly urban as anything by Miéville. The real significance of this breakthrough is not that it led to subsequent shortlists (apart from that of 2013) containing at least two women writers – although this is welcome – nor even that it led to so many women winning – although this is also very welcome – but that it demonstrated that the Clarke is more than a list of winners and shortlists precisely because it is at the centre of the relatively unique participatory culture of sf. Let us hope, therefore, that whoever wins in May, the story will not be too neat. It is the controversies and the debates – and the reactions, syntheses and breakthroughs they inspire – which make this award special and demonstrate that sf is so much more than just a type of literature.

Works Cited

Flood, Alison. 2013. 'Arthur C Clarke award announces all-male shortlist', *Guardian*, 4 April. URL: http://www.theguardian.com/books/2013/

apr/04/arthur-c-clarke-award-shortlist-all-male
The Guardian. 2015. 'Arthur C Clarke award goes to "elegy for the hyper-globalised present"', 6 May. URL: http://www.theguardian.com/books/2015/may/06/arthur-c-clarke-award-station-eleven-emily-st-john-mandel
Harrison, Niall. 2010. 'SF by Women, 2001-2010: Index.' *Torque Control*. URL: https://vectoreditors.wordpress.com/sf-by-women-2001-2010/
James, Edward. 2002. 'The Arthur C. Clarke Award and Its Reception in Britain.' In Gary Westfahl and George Slusser, eds. *Science Fiction, Canonization, Marginalization and the Academy*. Westport CT: Greenwood Press, 67-78.
----- 2006. 'The Possible Cost of Complacency.' In Paul Kincaid and Andrew M. Butler, eds. *The Arthur C. Clarke Award: A Critical Anthology*. Everdon, Daventry: Serendip Foundation, 31-9.
Jameson, Fredric. 2005. *Archaeologies of the Future: The Desire Called Utopia and Other Science Fiction*. London: Verso.
Kelly, Stuart. 2013. 'A Booker judge's envy of the Arthur C Clarke award', *Guardian*, 4 April. URL: http://www.theguardian.com/books/booksblog/2013/apr/04/booker-judge-arthur-c-clark-award
Kincaid, Paul. 2006a. 'Introduction.' In Paul Kincaid and Andrew M. Butler, eds. *The Arthur C. Clarke Award: A Critical Anthology*. Everdon, Daventry: Serendip Foundation, 11-16.
----- 2006b. 'Twenty Years After: The Clarke Award So Far.' *Vector* 248: 5-6.
Lovegrove, James. 2015. *Lifelines and Deadlines: Selected Nonfiction*. Alconbury Weston, Cambs: NewCon Press.
Priest, Christopher. 2012. 'Hull 0, Scunthorpe 3.' URL: http://www.christopher-priest.co.uk/journal/1077/hull-0-scunthorpe-3/
Roberts, Adam. 2015. *Rave and Let Die: The SF and Fantasy of 2014*. Alconbury Weston, Cambs: NewCon Press.

Ideas, Inspirations and Influences: An Interview with Alastair Reynolds

Will Slocombe (University of Liverpool)

WS: Some writers are fundamentally solitary but others, such as the Glasgow Science Fiction Writers' Circle, are more communal. Do you think of yourself as a solitary writer?
AR: Yes, very much so, it is entirely a solitary creative activity. I've never felt any interest in being involved in a writers' circle. I never sent my stories around to groups of writers for critiquing, as that seems a complete waste of time. The only critique that matters is the guy with the cheque or the woman who is going to buy the story or not. The only way to improve is just to relentlessly submit stuff and try and get into a feedback cycle of self-improvement. I am intensely solitary as a writer now. I'm pretty solitary anyway as an individual, just someone who basically is quite comfortable with their own company. I love to sit there and allow myself a lot of time for creative germination. If I'm not doing something I'm always thinking about what I might be writing next. On a train or having a haircut, I'm obviously thinking one or two stories down the line or a novel down the line, that process goes on all the time. I am never at the point when I don't have one or two ideas to draw on.
WS: When you say 'creative germination', how much do you actually map out a story before you start? There's a sense in your books that there's more going on in the universes than you are telling us – do you work those out? is it just something that you run with?
AR: There is a little bit of working out, but often it's a sleight of hand in that you develop stylistic gimmicks or tricks that you know will give the impression that there is more there than there is. It's like one of those facades in a western where the buildings are only painted on one side. You just develop an arsenal of little tricks you can do that imply a bigger universe than you could ever possibly flesh out. Occasionally you do put things in because you have worked them out in the background because for one reason or another you want to but often it is just little nods.
WS: You don't have a 'bible' then? Does that give you more freedom if you want to return to that universe later?
AR: I don't, no. I have a couple of files on my computer which have timelines and glossaries and I occasionally consult them but most of the time if it's Revelation Space and I want to write another story in that universe I rely mainly on my own memory of where I wrote things in the books. I have a good visual sense of where a particular scene falls in a book and can open it at more or less the right page. So I can refresh my memory about what I said about this character or something like that and I will contradict myself occasionally but it doesn't

concern me. If you're the type of reader who is concerned about that kind of internal consistency then I'm not the writer for you. I'm writing books that feel cohesively linked but it's not an exercise in obsessive consistency. That would bore me as a writer as much as a reader.

WS: You've said in the past and on your blog that you love to stay abreast of current scientific development by reading things like *New Scientist*. I was interested by what ideas stood out to you and how you worked them into stories?

AR: What I've found is that you can't just sit and read *New Scientist* and say that is an idea I am going to use in *x* month's time. It just doesn't work like that. You just have to read it all, almost uncritically, and absorb it and let it churn around in your brain for years or months and then you never know what important stuff is going to be. A year or two down the line I might suddenly think, 'Yeah, that was that thing I read in *New Scientist*', but it might not be the thing you thought at the time was going to be the most interesting. If I flip through a copy of *Scientific American* or *New Scientist* it might be that there was an article on information loss in black holes or something like that. That's a typical science fiction idea, but the one that comes out that I might find myself using might be something about papyrus or something completely off-the-wall.

WS: Do you go back to the original article or do you just rely on memory?

AR: I don't, no. Just for space purposes I don't keep back issues. If I rely on my memory then I rely on the fact that if I remember enough I can google it and then get some information. A case in point was a story I did last year about starling murmurations ['A Murmuration']. I kind of remembered at some point I'd read that someone was doing a scientific study of the vectors of the birds in the murmuration so it got googled. You can quickly get what you want if you can remember enough.

WS: So from that point where do you go? I've noticed that you tend to write to a certain point, stop, go back to the start, rewrite, and then carry on…

AR: It's a pattern I fall into but it is not necessarily a healthy one because I think ideally you just keep going until you get to the end and then you go back and fix what is wrong with it. I always reach the point when I cannot live with what I have written. The building sense of dissatisfaction reaches a threshold and I have got to go back and fix it. I liken it to building a tower: up to a point you can accept that it is rickety and you keep adding layers to it, but there comes a point when the whole thing is going to fall to bits unless you go back and shore up the foundations. You can't progress any further until you've gone back and sorted out the stuff at the bottom. I don't like having to do that because you lose any sense of forward progress but it seems to be a necessary part of the creative process.

That said, it gives you a chance to reflect on stuff that's working and stuff that isn't working and simplify the story if possible. Early on in the crafting I tend to overthink how many plot elements I need so I tend to pour too many ingredients into the broth. Then later stages of the book are usually simplifying

that, taking out some of those sub-plots and maybe combining characters because I suddenly realize I don't need six different people who are fulfilling essentially the same role. I can just blend them into one character, which is easier for the reader.

WS: So when you start with a story, do you start with an idea which sometimes ends up as a full story, sometimes a novella?

AR: I generally know what I am starting and I generally stick to that. If I am writing a novel I'm in novel-writing mode.

WS: So there are different modes?

AR: Yes, very different, and time pressures come into it – a sense that I have got to write this thing now. I can't afford to write something else. What I am writing now is only going to be the novel, very occasionally something becomes longer than I thought it would be.

WS: When that happens, do you tend to trim it back or just run with it?

AR: It depends. *Chasm City* started off as what was going to be a reasonably long short story but I didn't have a contract at that point so had the freedom to write whatever I fancied and had no external pressures to deliver anything. There was nothing to prevent me messing around with that manuscript until it was what it needed to be, whether it was a novella or a novel. Obviously, now I am in a different commercial environment when I do have deadlines and windows of opportunity. If I have submitted a manuscript to an editor I know that they are not going to get back to me for six weeks. Therefore, that gives me six weeks to work on something else which might be enough time to work on a short story or two, then I will really try and get in that frame of mind.

WS: You recently posted to your blog that one of your future books is going to return to a previous universe. Obviously you're not sure which one it is at this stage, but what kind of factors will you be using, other than commercial viability?

AR: The first thing is I have to have a sense of a story in my head. I can't really go into a novel without some confidence that I know roughly what type of story I want to tell. Until that happens then it's difficult. The only way to make that happen is just a process of locking myself away with notes.

WS: That solitary thing again?

AR: Yes, it's a pressure cooker until I come up with an idea that feels strong enough for a book. I don't have that at the moment but I am confident that I can have it. I have been through that process so many times that I know it is only really just a mechanical thing. I am just giving myself a bit of downtime. Take away the pressure to produce writing, then if all I have got is the pressure to sit and think about ideas, then that is what I will do with notes. It could take a day, it could take a week, it could take a month; it can't be hurried but it is better to wait until you have the strong idea than try and rush into something with a half-baked idea.

WS: Everything you're saying and everything you've said on your blog implies you are a very story-driven writer; is that the point is for you?

AR: I never really think about those things, I do sometimes have scenes in my mind that I want or moods or an aesthetic. A lot of my books are driven by a sense of aesthetic. For example, when I started off thinking about *Revelation Space* I wanted to write a space opera but with a very gothic medieval sensibility. That is as much as I can say; it wasn't that I had a clear idea of the story line or thematic elements. I just wanted something that felt gothic because it was something I hadn't seen done.

I'd been to see *The Name of the Rose* when that film came out in 1986 and I was blown away by it so the next thing I did was read the book. I remember reading the book and immersing myself in this really richly detailed medieval world where there were sort of elements of mysticism but also glimmerings of the scientific enlightenment in the priest's character and I was thinking, 'Imagine a science fiction novel that was as intricate, dark and clotted with atmosphere. Wouldn't that be fantastic?' To some extent, I think Gene Wolfe had already written that at that point but I hadn't realized. It was that seed, an aesthetic sense of something that had not yet been written. That drives me a lot more than wanting to write about Fermi Paradox or faster than light travel.

WS: You've mentioned Gene Wolfe, but could you tell me a little about your other influences? You've mentioned Cordwainer Smith before, for example.

AR: My influences are very unexceptional for a science fiction writer. I grew up exposed to television science fiction of the 1960/70s; *Star Trek*, *Dr Who*, *Thunderbirds*, *Space 1999* all that. Then the big science fiction films of the 1970s – *Star Wars*, *Close Encounters* – they were really important. I also love 1950s science fiction. When it was shown on television my dad and I would always sit down and watch those old films like *The Day the Earth Stood Still*. All that is important, and then I started reading written science fiction at probably seven or eight. I started reading Clarke short stories because they were in a magazine I was reading and I really enjoyed them. Then they started publishing Asimov's short fiction and that naturally leads on to reading the novels of Clarke and Asimov. They're quite approachable books – even if you are only ten you sort of just about cope with them. There are things you don't understand but kind of come back later and then you get the gist of it. I started reading *2000 AD*, and then they published a comic strip version of Harry Harrison's Stainless Steel Rat stories, then I read the Stainless Steel books. They're good if you're a young reader. Then I read Bob Shaw who wrote very approachable science fiction. Then James White, who is nowhere near as well known now as he really should be; James White wrote fantastic science fiction, again very accessible.

I got one of those coffee-table books for Christmas, 'the history of science fiction'. I love those books but they don't do them any more, which is a great shame. They used to come out every couple of years in the 1970s. There was one that had a chapter about the American New Wave and what had happed since the New Wave, and mentioned writers like Joe Haldeman, John Varley and Ursula Le Guin. It plants a seed of other writers you want to go and find out

about and you start reading those. A mate of mine liked Philip K. Dick and Alfred Bester. It was a slow opening up of my parameters as a reader but it was still quite a normal science fiction diet, not radical.

I didn't read the British New Wave until much later. I didn't go back and read Ballard until I was already reading *Interzone*. There was really a fantastic line of paperback reissues of Ballard in the 1980s with covers by the guy who did the covers for Talk Talk's albums, James Marsh I think, really good record covers. He did all the Ballard paperbacks as well. He did *Day of Creation*, *Crash*, *Vermillion Sands*, I read those and then I got Ballard and then I started reading M. John Harrison, Christopher Priest, and some of the more experimental literary fiction that invaded science fiction in the 1960s, so that expanded my reading as well. By then I was reading anything I could get my hands on.

WS: Do you still get much fun from reading now? Do you find that now you are a writer you read science fiction differently, critically?

AR: I get loads of time, but I just fritter it away. A lot of my reading time is filled up with reading scientific stuff, like *New Scientist*. I have never been a particularly fast reader but I do try and read as much as I can. Being a science fiction writer is the devil's bargain in a way because you get pulled into this literature because you love it so much but you become engaged with it at such a deep level that you lose the ability to read it for pleasure. The critical filters are up all the time. I can't read a piece of science fiction without dissecting it; no matter how good it is I am just pulling it apart line by line to see how it was done. It's very difficult for me now to just read it as a piece of fiction. I can still do that with adventure stories, historical fiction. But even if I'm on holiday or something like that, if I'm reading a good science fiction piece I'm thinking, 'blast, it's too good', and if I'm reading something that doesn't quite meet my exacting parameters then I'm scornful of it.

WS: We've talked a lot about 'science fiction'. In your blog post about Emily St. John Mandel's *Station Eleven*, you say, 'Like the best science fiction (I am not sure quite what I would call this book) it makes us see the world through fresh eyes'. How do you define 'science fiction'? It's something I have real difficulties with: speculative fiction, science fiction, the entire Atwood thing…

AR: There are problems with that. I don't get involved with that. I think first of all if Emily St. John Mandel didn't choose to call herself a science fiction writer then I think that's her prerogative. I think it is Atwood's prerogative as well. I think Atwood gets too much stick, the poor woman is probably interviewed about twenty times a day for her opinion on everything from the colour blue to the cost of milk and occasionally she said some things about 'science fiction' which was not entirely flattering to the community and she gets pilloried for it. It's understandable, it's not her fault. So I say let bygones be bygones. Margaret Atwood has her own ideas on science fiction, but we all do, we all get annoyed by the trashy stuff sometimes and I am cool with that.

I was never quite sure when you get into alternate history, though. It gets

very woolly because you can have really alternate history where it plays with big cultural ideas, like if the Armada hadn't been defeated and then you live under a rigid Catholic society even in the twentieth century. Then you can have alternate history like what would have happened if Blair had won the election. It's alternate history but it is not really engaging with massively consequential ideas. It's impossible to draw a line.

I used to get quite prickly about people conflating fantasy and science fiction. I'm much less worked up about it now because I think it is very hard to draw the parameters. You get stuff like China Miéville's and it's kind of difficult to say what it is. Does it matter? Probably not, my only slight continuing irritation is that generally speaking science fiction awards are more open to works that are transgressive in terms of the genre boundaries. Quite often you have something like the Arthur C. Clarke Awards where there will be a book on it that is apparently fantasy but it never happens the other way round. You never get science fiction books on the British Fantasy Awards and that really annoys me. It is very much a one-way membrane, but then again I have a bit of a chip on my shoulder because I think a lot of what I write is basically horror and I have never been nominated for a horror award.

WS: Interesting, because you get seen as a hard science fiction writer, not a horror writer…

AR: There is a strong horror base in what I do, and in a lot of other science fiction; a lot of science fiction is essentially horror in a science fiction framework.

WS: Is that true of, say, *Slow Bullets*? Is there existential horror in your recent books, throughout your works?

AR: I don't know. I could talk for hours about the germ of that story. *Slow Bullets* was the intersection of two ideas that were sitting on my hard drive for about five years until one day I worked out that they could fit together. One of them, that almost goes back to *The Name of the Rose*, was that I kept thinking about medieval illustrators, armies of monks in rooms who had to copy out these manuscripts. I got this idea; imagine if you got some horrible reason why you had to have almost a Manhattan Project in which you had to write stuff down because it was going to be lost otherwise. What could be the cause of that? I was trying to come up with a science fiction premise for a need to write things down because that ties in with misgivings about the long-term stability of digital archives. I always think things are better when they are in a printed medium. The other thing I was thinking about was an idea for what I hoped would be a sequence of short stories about a crew of misfits who end up in the future, transported into the future after society has collapsed and although they're not equipped for this job they are the only ones who carry the sort of cultural beacon if you like, the necessary knowledge to reboot society.

WS: A kind of serious *Red Dwarf*?

AR: A serious *Red Dwarf*, yes. I have lots of ideas that float around on my hard drive without really being developed. Occasionally two of them will connect and

I think, 'Okay, now is the time to do it'. I know exactly when it happened with *Slow Bullets*: I was in Cardiff, we'd come down to see *Holiday on Ice* at the skating rink. We were just sitting on the benches waiting for the show to start for half an hour whilst people were still filtering in. Of course I had nothing to do but think of ideas and suddenly thought, 'Hang on, if I combined those two ideas…' I always feel a successful short story or anything really is never just one idea but a juxtaposition of two or more ideas. Often the process is not coming up with an idea, it is coming up with two ideas: that's when things really ignite.

WS: How does something like *Slow Bullets* compare to the Poseidon's Children (PC) Trilogy? A lot of people saw the trilogy, especially at the end, as optimistic whereas it seems *Slow Bullets* is far more about humanity's survival in a hostile environment…

AR: They are different but I think that, as much as to prove something to myself, I just wanted to write something that was at odds with the prevailing optimism of those books. It also germinated over a really long period. It is probably the case that the genesis of *Slow Bullets* might even have been earlier than the PC Trilogy. That's how I work, I just have ideas that sit around festering for years and I can compartmentalize myself quite well and say right today I am going to be happy-clappy, tomorrow I am going to write something bracingly pessimistic. It has nothing to do with my state of mind, it's just different modes that I like to operate in. I wrote a bunch of stuff over the last two years that doesn't have the same aesthetic as the PC Trilogy. It is just different modes that you happily switch into – a change is as good as a rest.

WS: You've always been quite candid about your relationship to science fiction as a genre and its politics. You are also open about your indebtedness to particular writers. Are there any authors that you think are particularly under-appreciated? Not just neglected or forgotten about, but almost politically pushed to one side?

AR: Definitely, there are writers, particular touchstones of mine that I mention whenever I am asked about this. I probably trot out Cordwainer Smith, Damon Knight, A.E. Van Vogt. Van Vogt is an interesting case because he is one of those writers I did encounter at a formative age. Someone gave me a big bag of science fiction paperbacks and one of them was a Van Vogt collection; I am going to say *Destination Universe*. All his paperbacks have interchangeable titles, a lot of it is hoary old pulp science fiction but if you've never encountered those ideas before they blow your mind. I really can't overstate the influence of Van Vogt on my writing. He had this thing where supposedly every five hundred words the whole premise of the story would change. He was like manically inventive to a fault but he kind of dropped out of fashion big-time because he got hooked up with Hubbard and Scientology and all that, which I have no time for whatsoever – I think it is complete gibberish and baloney and probably quite toxic. It is unfortunate that Van Vogt got tarred with that, and then he had Alzheimer's I believe. He didn't have long. He wasn't one of those writers who

writes until he stops; he sort of tailed off. *He* was influential to me.

Then there are other writers closer to my peer group who are better than me. Paul McAuley is a fantastic writer, and I've learnt so much from studying his work. He got spaceship stories into *Interzone*, along with Stephen Baxter. *Interzone* didn't seem to be receptive to that type of science fiction. It was all, to coin a phrase they used in one of their editorials, stories about people staring moodily at cans of baked beans in the near future, all very grim and dystopian and everything you think science fiction under Thatcher would have been, very bleak Greenham Common-type of stories. Suddenly, he was writing stuff set a hundred years in the future, involving space exploration. And it made me think that if he can do it maybe I can. He's a fantastic writer, probably not the household name that the quality of his work merits. He is active and interested and is still very, very energetic.

There are other writers, such as Greg Egan, who are again not in any sense household names but they leave significant ripples in the field. There was a period in the early to mid-1990s where there was no more interesting writer in the field than Egan. Every story he wrote seemed to be opening up possibilities of science fiction in ways we hadn't seen before. I was just slack-jawed with admiration for this guy. He's never had a film, never had a breakout. I think what he was doing was writing, trying to approach some scientific ideas with a level of rigour that no one had applied before. Other writers have done stories about hacking your own consciousness but Egan said let's forget everything that has ever been written, let's just rethink this from the basic parameters up, taking the conceptualizing as far as it can go, ending up with a story like 'Learning to Be Me', which is completely mind-blowing. He then started writing novels and the first three or four were kind of accessible, then he went up a gear and started writing stuff that was really difficult for people who were not heavily invested in science fiction to read, while at the same time not writing stuff that feels like anybody else's science fiction, just really difficult. Throwing things on page one like tensor algebra – it's difficult and it's forbidding. The payback is probably worth investment but even I was struggling.

He wrote a book called *Schild's Ladder*, for example. Ostensibly, it's about this bubble of space-time that begins to expand after a physics experiment goes wrong, at half the speed of light through the galaxy. The way he sets up the human society is very interesting, it is like post-gender: everyone can be mind-uploading and swapping bodies and they travel around in tiny spaceships made of nanotechnology, etc. It's fascinating… Then he starts getting into the esoteric physics of this boundary. I have a degree in physics and I did a Ph.D in astronomy and I'm lost because it's dealing with the fundamental properties of space-time on a level that I can't follow, and I'm not smart enough to say whether it is really legitimate speculation. At that point it just becomes a killer blob taking over the universe, doesn't it? I think he has only gone further in that direction with his subsequent books.

In his recent trilogy (which I haven't read – no fault of Egan's, it's just that I am behind now on everyone), there aren't even any human characters, as it's all told from the point of aliens who live in a universe where the laws of relativity are back-to-front. The whole thing is predicated on interesting intellectual games of physics which if you are into that kind of thing is going to be very fascinating but for a lot of people is just not that gripping. He certainly deserves to be more well-known but at the same time he has probably selected the audience that can cope with it. It's like a really arcane modern jazz or something like that.

WS: You just mentioned Stephen Baxter earlier. What was it like to collaborate with him? I think it was your first time?

AR: More or less. I collaborated with Liz Williams, a colleague and friend of mine. We'd written a relatively long short story together which was sort of okay. The problem we had was that we didn't have a clear sense of the plot before we went into it. We did this thing where I wrote a thousand words then Liz would write a thousand words, edging our way to something that resembled a story. We didn't really have a firm enough sense of where we were going with it, I don't think. It was a good thing to do, we did it kind of as a gift to Eastercon because we were both guests of honour there and we thought it would be nice if we collaborated on something. It became a bit more drawn out than we wanted it to be and then they took a hell of a long time to actually print it. It was well after Eastercon, a year later or something. It was an interesting exercise but we haven't rushed to do another one, although I would still be interested.

WS: You'd be happy to and have learnt from the experience?

AR: Yes, and Liz is a great writer. I'd never collaborated with Steve but I had known him almost since I had moved into sf. He was one of the first people I met when I started meeting other writers. I always got on with him, probably only met him half a dozen times in twenty years but he is just one of those people that you just know on an instinctive level that you are not going to fall out with. We click. The important thing was that I knew he had already collaborated with a number of other writers. If he can collaborate with Clarke and Pratchett – neither of whom would have suffered fools gladly – then I am not going to have a problem collaborating with him. He's an old hand at this, so it seemed highly likely that it would be an enjoyable process.

I knew that Steve and I had shared touchstones in the field. We both had a deep admiration for Clarke, as we'd both grown up reading a lot of the same American sf. Steve's early stuff is really indebted to Larry Niven, as is mine. I thought we had a lot in common but there were interesting differences which will make it even more or less than the sum of the parts but it was not going to be like as if I wrote the book. There are distinct differences in our approaches; you wouldn't collaborate unless there were some interesting differences of approach.

WS: How would you define those differences?

AR: Steve's got, I suppose, Wellsian sensibilities, he's steeped in H.G. Wells

and I'm not – I probably should be but I'm not. He's very good at doing big epic Cecil B. DeMille-type set-pieces, which I don't go near as a rule, but Steve will happily blow up the Earth from lots of different vantage points to witness it. I just shudder at the thought of doing that. I can't get my head round it. My scenes tend to be more intimate, maybe one character looking on a screen, something like that. Steve does the huge cosmic set-pieces so well. It was clear that there would be things he could bring to the story that I couldn't approach and hopefully vice versa as well. Hopefully there were aspects of my writing that are maybe not present in Steve's work. We really enjoyed it.

The way we wrote it was that we talked about it and then we sat down in a hotel coffee bar. We met at about 10 a.m., we were going to meet our editor at noon so we just started chatting, catching up for a bit and then Steve had a sheet of paper and said let's just brainstorm. What do we want in this book, what do we not want? We had some rough sense of what we wanted already at that point. By 11 a.m. Steve just said, 'Why don't we try doing a chapter outline?' I said, 'Okay, go ahead'. So he blocked out these chapters or these sections anyway, we will have this bit in there, this bit in there. You write that one, I'll write that one. I said, 'Yes, sound good to me'. So we had six bits that we estimated would be about 15,000 words each, which for me is a nice manageable chunk; it's a novella. It is a piece of work you can do in a week if everything is going well. It probably won't happen in a week but it's not too daunting. We broke the book down into six self-contained episodes and farmed them out to each other and that is pretty much how it worked. Once you start writing something some of the ideas you thought were great turn out to be not so great and then you come up with other ideas, things that you hadn't thought of that take you off in interesting directions so you have to be flexible but we were. We were very willing to jettison some of the things that didn't work and go with the things that did. It was good. I think both of us probably wouldn't be against doing another collaboration if we had the idea. We haven't at the moment.

WS: It needs the idea?

AR: I am not teasing you or anything. If between us we came up with something that felt like the natural collaboration I think we'd quite happily go with it.

WS: You've done books in the *Dr Who* universe, you've done a Clarke. Would you be interested in going to other people's universes?

AR: No, I'd probably steer away from that. *Dr Who* was a special case. I have that deep affection for it. It is also an infinitely baggy universe in which you can tell almost any story. That was good. The thing about taking the short story by Clarke, it doesn't fit into any other Clarke sequences so Steve and I had a lot of leeway making up things that we wanted to. Which we did, hopefully, in interesting ways. There are a few nods to the other stuff, cheeky nods to *2001* and things like that in there. What we were striving for was a tonal deference, if you like, we wanted it to feel Clarkean but at the same time we wanted it to feel like something that was written in 2015 not 1970. That was a real challenge

because we didn't want to throw out the original story. We found a way round that.
WS: So both the *Who* and the Clarke enabled you to enter 'open' universes?
AR: I suppose if someone approaches you, you consider every opportunity on its own terms. I haven't been showered with invitations to write in other people's universes by any means. There are things I am incredibly affectionate about, I love the Shaper Mechanist stories of Bruce Sterling but Sterling himself has said he does not want to write any more, he does not want anybody else to write any. So I think that's fine. I don't want to read my version, I want to read his version. I wouldn't really gain anything by writing in that universe.
WS: Would it feel too much like fan fiction if you ended up doing that rather than paying homage and exploring ideas?
AR: There might be an element of that, yes. Some people say my stuff is just fan fiction anyway. I'm tired of that one. I'm quite happy to hold my hand up: Sterling was highly influential on my development as a writer in the 1980s. He was a writer I was desperately trying to look at every aspect of his prose, how he put his sentences together, how he describes things, how does he do dialogue, things like that.
WS: You can't help but take on some of that style, then?
AR: Probably all writers go through that when you latch on to a figure that you feel really stimulated by but then you get that anxiety of influence where almost you have to back away because you realize you are too much of a shadow of that writer and you need to find a way to develop your own voice. Then you spend the next fifteen years trying not to write like writer *x*. Then you come back and find some happy middle ground where you are comfortable with your influences.

The author would like to thank Alastair Reynolds for lending his time on 23rd July 2015. Thanks also to Janet Rothwell for transcribing the initial interview.

The Fourfold Library (2): Una McCormack on Sylvia Engdahl, *Enchantress from the Stars* and *The Far Side of Evil*

Una McCormack has written several novels and audio-dramas linked to such series as Blake's 7*,* Doctor Who *and* Star Trek*. In 2015, she published* The Baba Yaga*, the third novel in Eric Brown's 'Weird Space' sequence, and in January, her story 'World without End' was featured in NewCon's anthology of women's science fiction,* Digital Dreams*. Here, she dips into the trans-temporal phenomenon known as the Fourfold Library to unearth a childhood inspiration…*

Between 1970 and 1981, the American novelist Sylvia Engdahl wrote six young adult science fiction novels, the best known of which, *Enchantress from the Stars*, was a runner-up for the Newbery Medal in 1970. Following this burst of creativity, she turned to non-fiction and teaching for many years, while caring for her elderly mother. During the late 1990s, a resurgence of interest in her works via the internet (to which Engdahl turned with great aplomb) led to reprints of her earlier novels. Now in her eighties, Engdahl has returned to writing sf, with a series of space operas entitled *Stewards of the Flame* (2007-).

Engdahl's earlier YA novels fall, in the main, into two distinct series: a trilogy, beginning with *Heritage of the Star*, which concerns the initiation and education of a young man into a scientific caste, and the two 'Service' books, *Enchantress of the Stars* and *The Far Side of Evil*, which feature Elana, a member of an advanced space-faring civilization (not unlike *Star Trek*'s Federation) who joins the Anthropological Service (an entirely unmilitarized Starfleet) in order to observe 'youngling' worlds. (Engdahl's other novel from this period, *Journey Between Worlds* [1970], which concerns the settlement of Mars, was somewhat self-consciously written to attract young women to the idea of space travel and exploration; the protagonist's focus on domesticity and homemaking sits rather uneasily with the adventurous heroine of her Service books.)

My engagement with Engdahl's work has spanned almost my entire reading life. I came upon *The Far Side of Evil* (1971), in a distinctive hardback edition, in my local library at around the age of 9 or 10. (The author, in later correspondence, expressed dismay that I read a book which deals frankly with subjects such as totalitarianism and torture at so young an age. But I was ready for it.) I borrowed and read this book again and again. Two 'other titles by this author', listed on the dust jacket with short and tantalizing summaries, were studied and imagined fiercely, but were not to be found in the libraries of St Helens. On reaching secondary school, the library there delivered: an equally distinctive hardback edition of *Enchantress from the Stars*, which I subjected to multiple rereads. I was never able to find any more of Engdahl's books – and, indeed, did not own any or even know of the existence of three of them until I found the author's website in the late 1990s.

For those who have read Engdahl (mainly girls), *Enchantress from the Stars*

is the one that they remember best. The novel has more narrative complexity than much middlebrow literary fiction, not least in its shift between first- and third-person narrators. Elana, eager to become an active agent of the Service, recounts the consequences of her ill-judged decision to stow away on an anthropological mission to a pre-industrial world that is under threat of colonization from a space-faring, youngling civilization. Without revealing themselves to either party, Elana and her colleagues pose as figures from folklore and legend in order to salvage the situation. These encounters are narrated in third-person by two young men representing the two different civilizations. Engdahl shifts effortlessly between confessional, space opera and folktale, in a story of great complexity and power. I now teach creative writing and, reading through 'how to write' manuals, I often see new writers instructed not to combine first- and third-person in order not to confuse their readership. Engdahl, thankfully, had not read such advice, and employed the narrative devices that best suited her artistic and intellectual purpose. I certainly had no difficulty following, even at eleven years old.

The Far Side of Evil is a darker, more mature work. Elana, now a fully qualified agent, embarks upon a mission to a youngling world where two powers – the Libertarians and the Neo-Statists – are poised on the brink of nuclear war (not unlike our own world in the 1950s). Engdahl's chief purpose in the book is to work through her ideas of the 'Critical Stage' – that civilizations enter a period in which they must choose between self-annihilation or else turn their passions and creativity towards the exploration of space. Elana, placed in a nation recently conquered by the Neo-Statists, is there to collect data about the Critical Stage. Her colleague Randil falls in love with a local woman, and can no longer stand by and watch her world annihilated. The novel recounts the catastrophic consequences of his intervention and Elana's attempts to stop nuclear war without disclosing her true identity.

The novel is serious, earnest and thoroughly works through the questions it poses. It asked my ten-year-old self to consider some of the following: when is intervention morally justified or is it always ambiguous and fraught; do societies pass through stages and what might these be; the nature and dynamics of power; how the lack of belief in a meaningful future can blight a generation; how pills might functions as talismans… In a harrowing sequence, Elana, arrested by the secret police, is imprisoned, interrogated and tortured. Engdahl lays bare the logic of the tyrant: Elana's torturer is a man who 'has built his whole life around the philosophy that force always wins, and when in the end I disprove it, he will be cast adrift'.

The debt to the geopolitics of the 1950s has dated the novel somewhat, although reading in the early 1980s, during the period of Reagan's 'Star Wars', it seemed contemporary enough to me (I certainly did not think that I was going to live to see the Millennium). Engdahl, in her afterword to a 2003 revised edition, discusses the evolution of her ideas of the Critical Stage, acknowledging that

she had not foreseen ‘that a planetary civilization, having once developed a capability for space travel, might cut back its thrust into space as ours has done’. She also expands the idea to include the threat of environmental collapse: a species may use up the finite resources that might otherwise have been used to explore and colonize space. The idea underpinning the Service novels, that civilizations might progress in stages seems to me, at the far side of a doctorate in sociology, questionable at least, but the book laid the intellectual groundwork for me to be able to frame and pose such questions.

Engdahl’s other YA series, and her later novels, all focus on male protagonists and, in *Journey Between Worlds*, the female lead is awkwardly promised a brave new world in which she can make a comfortable home. Even Elana makes an early marriage to her childhood sweetheart. There is little exploration of gender politics, or the variety and diversity of possible sexualities. But in the two Service novels, I found something that was a rarity in the young adult and science fiction novels that I consumed as an adolescent: a young woman who made decisions about her own future, who was interested in ideas, who lived with consequences of her choices, who was an equal participant in the world. Engdahl’s gravity of purpose in these books reaffirmed my sense as an adolescent that I deserved to be spoken to on equal terms; that I should, in turn, speak on equal terms to the youthful readership of my own space operas, young adult novels and other flights of fancy.

We Are All Astronauts, University of Heidelberg, October 22-25, 2015

Conference report by Umberto Rossi

Astronauts are both part of science fiction and, since Yuri Gagarin's flight on April 12, 1961, part of history, as solid and permanent as John F. Kennedy and Nikita Khrushchev for as long as historical memory exists. But astronauts are, as J.G. Ballard suggested in 'Zodiac 2000' (1978), one of 'the houses of our psychological sky', an important feature of our collective imagination. This inspired Henry Keazor, professor of contemporary art history at the University of Heidelberg, to organize a multidisciplinary conference on the figure of the astronaut/cosmonaut, taking its title from Buckminster Fuller's 1968 book, *Operating Manual for Spaceship Earth*.

The conference started with a lecture which should have been delivered by Vivian Sobchack – who unfortunately could not attend the event – but was more than satisfactorily replaced by Harvard historian Matthew H. Hersch, whose 'Redemptive Space: Duty, Death, and the Astronaut-Soldier, 1949–1969' effectively outlined the transformation of U.S. astronauts in popular imagination, from space-faring soldiers to individuals looking for redemption and liberation from the fears and tensions of the Cold War. That Sobchack, a film and cultural critic, could be replaced by a historian indicates how far the astronaut is a liminal figure that crosses several fields of knowledge and scholarly enquiry, from contemporary history to literature to anthropology to the visual arts. The added value of the conference was in the intersection of these disciplines which animated the debates at the end of the presentations (we were spared the joys and sorrows of parallel sessions, and were grateful to Professor Keazor and the organizing team for this), and I was surprised by the many connections which occurred between so many episodes of the space programs and several ambits of culture and the arts.

As a science fiction and war literature scholar, I found something interesting in all the presentations, but I would like to focus on those which had a strong connection to sf in particular. Hersch's outstanding lecture, even though dealing with real astronauts and how the U.S. society envisioned them, provided a vital historical background to my presentation on the astronaut as psychopath in the sf of James Gunn, John Wyndham, Robert Silverberg and Barry N. Malzberg. It was particularly interesting for anyone who wants to deal with sf narratives featuring astronauts in the 1950s and 1960s. At a moment when the conquest of space seemed on the verge of coming true, sf writers were attentive observers and commentators of the historical spaceflights, both those of the NASA and the FSA (now Roscosmos), and their fictions provide an interesting counterpoint to the official discourse of the national space programs (with both positive and negative approaches). Hersch placed the US space program and its astronauts

in the context of the Cold War and, above all, the aftermath of World War II, thus foiling the apparently small gestures and acts by which astronauts strove to send different messages to the public, speaking from 'a realm without borders and armies'. Moreover, his survey of sf movies of the 1950s and 1960s plus his hints at the military past of such a key figure in sf as Rod Serling were tremendously interesting for science fiction scholars.

Monica Rüthers' presentation on 'The Character of the Cosmonaut in Soviet Popular Culture' complemented Hersch's lecture. It reconstructed how the figure of Gagarin, the new Soviet hero, was presented to the people of the USSR, leaving the machinery of spaceflight out of the picture (thus in total opposition to what NASA was doing in the USA and the rest of the western bloc in the same year), and focusing on the individual, always stressing his proletarian origin and his being – notwithstanding his achievements – a representative of the Soviet society, a 'son of the people' (whose life had uncanny similarities with Neil Armstrong's).

Marc Blancher's presentation, 'Let's Discover Space!', dealt with how the moon mission was anticipated in one of the most famous French-language comics, Hergé's Tintin, in the albums *Objectif lune* [Destination Moon] (1953) and *On a marché sur la lune* Explorers on the Moon] (1954). Blancher underscored how the Belgian artist researched these two episodes, and hinted at the Cold War context through the competing countries of 'Syldavie' and 'Bordurie': avatars of the USA and the USSR. Hergé's comedic approach to the exploration of space was also discussed, providing an ironic point of view on the space race to come.

Jörg Hartmann's 'Off Structure!' focused on the metaphoric and symbolic subtexts of Alfonso Cuarón's *Gravity* (2013) by applying the paradigm proposed by Hans Blumenberg in his *Shipwreck with Spectator* (1979). The orbital shipwreck of Ryan Stone thus becomes a 'metaphor of existence' and the plight of the astronaut striving to get back to Earth is something everyone can identify with. Once again, the idea that we are all astronauts may be quite productive in hermeneutic terms, but the ensuing discussion posed other interesting questions, such as to what extent a film like *Gravity* can be said to belong to science fiction, as orbital space has been inhabited for decades, and is no more a place outside the human environment. Astronaut stories are also liminal, placed on the mobile threshold (*limen*, in Latin) between our world and outer space.

A potentially interesting presentation for sf scholars might have been Michael Iwoleit's 'The Dead Astronaut', dealing mostly with narratives by Ballard and Malzberg as iconoclastic attacks on the triumphalist rhetoric of NASA. Unfortunately, Iwoleit could not attend the conference and we only had the opportunity to listen to his presentation read by Professor Keazor, so we were unable to discuss the issues with the author, one of the most famous German practitioners of science fiction. I particularly regret this as Iwoleit's

paper echoed my 2009 article on Ballard's dead astronauts stories (*Science Fiction Studies* 107). Moreover, Malzberg's works are not often discussed at academic conferences – he is an undeservedly neglected author.

Martin Butler explored a quite different area of popular culture: surf rock music and how it used the figure of the astronaut as 'the embodiment of a distinctly pre-digital era of technological advancement and exploration'. It was an interesting specimen of the impact that the space race had on the collective imagination, with traces left in the lyrics, record covers and sound itself of bands of the early 1960s such as The Spotnicks (from Sweden) and The Astronauts (from the USA).

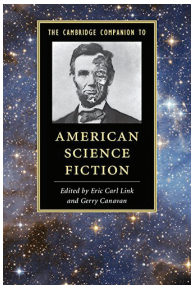
Nils Daniel Peiler discussed 'The Image of the Astronaut in Stanley Kubrick's *2001: A Space Odyssey*', focusing on the borders between the human and the machine. It was a most welcome rethinking of a classic of science fiction cinema, possibly the artistic realm which was most often explored during the conference, in the presentations and during the following Q&A. Unsurprisingly Marc Bonner also tackled Kubrick's masterpiece in his talk on the astronaut as the post-humanistic reverse of itself, but he connected it with more recent movies, such as Duncan Jones' *Moon* (2009) and Christopher Nolan's *Interstellar* (2014). Once again the concept of liminality came up in the discussion, with the astronaut in these films finding themselves in extreme situations that ask viewers to reconsider the traditional image of the astronaut created during the space race: David Bowman, Sam Bell and Joe Cooper, the protagonists of the three films, are all anti-heroes who 'unintendedly climb the Penrose stairs to merge with the infinite' (and this metaphor is particularly fitting when thinking of the tesseract in *Interstellar*).

Last but not least, Thomas Hensel with his presentation on 'The Outer Space as a Space of Experimentation in the Computer Game' tackled an issue belonging to a promising branch of sf-related media studies. Hensel explained how the abstraction of outer space covered up the inadequacy of software in the earliest videogames, then highlighted the ontological and aesthetic analogies between avatar and astronaut, and showed how the avatar, like the astronaut, mediates between inner and outer space, so that games pivoted on astronauts and spaceflight may be said to be self-reflexive ones, thematizing the virtual reality itself on which the game is based.

'We Are All Astronauts' was a highly rewarding experience, whose overarching theme was the concept of the astronaut as a threshold figure, but also as a metaphor of loneliness and alienation since, according to the American sf author A.A. Attanasio, 'Being human is the most terrible loneliness in the universe'. Such a multiplicity of connotations of the astronaut/cosmonaut turns him or her into a key figure of the collective imagination, and this was confirmed by a visit to the Technik Museum Speyer, where we attended the inauguration of an exhibition on astronauts and space exploration and met most of the German astronauts, the event being broadcast by a national TV network. This, and the

recent media exposure of Canadian astronaut Chris Hadfield, with his orbital cover of David Bowie's 'Space Oddity', plus the current popularity of astronaut Samantha Cristoforetti in Italy, tells us that astronauts still have an impact on our imagination. I'd like to add that, in the same hangar where the event took place, we could see (and touch) one of the two surviving Russian Buran space shuttles, an impressive relic of the space age, and a silently eloquent objective correlative of the discussions during the conference. For those who were unable to attend, the proceedings are to be published as a collection of essays.

Book Reviews



Eric Carl Link and Gerry Canavan, eds. *The Cambridge Companion to American Science Fiction* (Cambridge University Press, 2015, 259pp, £18.99)

Reviewed by Lucas Boulding (University of Kent)

The *Cambridge Companion* series has become a staple reference for recent critical perspectives on a huge range of topics within the humanities and social sciences. Link's and Canavan's volume lives up to the high standard established by the series. Many of its contributors are at the forefront of the field, and have condensed monograph-length studies and years of academic research into succinct and readable chapters – though individual authors have weighed the balance of reference to a wide range of important works against the coherence of sustained argument differently, and to different ends. Without wishing to skip over these excellent contributions, it does seem to me that the most interesting feature of this collection is the choice of its subject at a time when increasing effort is being made by the academic sf community to widen the scope beyond the bounds of the Pacific and Atlantic. It is not the fact of its existence – for American sf is obviously a topic of importance – but the choice of this moment for its publication that seems to me to be at issue.

Link and Canavan argue that sf, particularly Anglophone sf but also sf in other languages, is inextricably bound up with the American experience, and that the U.S. has had an overridingly formative force in its production and reception. They suggest that the format of *The Cambridge Companion to Science Fiction,* edited by Edward James and Farah Mendlesohn, tacitly acknowledges this by including chapters that focus heavily on the most U.S.-centred periods in sf's history, namely the 1920s through to approximately the middle of the century. After this point – in both *Companion*s – the continuing growth and interaction of sf writers, artists and filmmakers across borders and continents begins to dilute the uniqueness of American sf; and it looks like the American Century is over for American sf almost as soon as it begins.

The case presented by Canavan and Link for focusing on American sf – by which they mean primarily U.S. fiction, excluding Canada, Mexico, and the twenty other states of the North American continent – is suitably cautious, stressing amongst other points sf's tendency to denigrate the parochialism of nationalism and the nation state, the importance of the figure of the émigré (both of authors and characters), and the constantly international make-up of sf fandom. Carl Freedman, in his review for *Science Fiction Studies*, finds their argument somewhat hesitant and insists that a stronger case could be made.

Certainly positioning the collection as an intervention in science fiction studies, advocating for Gary Westfahl's position that 'mainline contemporary science fiction across the globe […] bears a specifically American stamp', would seem to require more in the way of active championing than this volume presents. It may be that the editors felt that such an intervention is best made by example rather than by explicit argument, which would certainly be in keeping with the editorial ethos of the series, favouring balanced views and survey over broadside. This creates something of the impression that the collection is about sf in general, but that all the examples just happen to be from the US. All this is to say that there is a tension that runs through this anthology between the idea of the U.S. as the fount of a unique sf tradition, valuable in its own right, that has come to influence the world stage, and the idea that world sf (and anglophone sf in particular) is in essence merely an extension of U.S. sf and not in fact a separate entity made up of a number of different traditions – hence erasing the importance of the distinction between the two in the first place.

Of the three divisions (Histories and Contexts, Media and Form, Themes and Perspectives), the section that most obviously suffers from the Washingtonian isolationist premise of the collection is Histories and Contexts, though it also includes some of the best chapters in the collection. Several chapters reference the importance of disregarding George Washington's advised isolationism in the history of fostering sf, noting that the American Century is said to begin with the U.S. entry into the Second World War. Each of the historically-angled contributions concludes by indicating that American dominance in sf is over, whether because international figures began to turn away from American models in the 1960s (Westfahl), exhaustion of the sf field and lack of new ideas (Westfahl, Darren Harris-Fain), or the rise of writers concerned with postcolonial issues, coupled with the dissolution of U.S. power into a global capitalism that erases all differences (David Higgins).

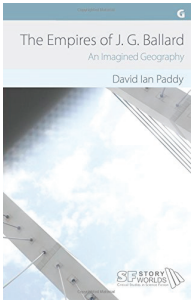
Westfahl does an excellent job on the pulp era – as can be confirmed by the interested reader's consultation of the parallel chapter in the James and Mendlesohn *Companion*, which covers the same time frame and focuses, quite naturally, on the U.S.. Beyond this tightly focused chapter, there are a number of instances where the contributors are clearly gesturing to international prototypes, examples and imitators, but found themselves necessarily curtailed by the premise. It is, for instance, challenging to write about the New Wave with only glancing reference to Michael Moorcock, M. John Harrison or J.G. Ballard. This difficulty is nothing by comparison with writing on Afrofuturism, Feminism, and Queer sf without being able to fully place the debates in an international context. As one example among many, Alex Lothian is forced to name *Torchwood*, the spin-off of British icon *Dr Who*, as bringing 'one of the first out queer protagonists to American science fiction television'. Lisa Yaszek's chapter on Afrofuturism similarly treads the bounds, consistently gesturing to African sf (and indeed that of the Caribbean) for comparison. Yaszek does the

best job in evoking these comparisons with just enough detail to make them forceful, without also jeopardizing her focus.

The American premise is best sustained in the Media and Form section, which, like Westfahl's early chapter, can be identified closely with specific geographic sites of production and a closely allied group of producers – no better example of this, in the world perhaps, than Hollywood. Though Sherryl Vint's chapter on Hollywood sf is hedged about with caveats concerning the necessary constrictions of looking solely at Hollywood, she provides a compelling survey of the material and ideological circumstances out of which the sf blockbuster grows. Likewise, Rob Latham's chapter examining the superhero in the light of the rise and fall of the U.S. as a superpower and John Rieder's chapter examining ideological changes in the U.S. conception of the frontier feel like the most naturally American contributions, and are consequently those which are most persuasive.

In some measure reversing the argument I've sketched above, which questions the unifying principle of the collection, this *Companion* serves to show the diversity of American sf, in part by rediscovering the variety that was already there. Far from the pulp and Hollywood uniformity which (cynical European) readers might anticipate, Yaszek and Lothian, as well as Mark Bould (whose references to early Native American utopian texts have piqued my curiosity) bring to view the early roots of American sf in non-European sources, and highlight the continuously diverse forms and traditions that have been excluded from proper recognition within American sf. The text that the contributors seemed to be mentioned most frequently was Octavia Butler's *Xenogenesis* trilogy (1987-9), though this may have been reinforced by the fact that each time it was cited, each respective author noted its subsequent reissue as *Lilith's Brood.* Similarly, Patrick Jagoda and Karen Hellekson both bring to bear nascent theoretical disciplines to look at digital games and fandom respectively. Narrowing the focus to purely American examples of these topics has the effect of allowing the prospective reader, for whom these may be unfamiliar artforms, to be baptized without the risk also of drowning in vast numbers of possible examples. It is in the mechanics of fandom, and in the support structure of sf publication and critical reception that sf from the 1960s onwards can be most successfully characterized as American, rather than the sense of cultural dominance in sf exhibited during the pulp era.

By way of summation, it is clear that this *Cambridge Companion* will be as useful and productive as the series' reputation suggests. Though I remain uncertain about the thesis that U.S. sf dominates world sf, and consequently the arguments put forward for drawing the collection together in the first place, I have been persuaded by the scholarship in these contributions that it is a worthwhile effort. It succeeds at showing how the sf of the United States continues that most American promise: to bring many out of one.



David Ian Paddy, *The Empires of J. G. Ballard*: *An Imagined Geography* (Gylphi, 2015, 366pp, £18.99)

Reviewed by Jacob Huntley (University of East Anglia)

When J.G. Ballard took to the stage of the ICA in the late 1990s to discuss the then work-in-progress film adaptation of *The Atrocity Exhibition*, he appeared in white suit and hat, the quintessential 'colonial' gent, casually discussing conceptual deaths and crash footage. The disjunction between the appearance – not forgetting the voice – and the subject matter was striking. For some in the audience, it was even disconcerting. Witnessing a figure of such apparent Englishness discussing the arousal potential of automobile contours or their possible congress with wounded body parts elicited murmurs from some of those present, no doubt in attendance because they quite liked what Spielberg had done with that nice memoir about young Jim. For anyone familiar with the adjective 'Ballardian' such a disquieting clash of disparate signifiers is instantly identifiable and recognizable; over the course of his literary output Ballard made paradox, oxymoron and mind-bending similes something of a stock in trade, following in the Surrealist tradition of assembling *disjecta membra*.

David Ian Paddy is evidently familiar – indeed, eminently at home – with this ambivalent combination of an ostensibly oh-so-English writer constantly questioning, testing and harrying notions of Englishness and indeed, more broadly, interrogating and critiquing the vexed nature of identity subject to Procrustean distortions along a spectrum ranging from individual to local to global (and that's not to mention inner-space or cosmic excursions). If Ballard was the perpetual indigenous exile, able to get lost at home, to discover the alien in the everyday, and to repopulate empty terrain with psychical explorers, then Paddy proves to be the ideal cartographer to unpick the clotted constellations and twisted territories. Paddy maps out a route through Ballard's oeuvre from his first published work, 'The Violent Noon' (1951), to the bourgeois insurgents and over-the-counter revolutionaries of *Millennium People* (2003) and *Kingdom Come* (2006). In tracing a path chapter by chapter through the natural disaster novels of the early 1960s; the inner-space experiments in the latter part of the decade; the dystopian urban concrete novels of the 1970s; Ballard's increasing interest in exploring American landscapes and post-NASA milieu; his 'international turn' during the 1980s and early 1990s; his switch to a species of crime fiction towards the end of the millennium; and his satirical reappropriations of English culture at the start of the twenty-first century, Paddy produces a nuanced and informative account. We not only see how Ballard's fictions reveal often contradictory impulses as they negotiate fraught questions around imperialist ideological constructions, but how Ballard's works themselves metamorphose to accommodate new conceptualizations of location and identity.

The writer who, as Paddy gently puts it, raises issues around 'the critical or non-critical appropriation of the language of colonial romances' is sufficiently attuned to transformations in cultural thinking and social mores to allow his body of work to be read as an ever-evolving fictional attempt to speculate upon the implications of the post-war transformation of the older model of empire into the new imperialisms of neoliberal economics, multi-national corporations, media-consumer capitalism and political globalization.

Importantly, this evolving project can be identified across Ballard's writings due to his tendency to test out ideas in short story form initially and then elaborate upon them in his novels. Paddy charts Ballard's development as a writer by noting texts such as 'The Overloaded Man' (1961), which sets 'a template for other works in which modern environments create a psychological detachment in the character', or 'The Insane Ones' (1962), which Paddy cites as a key text for understanding Ballard's later 1960s fictions that deal with forms of psychic imperialism. Alongside templates for general trends, there are very specific instances of rewriting, as in the revision of 'The Illuminated Man' (1964) as *The Crystal World* two years later.

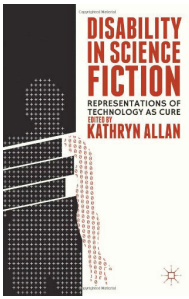
For anyone with more than a passing interest in Ballard, Paddy's book should be considered required reading in its careful chronicling and assessment of Ballard's fictional output, but it also stands as an extremely useful review of how twentieth-century literature in England (in both mainstream and genre works) responded to the country's post-imperial and post-colonial relationships with the shifting sands of global reconfigurations of power. In part this is due to Ballard's recycling of literary precursors as models for his texts (Joseph Conrad, Graham Greene and *The Tempest* being on particularly heavy rotation) so that Paddy is able to state that *The Crystal World* not only undermines a sense of realism through the improbably fantastic premise but also by rendering the realistic scenes as reiterated citations of other literary works.

In navigating the textual unconscious or intertexts, such as the 'remnants of colonial adventure tales in the vein of G.A. Henty' that haunt *The Drowned World* (1962), Paddy also locates Ballard's texts alongside other, contemporaneous literary fictions, including those by Anthony Burgess and V.S. Naipaul. What becomes apparent through such comparisons, however, is how Ballard's commitment to modernity generates a unique tension between pessimism and enthusiasm for what the reshaping of the world might look like, how it will be constructed, and who will be calling the shots. As the country limped, victorious, from the seismic upheavals (both topographical and metaphysical) of World War II and sloughed off an imperialist, colonialist past in the face of transnational transformations like the U.N., the subtler shifts in power – via mediation and consumer capitalism – are what Ballard deems as the 'invisible persuaders' replacing traditional political structures.

For Ballard, consumer capitalism indicated not just a new way that things were being sold or made available, but also a dramatic new shaping of social

organization, and ultimately a mode of social control that transformed human identity and social relationships. In excavating this most politicized territory of Ballard's thought, Paddy maps the intertextual relationship between Ballard, Guy Debord, Fredric Jameson and Slavoj Žižek. For Paddy, 'One of Žižek's primary contributions to contemporary critical theory has been a radical new consideration of ideology'; in his consideration of Ballard's crime novels (*Running Wild* [1988]; *Cocaine Nights* [1996]; *Super-Cannes* [2000]), Paddy emphasizes the close propinquity between the fiction and the theory (much like Ballard's previous critical-creative dialogue with Jean Baudrillard). This most sociological turn in Ballard's work does allow for a tone of caution to be addressed, however.

It should be noted that an easy criticism of Ballard's *Cocaine Nights* and *Super-Cannes* (and possibly a majority of Ballard's novels) could arise in response to the way they seem to make grand if not universal claims about the contemporary world based on a small community that actually constitutes only a minority of middle-class, presumably white, professionals. Yet the point, as Paddy notes, is precisely that there *is* a myopia. Ballard is really one step ahead. In creating characters and situations in which that small, white elite assumes its predominance despite being in an ostensibly post-colonial environment, Ballard's 'interest in colonial conflicts and international politics' remains a constant, if sometimes covert, thread as Paddy ably demonstrates over the course of this study.



Kathryn Allan, ed. *Disability in Science Fiction: Representations of Technology as Cure* (Palgrave Macmillan, 2013, 228pp, £58.00)

Reviewed by Kayte Stokoe (University of Warwick)

This collection of essays undertakes the valuable task of placing science fiction texts – in this case, short stories, novels, film and television – in dialogue with disability studies (DS). In defining her critical perspective, Kathryn Allan writes that 'DS strives to articulate disability as a social ideology of a particular form of human embodiment. By contesting the medical frame in which disability has historical [*sic*] been placed, DS seeks to remove the socially constructed aura of deficiency and deviancy from the disabled body'. The volume often moves beyond disability studies, though, into critical disability studies (CDS), which, as Jenny Slater argues in *Youth and Disability* (2015), broadens disability studies to create 'a sociology of impairment', accounting both for the DS 'challenge [to] a disabling society' and for the lived experience of disability.

Although the lenses of gender, race, sexuality and, occasionally, disability have been used to view science fiction, this volume promotes a disability-centred, intersectional approach, facilitating a fuller understanding of sf as a

genre which, in Samuel R. Delany's words, provides 'tool[s] to help you think about the present'. As Allan demonstrates, a CDS approach can illuminate sf texts on at least two levels. First, in rejecting a pathologizing medical model, the depiction of disabled characters can shed light on diverse possibilities for embodiment without assuming that they will, or should, benefit from a technological trajectory from 'deficient' to 'normal'. This enables a critique of fictional and societal mobilizations of this trajectory and a fuller recognition of the way in which regulatory norms operate. Notably, as demonstrated by Allan and by Joanne Woiak and Hioni Karamanos' chapter on Delany, sf's capacity to 'help you think critically about future possibilities', without determining those thoughts, renders it an especially productive genre to discuss from a DS perspective. Second, as subtly illustrated by Brent Walter Cline in his chapter, a CDS approach allows us to recognize how theories of the posthuman mobilize concepts of technological advance and the superiority of the mind to demean the body and erase its lived realities. Exploring this amplified form of Cartesian dualism, one appreciates the level of double-think to which we all, and minorities especially, are subjected: we must constantly work to impossible standards of bodily perfection while simultaneously hearing that "the little grey cells of the brain" transcend the corporeal exterior. Thinking intersectionally, it is clear that social norms, such as ableism, classism, heteronormativity, racism, sexism and transphobia, overlap with forms of embodiment, so that it is necessary to value all possibilities for embodiment as opposed to seeking to limit or transcend them.

This intersectional focus further illustrates the power of combining a CDS approach with sf narratives. As Woiak and Karamanos argue, Delany's nuanced works present an ideal starting-point for an intersectional analysis rooted in a CDS perspective: while refusing didactic approaches which 'tell you *how* or *what* to think', Delany guides his readers into spaces of alternative embodiment, 'inviting [them] to participate in the process of generating new cultural scripts about the lived experience of difference'. Woiak and Karamanos offer careful readings of Delany's works, particularly *The Einstein Intersection* (1967), subtly analysing the characters Kid Death and Lo Lobey, and demonstrating how Delany's intertextual mythos mobilizes the trope of the hero's journey to destabilize oppositions of self and other, normality and abnormality. Moreover, this chapter provides readers with a working template, indicating the tools needed to carry out CDS readings of science fiction: the application of difficult questions, an awareness of intersectional issues, the desire or capacity to deconstruct normal/abnormal or abled/disabled binaries, and the strategies of close textual analysis.

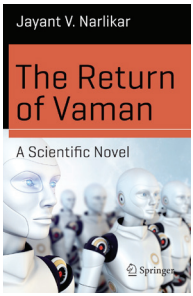
Gerry Canavan's chapter is equally moving, boldly obliging readers – and, I would suggest, disabled readers in particular – to recognize the extent to which we internalize ableist assumptions. In interrogating sf explorations of Huntington's disease, including Robert J. Sawyer's *Frameshift* (2005) and Kurt

Vonnegut's *Galápagos* (1985), Canavan challenges assumptions about genetic disorders, and mobilizes Lee Edelman's concept of reproductive futurism, stressing the implications that 'the centrality of the Child in heteronormativity' can have for the study of disability, as well as for disabled embodiment. For Canavan, the pseudo-moralistic discourses which ensure that disabled people 'lose touch with this circuit of reproductive futurity – not through personal choice, but with the totalizing force of a moral prohibition' contribute to the erasure of personhood experienced by those with genetic disorders. Canavan's hard-hitting analysis then encourages readers to question or refute the pessimism which positions the futures of those with genetic disorders as inferior or non-viable futures, while equally recognizing the specific difficulties experienced by those with progressive genetic disorders. To that end, Alison Kafer's nuanced analysis in *Feminist, Queer Crip* (2013) of the condemnation visited on parents perceived as 'failing to protect their children from both disability and queerness' introduces the question of selecting *for* disability, and would further elucidate Canavan's analysis of the Oankali practices in Octavia Butler's *Xenogenesis* trilogy (1987-9). However, although Canavan's astute critique enables us to consider internalized ableism and its relationship to other structures, it arguably shames disabled people who have decided not to reproduce: the choice to remain child-free, which may tie into an individual's queer or feminist politics, is reduced, in Canavan's terms, to a 'eugenicist' and self-hating impulse.

An intersectional lens also elucidates António Fernando Cascais' chapter. Cascais pays careful attention to how the use of myth and mythic tropes in sf encourages readers to map the actual and potential uses of non-normative embodiment by drawing upon Robert McRuer's crip theory. Unfortunately, Cascais' approach is somewhat undermined by the use of inappropriate language with reference to trans-embodiment in Robert Heinlein's 'All You Zombies' (1959); not only is the term 'sex change' dated but, in pairing it with the concept of time travel, Cascais makes it appear outlandish and sensational. This sensationalism is particularly out of place when one considers McRuer's subtle analysis of 'transgender dignity' in *The Transformations* (2006) and his acknowledgement of the intersections between trans-embodiment and disability. This point leads me to two observations about intersectionality in the volume as a whole. First, greater attention could have been paid to (trans-)gendered embodiment and its relationship to disability. While I understand the value of concentrating primarily on disability, the gendering of disability means that gender often colours our perception and experience of disability. Second, this volume succeeds in its aim of appealing both to academic and non-academic audiences. Chapters such as Donna Binns' analysis of *The Bionic Woman* offer exceptional close readings of sf tropes and of disabled women's embodiment, doing so in an accessible, lucid manner which facilitates a wider understanding of CDS and critical theory.

Allan has done an excellent job of editing this volume, rendering it cohesive

with cross-references and commonalities between chapters and across chapter sections. Readers move smoothly through generic boundaries and conceptual frameworks, perceiving the way in which figuration – whether based on object figures such as prostheses or figures based in character – can facilitate a wider understanding of disabled embodiment, both within and outside sf paradigms. Moreover, the figure of the 'freak', mobilized in Binns' chapter and in others on *Star Wars* and John Varley, creates a productive space for theorizing non-normative embodiment, yet equally encourages readers to question whether figuration of disability reproduces or unsettles reductive, ableist rhetoric which necessarily positions the disabled person as outsider. Finally, while a further volume may want to tackle additional texts and perspectives, such as the work of Kafer, Slater, Eli Clare and Omise'eke Natasha Tinsley, and novels such as Michael Moorcock's *Elric of Melinboné* (1972), *Disability in Science Fiction* is a groundbreaking text, offering an exciting and rigorous introduction to the mobilization of CDS alongside science fiction.



Jayant V. Narlikar *The Return of Vaman: A Scientific Novel* (Springer, 2015, 142pp, £15.00)

Reviewed by Bodhisattva Chattopadhyay (University of Oslo)

Written in 1986 by the eminent Indian astrophysicist Jayant Vishnu Narlikar, this is the novel's first international print. In the scientific community, Narlikar is known primarily for the Hoyle-Narlikar theory of gravity, but he is also well-known amongst readers of Indian sf. While sf traditions exist in several Indian languages, with the exception of Bangla sf (or *kalpabigyan*) little has been translated into English. Narlikar, who writes sf in Marathi, is thus a notable exception. The volume also contains one of his best-known short stories, 'The Rare Idol of Ganesha' (1975), and a concluding essay on Narlikar's views on sf.

Marathi sf has a long history even though hardly anything is available in translation. The pioneering work is generally considered to be *Tareche Hasya* ('The Laughter of Electric Wires' [1917]) by S.B. Ranade, although original works prior to independence were few and far between, unlike in Bangla, where adventure stories with sf elements had become quite popular by the 1930s. After independence however, there was a steady stream of translations of writers such as H.G. Wells and Jules Verne in many Marathi journals, especially for children, and several original works were also produced by writers such as Narayan Dharap, Bhaskar Ramachandra Bhagwat and Gajanan Kshirsagar. It was however in the 1970s that original sf in Marathi took off with the sf writing competition organized by the Marathi Vidnyan Parishad (Marathi Science Academy). It was here that Narlikar sent his first story 'Krishna vivar' ('Black

Hole' [1975]) under the pseudonym Narayan Vinayak Jagtap. Narlikar had turned to sf under the influence of his supervisor Fred Hoyle. For Narlikar, the aim of sf has always been to spread the message of science, and the competition, which was held with the same aim, suited his purposes. Narlikar's win brought respectability to the genre and he soon followed with his second story, published in the magazine *Kirloskar*, 'Ujavya sondecha Ganapati' ('The Rare Idol of Ganesha'), and the novel *Virus*. *The Return of Vaman*, his second novel, came out first in Marathi and later in English, translated by Narlikar himself. With Narlikar's success, Marathi sf developed rapidly thereafter with many others following Narlikar's footsteps such as Bal Phondke, Laxman Londhe and Niranjan Ghate, and remains a prominent part of Marathi literature.

Narlikar's sf, along with Bangla sf, was my introduction to Indian sf, and the first Narlikar story I read was 'The Rare Idol of Ganesha' in Bangla. Narlikar's iconic status in the field of Indian sf undoubtedly owes much to his reputation as a scientist, and it is the scientist's sensibility that he brings to his fiction. Narlikar is just as well-known for his popular science books as his fiction. Shortly before I began my doctoral research on sf, I also had an opportunity to meet Narlikar at IIT-Kanpur in 2009, at the first Indian sf writers workshop, and he was an inspiring figure to say the least as he spoke on the importance of sf to an audience packed with science and technology majors.

That said, these stories did not appear particularly exciting to the thirteen-year-old me when I first came across them. The narrative appeared flat and parts seemed overly didactic in comparison with U.S. authors such as Ray Bradbury. On rereading them after so many years, I have changed my opinion about their quality. I now notice how subtly Narlikar's prose weaves together Indian realities by means of deadpan realist humour, directed almost entirely at Indians and their pretensions. This is nowhere more evident than in the novel, where there are entire sections on the muddled and sloth-like Indian bureaucracy ('babudom') with its proverbial red-tape and corruption, observations on the lives of neglected housewives, and the ways in which expat Indians behave on returning home. Consider this brief example:

> 'I told you not to go by Air India … it is always late!' The mother had evidently not forgotten her native Marathi. 'Come on Neela, you exaggerate. We had no better experience with Pan Am last time. And our travel agent offered the best deal on Air India … Remember we save four hundred dollars, more than five thousand rupees.' The husband justified their choice of airlines.
>
> Mahesh smiled … it was characteristic of NRIs to convert to rupees, even after several years abroad. The children, however, were rooted in America.
>
> 'Maa...mmy, I want coke! I don't like this substitute', the older one complained.

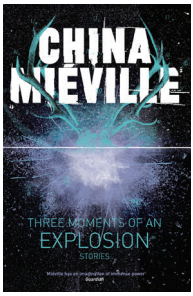
As anybody who has travelled internationally can attest, while the India described here might have changed from its pre-liberalization state when Narlikar wrote the novel, and the current globalized one (for instance one can find no real coke substitutes any more and KFCs are ubiquitous, at least in the metros), this observation remains as true today as it was then.

The two novums in these stories derive from two ideas in physics: symmetries in fundamental particles that leads to the sf premise that an object can be converted entirely into its mirror image, and the concepts of photonic computers and von Neumann self-replicating artificial intelligence leading to existential risk for humankind. In the case of the novel, these technologies derive from knowledge stored in a relic discovered in an archaeological dig. This relic, a cube left behind by an ancient civilization of beings called the Monads, contains blueprints of advanced technologies; another artefact left by the same species is kept as a warning about building an AI, which led to their destruction. As expected, the warning is interpreted too late to prevent the creation of the AI. While definitely not path-breaking except for its specific Marathi context, Narlikar's novel is a good read. The story never lags and the style is lucid, and it is a satisfying experience overall.

It is however not the sf element that makes Narlikar's fiction stand out, even though Narlikar is fairly clear that the purpose of good sf is the dissemination of science. All his stories provide examples of his approach where, woven into the story, one may find characters explaining scientific concepts and ideas in a simple fashion, usually for the benefit of the uninitiated. As a popular science writer, Narlikar does this part of his fiction fairly well and these sections rarely seem like infodumps. What makes these stories notable is that Narlikar uses sf premises to address a uniquely Indian audience, with their fascination for religion and mythopoeic ways of understanding the world. As a scientist, Narlikar frequently takes a dig at popular superstition, while, as an Indian, being perfectly respectful of the place of mythology in culture, and not only Indic mythology. His character-names have mythological resonances which are reworked in the narrative, for instance the couple Laxman and Urmila, who are also married in the Hindu epic *The Ramayana*, repeat some of the conflicts from the original. His masterstroke is designating the amoral robot as Vaman, a name for one of the avatars of Vishnu, who once rescued humankind from the hubris of the demon-king Bali. Here, in the retelling, it is Vaman whose hubris ends up destroying it, but this is also an indictment of the human tendency to play god and, if possible, take the easy way for ultimate solutions. While Narlikar is certainly not against science, mythology serves as a repository of lessons from which humans may gain insight into their own evolution towards greater knowledge, and to which there are no shortcuts. This lesson is also available in Narlikar's popular science writings, notably in his book *The Scientific Edge: The Indian Scientist from Vedic to Modern Times* (2003), in which he simultaneously castigates the nativist tendency amongst many Hindu Indians to accept a notion

of an ancient Vedic science that has anticipated all aspects of modern science (which has manifested at times in exceedingly naïve ways), and upholds actual scientific achievements in ancient and medieval India. In this narrative, the discovery of the ancient cube with its advanced but dangerous knowledge serves as a metaphor for blind faith in the cultural scientific heritage that many Indians seem to have, without an awareness of the consequences of such faith, while lacking actual scientific credentials or by possessing an inaccurate or incomplete picture of the past.

The international reprint is part of the Springer series titled 'Science and Fiction' that consists of a mix of sf novels and critical studies of sf. The term used for sf in the series is 'scientific novel', and such a label may seem a tired attempt to distinguish the series while reviving debates on the nature and quality of sf. Even for this volume, where scientific elements and hard science often take centre-stage, such discussion is quite irrelevant. Narlikar calls his work 'science fiction' without any qualifications in the concluding essay, 'Sci-Fi and I: Science Fiction from a Personal Perspective'. In this piece, Narlikar not only traces his own sf writing career but also addresses a variety of questions related to the genre: what constitutes good and bad sf, the purpose of sf criticism, the role of sf in the general body of science writing, scientific constraints, and sf films. The essay is of most value, as material on vernacular Indian sf written by the authors themselves is almost non-existent, and makes the book of interest to anyone concerned with Indian or postcolonial literature.



China Miéville, Three Moments of an Explosion: Stories (Macmillan, 2015, 431pp, £18.99)

Reviewed by Carl Freedman (Louisiana State University)

As I have maintained in print more than once before now, China Miéville is the kind of writer who requires the big canvas of the long novel – or novel-sequence – in order to display what he can do at his very best. Miéville is for me primarily the author of the Bas-Lag novels as plainly as James Joyce is primarily the author of *Ulysses* (1922), or Thomas Mann of *The Magic Mountain* (1924), or William Faulkner of *Absalom, Absalom!* (1936). Yet, that does not mean that Miéville's short fiction is of little value; after all, Joyce, Mann and Faulkner themselves produced some of the finest stories and novellas ever written. In 2005, Miéville published the collection *Looking for Jake and Other Stories*; the quality of the stories is somewhat uneven, as is almost certain to be the case in such a gathering, but the best of these pieces are among the best short fiction to have appeared in recent years. *Three Moments of an Explosion* is a more substantial offering (it contains twenty-eight tales, exactly double the earlier volume's fourteen), and should enhance the author's reputation as a

master of short fiction.

No reader of the author's previous work will be surprised to find that the most outstanding overall quality of this very heterogeneous collection is the nearly endless fertility of Miéville's imagination. There are good writers of a-realistic fiction who would base full-length novels on ideas that Miéville invents *en passant* and leaves behind after half a page. 'Syllabus' is a perfect example. Barely more than two pages in length, this piece takes the unlikely form of an academic lesson-plan; it describes a three-week course called 'Humanity, Introspection and Debris' that is designed to study three distinct subjects. Week 1 ('Tip Life') is devoted to studying how the history of human society has been affected by debris left behind by time travellers from the future (and, probably, from the past as well). Topics for discussion include 'Why were bollards for so long held to be refugees from a future war?' Week 2 ('The Misprision of Modern Relief') examines the major role played by extraterrestrial insects in humanitarian organizations in nineteenth- and twentieth-century Britain. Week 3 ('Cost-Benefit') tackles the privatization of sickness in the U.K., with particular attention to 'the precipitous rise in the price of shares in plague'. One reads 'Syllabus' hungry for a much fuller delineation of each of the three worlds suggested here. But Miéville concocts many more fascinating ideas than he evidently has the time to develop at length.

'Syllabus' is not the only item in the book to employ an unconventional narrative form. Three pieces ('The Crawl', 'Escapee' and 'Listen the Birds') are written as screenplays of non-existent trailers for non-existent movies. There are also several prose poems that function less to tell stories than to establish moods and to offer conceptual meditations on certain subjects. For instance, the title piece engages the three closely related matters of the commodity structure, human subjectivity and history itself. Most of the things in the book are, to be sure, narratives in the more familiar sense (not for nothing is the volume's subtitle simply 'Stories'): and they are extremely multifarious narratives that exemplify the author's characteristic generic versatility. There is more-or-less straight science fiction on offer here, various kinds of fantasy, and – perhaps the author's most typical and impressive specialty – works that combine elements of both of these genres that are so closely related in some ways yet so diametrically opposed in others.

A number of my personal favourites in the volume actually stick pretty close to realism. A good example is 'Dreaded Outcome'. It centres on a New York City psychotherapist who practises a school of therapy called TVT, or 'traumatic vector therapy'. TVT recognizes that psychological problems are not entirely in a patient's head – that, often, objective real-world factors are at least partly to blame. Consequently, a good therapist must possess not only insight and sensitivity but also the skills of a trained assassin: for TVT frequently requires a therapist to murder individuals who cause psychic distress to the therapist's patients. As often in Miéville – perhaps most notably in *The City & the City*

(2009) – the influence of Kafka is unmistakable.

Kafka is also vividly present in 'After the Festival'. Here the environment portrayed is, as in *King Rat* (1998), a world very close to our mundane reality but invaded by forces beyond our normal understanding. This story, one might say, is haunted more by the Kafka of 'The Metamorphosis' than (as in 'Dreaded Outcome') by the Kafka of 'A Hunger Artist'. The festival of the title is an East London street festival at which animals are slaughtered and cooked, and in which the severed animal heads are placed over the heads of festival-goers chosen more or less at random. A good time is had by all the humans. But sometimes a strange development called 'intrusion' takes place, in which the animal head seems to take over the consciousness of its wearer. Usually the condition is treatable and temporary. But in extreme cases, such as that of Charlie, on whom the story focuses, intrusion means the effective end of human life for the afflicted person. Charlie is a worthy successor to Gregor Samsa and 'After the Festival' is, *inter alia*, a beautiful piece of propaganda for vegetarianism.

Miéville, of course, is first and last a radically political writer: the impact of Marx on his work is in some ways even more profound than that of Kafka, Lovecraft and Peake put together. *Three Moments of an Explosion* ought to be read in conjunction with another of Miéville's texts that is almost exactly contemporary with it: his brilliant essay, 'The Limits of Utopia' (2014), which appears in the first number of *Salvage*, the exciting new left-wing arts-and-letters quarterly of which Miéville is an editor (and to which one of the stories here, 'The Dusty Hat', obliquely alludes). In this ground-breaking critique, Miéville argues that there are reactionary as well as revolutionary utopias and that, at the present time, a certain kind of rigorous pessimism may be a necessary precondition for liberation. His main focus is on the increasing devastation – by capitalism, *not* by human action in general – of the biosphere that makes human life and human civilization possible. We are *not* all in this together, insists Miéville, for a very few reap huge rewards from ecological destruction. In fighting for environmental justice, 'we fight best by embracing our not-togetherness' Miéville writes.

This is the most important single theme among the extreme variety of *Three Moments of an Explosion*. In 'Polynia', for instance, icebergs that global warming has melted in the Antarctic mysteriously reappear in the skies above London. Nothing quite catastrophic happens during the time present of the story – sometimes bits of ice break off from the bergs and fall to the streets below, but that is rare – though the climate of London takes a considerable turn for the colder, especially in the brutally frigid 'mini-winters' directly below the icebergs. There may be an allusion here to the scientific hypothesis that global climate change could short-circuit the Gulf Stream and give Britain a climate much like Nova Scotia's. There is certainly a strong sense of what Freud called the return of the repressed: when we try to ignore that which is disturbing, like the injury to our planet caused by the profit-motive, it is all but certain to make itself felt

in dangerous and even more disturbing ways. ‘Covehithe’ is an especially clear parable, in which offshore oil rigs that have collapsed into the ocean return as apparently animate beings that invade dry land like giant monsters and return to the sea to give birth to their offspring.

There is much more in this volume than can be suggested in a brief review. In addition to the tales already mentioned, especially good examples include ‘Säcken’, a horror story about the violence of history; ‘Keep’, an end-of-the-world story that shows how catastrophe can result from radical individualism in a terrifyingly literal way; and ‘The Design’ which offers, among other things, a charmingly old-fashioned narrative of same-sex love. The many readers who have long regarded Miéville as one of the most fascinating and rewarding fiction writers at work today will not be disappointed by *Three Moments of an Explosion*. Those still unfamiliar with him, and who would prefer to begin their acquaintance with material briefer than a full-length novel, will find the volume a fine introduction to his oeuvre.

Eileen Gunn, Questionable Practices (Small Beer Press, 2014, 286pp, £10.99)

Reviewed by Andrew Hedgecock

There is a subtly experimental aspect to *Questionable Practices* but don’t expect migraine-inducing typographical trickery or perplexing narrative cut-ups. Eileen Gunn’s work tends to have a traditional narrative shape – there are clear beginnings, middles and ends; expositions, climaxes and resolutions. Her experimentation takes the form of guerrilla assaults on a range of storytelling traditions. There is playful sabotage of folk story motifs and carefree demolition of the narrative conventions of fantasy sub-genres. In essence, *Questionable Practices* is a collection of anti-stories.

You wouldn’t read Gunn for emotional insight. The mechanics of storytelling is in sharp focus in the majority of these stories, but less attention is paid to the trials of the human condition or the workings of the heart. It would, however, be unfair to assess Gunn’s work against objectives it never sets out to fulfil. This is an engaging, rewarding and intellectually challenging book: there is considerable pleasure to be derived from spotting allusions, unpicking deceptions and being surprised by polished contrivances. The collection is crammed with smart pastiches that fizz with ludic challenge. There are few more accomplished exponents of the disquieting thought experiment than Gunn, and few experiences more enjoyable than trying to keep up as an accomplished storyteller takes her ideas for a haphazard stroll.

Throughout the collection, whether she is writing alone or in collaboration, Gunn repeatedly pulls off the literary equivalent of the tablecloth trick: she

whips reader expectations from under the ‘dishes’ of theme, character and plot without leaving a shattered and indigestible mess. On some occasions the trick is worked more elegantly than others, but you have to admire her willingness to take flamboyant risks.

Her ambition and audacity is illustrated by a pair of linked fables, written in collaboration with Michael Swanwick, that play very different narrative riffs on the same motif and create sharply contrasting moods. ‘The Trains that Climb the Winter Tree’ and ‘The Armies of Elfland’ are variations on the theme of Elvish invasion into the human world. These dark and inspired tales are crammed with violence and concern the high price we pay for the getting of wisdom. Both stories flirt with incoherence in their middle sections and the reader gets a sense of the authors’ struggle to rein in the relentless energy of their narratives. Control is regained and the outcome is a pair of flawed but powerful stories that freight pell-mell plots with mischievous pastiche, subtle symbolism and thoughtful reflection.

The tragicomic ‘Up the Fire Road’ combines folklore, comedy of manners and media satire. The virtuosity of Gunn’s work and the risks she takes in *Questionable Practices* are encapsulated in this opening story. It begins with competing narratives about an ill-fated cross-country skiing expedition and an encounter with Mickey, a being of indeterminate gender, who might be a sasquatch or simply an old hermit. The key protagonists, Christy, a slacker, and his more grounded lover, Andrea, relate experiences both quotidian and dreamlike in Mickey’s cave. The narrative shifts in terms of pace and tone and climaxes in a three-way confrontation on the set of a Jerry Springer-style TV confessions show. It is hard to care very deeply about the fate and perceptions of the self-serving Christy and Andrea, but easy to admire Gunn’s ability to switch focus, modulate voice and challenge expectations in relation to the story’s plot, theme and mood.

In ‘The Steampunk Quartet’ Gunn introduces real-life associates into brief pastiches of a series of well-known works: *The Difference Engine* (William Gibson and Bruce Sterling); ‘The Night of the Cooters’ (Howard Waldrop); *Perdido Street Station* (China Miéville) and *Infernal Devices* (K.W. Jeter). These pieces are brilliantly constructed and executed with an exuberance that makes them more than mere exercises in literary ventriloquism.

If Gunn’s best stories are brilliantly contrived, her more mediocre offerings are merely contrived. Her reworking of established tales relies on readers having a high degree of familiarity with the source material and a well-informed appreciation of her intentions. This makes *Questionable Practices* a deeply satisfying read for an ‘elite’ audience, familiar with sf, fantasy and mythology in print and on screen, but may limit the its appeal to a less widely read and, perhaps, younger readership.

For example, the *Star Trek* slash fiction spoof, ‘No Place to Raise Kids’, requires familiarity with this specific genre of fan fiction and an understanding of

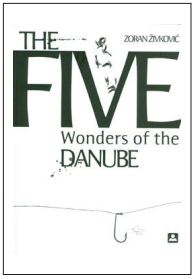
the way it works. Without that, the story becomes an exercise in inconsequentiality, a parody of an unseen parody. Similarly, 'Shed That Guilt! Double Your Productivity Overnight!', written with Swanwick, and 'Michael Swanwick and Samuel R. Delany at the Joyce Kilmer Service Area, March 2005' are clever but unsatisfying stories. Neither is an in-joke or an exercise in name-dropping; they seem instead to be pasquinades based on writing that succumbs to these tendencies. But, for me, both stories collapse under the weight of the irony and self-reference Gunn has inserted into their narratives.

Her best stories offer compelling insights into the modern life and human experience. 'Hive Mind', written with Rudy Rucker, is funny, tragic and perfectly structured. It examines the obsessive impact of online relationships, e-commerce and digitally mediated culture. 'Chop Wood, Carry Water' is a first-person retelling of the familiar tale of the Prague golem. In Gunn's brief but multi-layered version of the myth, the golem is a gentle being who longs to decompose into clay. In essence the story is a fable on the themes of the corrupting nature of money and the redemptive power of kindness.

'Zeppelin City', the collection's penultimate story, is another highlight. Co-written with Swanwick, it is a vibrant steampunk adventure with heroines called Amelia Spindizzy and Radio Jones. There are motifs redolent of Michael Moorcock's alternative histories, Bryan Talbot's *Adventures of Luther Arkwright* and Fritz Lang's *Metropolis*. There is a scene that vividly captures an air-battle in incendiary and clamorous prose; there are knowing references to cultural icons of the 1930s; and there is a hint of paradox in that the story simultaneously celebrates and lampoons the tropes of pulp sf. The reader's attention to the relentless runaway train of a plot is unwavering, in spite of a sudden and significant shift of viewpoint.

The final story, 'Phantom Pain', concerns memory, aging, and death. It is one of the strongest in the collection. Ed lurches in time and location: he is wounded in jungle warfare, works in a library, lives in his family home and experiences frail old age in hospital. The story makes subtle use of genre elements to create a uniquely honest and powerful statement about the human condition.

Questionable Practices is an ambitious but uneven collection. It would be glib to dismiss its more abstract stories as clever but heartless, but while their revision of familiar narratives is inventive, there is a degree of aridity to their philosophical and metaphysical speculation. Setting this reservation aside, Gunn demonstrates striking virtuosity in confounding the reader's expectations and the vast majority of her stories are infused with a wicked intelligence and searing wit.



Zoran Živković, *The Five Wonders of the Danube*, trans. Alice Copple-Tošić (Belgrade: Zavod za udžbenike, 2011, 308pp; RSD1760; ISBN: 978-86-17-17494-9)

Reviewed by Paul March-Russell (University of Kent)

Longlisted for the 2013 International IMPAC Dublin Literary Award, Zoran Živković's remarkable book is sadly still only available from Serbia (which is why, contrary to customary practice, both the price in Serbian Dinar and ISBN have been included above). Over and above the fantastical tales that Živković relates, the book is an object of beauty. Published in hardback with dimensions of 28.5cm × 21cm and beautifully illustrated throughout by Boris Kuzmanović in what I take to be ink and pen drawing, it demands to be held, weighed and studied. Each of the five sections is colour-coded to match the respective bridges – black, yellow, red, white and blue – with extra-large borders both at the top and the sides of the printed text. Furthermore, each section is prefaced by a series of drawings that not only refer obliquely to the next story (or chapter) but are also placed sequentially under successive layers of tracing paper. The effect resembles that of a palimpsest in which the drawings are at first glimpsed one under another, only to be fully revealed as the reader turns the page, or are obscured altogether. The evanescent quality of the drawings and their gradual or sudden revelation perfectly complements the mysterious effect of Živković's text.

The overlapping of the boundaries between form and content, text and image, strikes deep at what Živković has attempted to do in this book, although frequent readers of his will see thematic and structural similarities with his previous fiction. For one thing, it is hard to say whether it is a collection of short stories or a fully-fledged novel, a problem of taxonomy that has persisted since his first short fiction work, *Time Gifts* (1997). 'Short story cycle' or 'short story sequence' might be better descriptors but neither quite captures the combined effect of Živković's text since both over-privilege formal unity at the expense of readerly pleasure. This is not to suggest that the book is disorganized but that, in keeping with its setting, it takes a less denotational form as its structural template: the Viennese waltz. If the opening illustrations form an introduction to the whole piece, we then have five sections that vary the basic themes in increasingly complex patterns until the final section offers a recapitulation of the entire work. This structure, although lending coherence to the whole, does not round it off in any simple terms. Instead, as the final quartet of questions imply, alongside (in Walter Pater's terms) the more general aspiration to the condition of music, the text is constantly attempting to slip its own generic boundaries; to become an indefinite process rather than an easily categorized product.

Following Pater's argument in his essay, 'The School of Giorgione' (*The Renaissance* [1873]), artworks may be decipherable in themselves but the

greatest examples are always straining at their generic limits to merge with the conventions of other media. It is no coincidence, then, that Živković's stories revolve around other artforms: painting, drama, sculpture, literature, cinema, music. Like the intimacy of the waltz (and is it by chance that one of the characters reads *Anna Karenina* with its celebrated waltz sequence?), the prose fiction touches each of these forms: the sensual sub-text of which is made manifest in the final story where the river rushes the reader back from Regensburg to Novi Sad in a euphoric revisitation of the overarching narrative. Such sensuality – the *jouissance* or ecstatic bliss favoured by French post-structural critics such as Roland Barthes – is not only complemented but also given hands-on, tactile pleasure by the book itself. Above all else, this is a text that delights both in its own creation and in its remaking by the reader.

Representation, then, is part of the text's active production of meaning. The first story describes the mysterious appearance of a large painting on the Black Bridge at Regensburg. (It may be that real-world counterparts can be found – there really is a yellow bridge in Vienna – but, as the last story indicates, Živković's use of the bridges is for imaginative rather than allegorical purposes.) A succession of ever more senior and sinister officials attempt to decipher and lay claim upon the painting, but as the bridge guard realizes early on, its depiction of the natural world is indivisible from its location on the bridge: 'The scene beyond the railing on the canvas was the same as that beyond the real railing'. Like René Magritte's *The Human Condition* (1933), the painting transgresses its mimesis to become the very thing it represents. The inability of the officials to even detach the artwork from the bridge – something which the persistent gulls effortlessly do – embodies their failure to extract an understanding of the external world from their own preconceptions. In contrast to the absurd logic of officialdom, Živković suggests that the artistic imagination has the capacity to go beyond the surface representation of things.

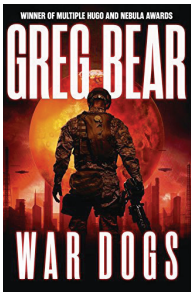
The second story, which might or might not be set on the same Sunday as the other stories, features five characters – a theatre prompter, a contract killer, a prostitute, a thief and a nun – who each momentarily stop at the same time on the Yellow Bridge. Their individual back-stories suggest that they have each simultaneously paused because of some connection with death. In, what the reader assumes to be, a series of dream-sequences, they each revisit their anxieties but drawing upon details known only to the other characters. A final pay-off suggests that these might not have been dreams after all but could be related to the objective world; even so, the story suggests that there has been some kind of telepathic understanding between the characters at the level of a collective unconscious. As with the first story's foregrounding of mimesis, this theme is revisited in the final tale's bravura performance.

In this respect, Živković reveals himself to be a true surrealist by piercing the veil of manifest reality to expose the latent content of the dream-world. The third story, in which two homeless people, just so they can keep warm, burn not

only the works of Dostoevsky but also the manuscript that one of them has been writing, begins in existential angst but ends with an injunction to the beauty of the marvellous. The barrels that the characters sleep in evoke similar receptacles in the plays of Samuel Beckett (*Endgame* [1958; *Play* [1963]). But the story also invokes Mikhail Bulgakov's statement that 'Manuscripts don't burn' and, true enough, once the fictions have been destroyed passers-by continue to see patterns in the water 'as though reflecting a gigantic manuscript from above.' The power of art to illuminate dull reality is also seen in the carvings that the homeless Isaac makes and scatters to the river.

The fourth story counterpoints its predecessor by focusing upon a composer and conductor whose inspiration for music comes directly from the White Bridge in Budapest, but which also arrives at the expense of those closest to him. Although the tale poses the worthwhile question as to the moral value of art, this conundrum is set into the context of another riddle: to what extent are the bridges that have been described sentient? The Blue Bridge of the final story is fully anthropomorphized and, here, the focus is not on the living characters of the earlier stories but upon the dead and the animal world. The hero is a dog, driven by instinct to bark at birds, and just as well he is since the gulls from the first story now make their reappearance. Throughout the collection, however, there have been varying levels of reality – the representation of art, the dream-world, the materiality of language, the 'time windows' in the fourth story – and a preoccupation with the lives of animals as sentient, alien intelligences. In this final story, the folly of human accomplishments is offset by the naivety of the dog, whose innocence not only permits him to save the day but to also pass between the barriers of art and life. Paradoxically, it is the dog rather than any of the human characters who embodies both Živković's ideal of the artist and a quintessentially Surrealist defence of the naïf, the outsider or dispossessed.

As with the best of Živković's prose, *The Five Wonders of the Danube* resists easy categorization, but its ironic amusement at the complexities of truth and perception should entertain readers of sf and experimental fiction alike. It is a sumptuous book, not only in the pleasure of its storytelling but also in the enjoyment of its own physicality. U.K. and U.S. publishers, please take note, and make this book more widely available.



Greg Bear, *War Dogs* (Gollancz, 2014, 291pp, £8.99)

Reviewed by Joe Norman (Brunel University)

Approximately halfway through *War Dogs*, its protagonist Master Sergeant Michael Venn states the following: 'No more, please. I'm a man without a center. I have no idea where the hell I am. Waiting for Joe. Waiting for anybody who can tell

me what the hell happened and how long I have to lie low.' This emotive plea cuts to the heart of Greg Bear's narrative: *War Dogs* is about a soldier whose personal identity has been stripped away by a life spent in an authoritarian military regime. Venn is trapped at home on Earth, incapable of leading a normal life, and evading the authorities following a controversial mission. Struggling to recall repressed details of his trauma, Venn waits for his friend Joe to arrive and reveal the truth, yet – like Samuel Beckett's enigmatic Godot – Joe never appears.

Bear has stated that *War Dogs* is the first part of a new trilogy. In an online interview with Shawn Speakman, Bear has described the background to *War Dogs* as one of 'cosmic intrigue', referring to a system of political relations and galactic conflict existing between Earth and two races of extra-terrestrials, known simply as the Gurus and the Antags. The Gurus gained their name by providing Earth with a host of new technologies, which revolutionized the lives of humanity and effected a new world order. Their kindness came with a catch though: the revelation of the Antags who had established a colony on Mars and seemed hell-bent on attacking Earth. While, by the end of the book, we are given some clues about the Antags, the Gurus remain distant and mysterious.

This is where Bear's protagonist comes in: Venn belongs to the Skyrines, a U.S. Marine Corps division specialized in off-world combat, formed to obey the Gurus and to defeat the Antags. The scenes set on Mars, especially during the novel's first half, are tense and action-packed, effortlessly pulling the reader along as an effective thriller should. Upon landing on the Red Planet, Venn and his team are quickly faced with the reality that little of their supplies, weaponry or transport have survived the journey, and the details of their mission are scant, leaving them stranded and struggling. Oxygenated air is a priority, and the squad desperately scrimp small amounts of thin air from salvaged technology dotted about the surface. Bear writes the horrible sensations of inadequate air supply and suffocation vividly: 'Shadows close in around my eyes like groping fingers. My lungs are awful balloons filled with fire.' Scenes in which Venn attempts to stop the deadly cycle of his fellow Skyrines panicking about their lack of air, and so using up their air supply even more quickly, are uncomfortable to read.

Beginning Bear's novel requires the reader to navigate Venn's idiolect, a slightly confusing process even for avid sf readers. The Skyrines' speech is peppered with military slang and acronyms, both real-world and invented, while Bear uses a slew of neologisms or reconfigured terms to depict the novums he creates for the novel. As Venn himself puts it: 'We steal words from the past and abuse them.' Far from abusing language, however, some of Bear's reconfigurations achieve a symbolic resonance, such as his employment of the term 'Cosmoline': in real-world use a wax-like, rust preventative for military rifles, here it refers to 'timeout', or the cellular suspension that enables human travel through interstellar space. When Bear reveals that this process shortens the traveller's life, we are made to question how far Venn himself has 'rusted'

mentally and physically, due to his time spent in timeout.

This initial linguistic confusion is soon overcome, however, and before long Bear has established Venn's narrative voice as authentic and convincing. In fact, Bear captures the inner world of a (Sky)marine so well that he could be writing from experience. Although he has never been a soldier, Bear has admitted to Speakman that he 'grew up around Navy officers and Marines, became quite familiar with the personalities and courtesies and social structures of the USN and to some extent the Marines.' Yet, while Bear's characters can be crude and uncouth, their relationships are at points genuinely touching. Bear perfectly captures the unique nature of a friendship founded upon a mutual need to survive. Often Venn expresses this bluntly: 'The tent smells of stale piss and ball-sweat. Not unpleasant when you're used to it'; yet just as frequently he becomes metaphorical, even poetic: 'Inside the tent, curled up like puppies in a litter to conserve heat, we are truly womb brothers'.

The introduction of women into this environment brings complications. After Teal Mackenzie Green, a Mars native, whisks them off to safety following an Antag assault, Venn becomes attracted to her and distracted from his mission. He constantly objectifies Teal, drawing attention to the otherness of her unusual physique, as shaped by the conditions on Mars: 'I never knew a woman could be that tall, that slender, that spidery, and still be that beautiful'. Later an all-female group of special ops Skyrines arrive, who have history with Venn's squad, and undisclosed orders: Venn's squad is unsettled by these domineering women yet clearly impressed by their martial prowess.

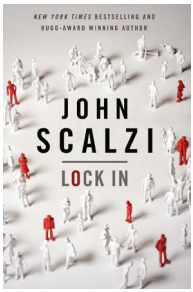
War Dogs features enough of the expected tropes of military sf to keep regular readers of the sub-genre interested. Yet, the novel is far from a glorification of war or a work of military propaganda. Instead, it is more concerned with exploring the effect that a life lived as a soldier as opposed to a civilian has upon a person's psychology and identity, and how they struggle to live a normal life outside of the combat zone. Bear also emphasizes the hypocrisy and inequality of the military hierarchies: as grunts, Venn and his team view their superiors – Sky Defense Brass – with a mixture of contempt and respect: as he states at one point, 'brass is always polished brighter than me or thee.'

One of Bear's achievements in the novel is encouraging the reader to sympathize with Venn, a somewhat slippery and ambiguous character. As Venn himself makes explicit: 'Being likable is a gift I do not reliably possess. I can turn it on sometimes but I know when I'm doing it and I feel guilty […] maybe I'm not such a good guy after all'. Venn's general demeanour is disassociated and abstracted; he alludes to unpleasant actions from his past, leaving us to imagine what he had to do to survive – as a result we are never really sure if Venn's a 'good guy' or not. Yet we feel for him. We learn early on that Venn is insecure about his appearance, succumbs to the bravado and boastfulness of his colleagues, and is seen to put others before himself. Where Skyrines have clearly been trained not to think too much during their missions, simply carrying

out orders unquestioningly, Venn resists this – at least in private – often thinking through the morality and rationality of his actions before acting; and he is ruffled by those who view Skyrines as knuckle-headed jocks.

Bear writes *War Dogs* in a permanent present tense, which does serve to achieve a sense of immediacy in what is essentially a fast-paced thriller narrative, yet also jars at points. Given that the scenes set on Mars are meant to have occurred in the past relative to those set on Earth, it is strange and confusing for the reader to hear Venn describe events happening *now* in both narrative strands, when it would be more logical for the Mars scenes to be written in the past tense.

Too many military sf novels treat alien life as a source of fear and uncomplex hostility which must be destroyed, rather than as a something potentially valuable which must be understood and nurtured. With this in mind, I found myself constantly hoping for revelations that grey the seemingly clear-cut morality of the Gurus and the Antags – and it finally appears in the novel's last pages, where the Antags' origins are brought into question. The novel ends with many plot points unresolved, characters whose fates remain uncertain, and important questions left unanswered. Whether *War Dogs* will come to be regarded as a classic in its own right remains to be seen, but I await the next two novels in Bear's trilogy with anticipation.



John Scalzi, *Lock In* (Tor, 2015, 334pp, £8.99)

Reviewed by Alejandra Ortega (Wake Forest University)

As the former president of the Science Fiction and Fantasy Writers of America, and the 2013 Hugo Award winner for best novel, John Scalzi is already a household name for any avid sf reader. His work is often easy to read and moves at a clip. Yet, while his latest novel retains Scalzi's signature style, its attempt to pack in a significant amount of information with a larger examination of what it means to be human can, at times, be difficult to fully comprehend.

Blending two genres together to create its story, *Lock In* is ultimately a procedural novel set in a science fiction world. Throughout the novel, the crime takes precedence over the more fantastical elements, often to the point of sacrificing explanation and world-building for the drama. Scalzi attempts to compromise by opening with a note on the basics of Haden's Syndrome, in an effort to provide us in a mere three pages with information of the disease that shapes the novel's setting. While it assists in offering a little bit of explanation of the world we are about to enter, it is information we will have repeated to us through various characters, making the prologue irrelevant. It starts with the basics, by first explaining how the 'Great Flu' became an epidemic nobody

was prepared for. ‘Haden’s Syndrome’ is a meningitis-like disease that renders some of its victims completely paralyzed, yet conscious within their bodies. This process is known as ‘lock in’. Although this is based on a real-life condition called locked-in syndrome, the novel imagines it in a science fiction setting. While the preface touches on how people with Haden’s have the potential to be affected by the disease, but not locked in, it does not expound on what exactly this means. We do later discover that these people are called ‘Integrators,’ and were affected by the early stages of Haden, but rather than becoming paralyzed, gained the ability to have a neural network placed within their brain so they can be used to allow paralyzed Hadens to experience life. When they aren’t renting time to use these bodies, Hadens move through the world thanks to the use of robots known as ‘threeps’. Although there isn’t much of a description of what they look like, it is possible they function similarly to the robots used in Robert Venditti and Brett Weldele’s graphic novel *The Surrogates*. Hadens access threeps with their consciousness in order to live in the real world like a healthy human being.

After these few pages of straightforward facts, the novel dives into the main story. In so doing, the reader is often required to pick up the subtle information of the world as it goes on, creating, at times, a confusing reading experience. However, if the reader is willing to set aside the interest in understanding the basics of how these people function – as well as the day-to-day life of this world – then one can be taken on an interesting ride through a crime drama of the future. After the expected orientation for starting a job with the FBI, rookie Agent Chris Shane is called in to investigate a Haden-related murder. He is assigned to work with veteran Agent Leslie Vann, who is a former Integrator haunted by her past and addicted to drinking, smoking and sex. The plot focuses on the murder of an unknown man, involving a suspect who is an Integrator. If the Integrator was carrying a Haden, then the number of possible suspects is astronomical. As civil unrest and political extremists create a higher body count, it becomes clear that there is a larger conspiracy plot hidden underneath what seemed like a typical murder story.

While *Lock In* follows the classic formula of the cop novel, it is clear that what is at its heart is the political divide between those who want to continue support of Hadens, and those who do not. Yet, weaving a complex politically-charged world with a murder mystery is ambitious for a relatively short novel. Although Scalzi masterfully discusses various perspectives and types of body rights, it would be possible to appreciate it more if he had taken his time and delved deeper into the story. There is an overwhelmingly large cast of characters, all with incredibly compelling stories. Yet we follow Chris, who has a flatter personality and is ultimately interesting due to his circumstances as a unique Haden. While it is possible that the first-person voice limits the novel’s perspective, there are still ways of receiving information without the copious amounts of dinner-table discussions and monologues the novel depends on. Although the story itself

is rather fast-paced, the different voices are often fighting to be heard over the bulk of the crime story.

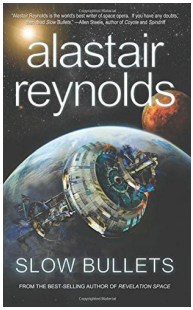
First, there are the corporate Hadens who argue about the prospect of a cure in a dinner scene, in which we have a subtle tie to the present anxiety of basic human rights. With the United States – and much of the world – still trying to grapple legally with basic rights pertaining to race and sexuality (in the novel Chris is African-American whilst another Haden, Hubbard, is gay), it does not mean that the citizens will peacefully follow suit. Scalzi perfectly parallels the Hadens' rights with real-life victims of persecution. Another notable scene depicts humans physically assaulting threeps on the street. While Chris often states that attacks on threeps are treated like an attack on a human, it is still questioned by the average citizen.

Another tie-in is through Vann. It isn't until near the end of the novel that we finally receive the bulk of her story, as a monologue. As the reader can already assume, her time as an Integrator resulted in her inability to accept the idea of another using her body for their own desires. It is evident that here Scalzi extends the discussion of the Hadens' humanity to women's reproductive rights. These connections make the cramped tension of the politics and murder mystery worth it, as seeing these human rights issues through the lens of the threeps and Integrators is a bold and powerful analogy. Yet, while it often seems that Scalzi is suggesting what makes a person human is more than just the physicality of the body, these questions are glossed over by the narrative push to save the day and catch the bad guy.

Although the mystery is entertaining and the various brief perspectives on human rights captivating, I am not one of those who can easily leave questions unanswered. Scalzi has since written a companion novella, *Unlocked: An Oral History of Haden's Syndrom*e (available online at tor.com). The novella explains how the illness became an epidemic, the research initiative put in place by U.S. President Haden, and how the threeps were created. Near the end of the novella, the critiques Scalzi touches on in the novel are furthered with stories from everyday Hadens. With these stories it is possible to see their progressive loss of basic rights. For example, a Haden describes going to a restaurant: 'the next time I went there they had a sign saying that threeps had to give up their seat if asked by a human customer. Get that – a *human* customer.' It is clear that the novella and the novel go hand-in-hand, and to have one without the other could be what creates confusion. While it is always a treat when an author writes a companion-piece that expands on a fascinating world, I would have liked to have had some of this information within the novel itself. It's a delicate balancing act to completely convey a complex world while staying true to the desires of the specific genre. However, discovering the novella after reading *Lock In* felt a little like extra homework I had to do to fully comprehend the original story.

Scalzi has announced plans for a sequel that will be entitled *Head On* and Legendary TV has acquired the rights to adapt *Lock In*. As the novel comes to a

close, it is clear that there is room for more. It has a satisfying resolution but the aftermath of the conspiracy twist creates potential new stories and perspectives to explore. Despite any qualms against the extra reading and the feeling of cramming information in a small space, the well thought out details of the world and connections to the mystery are what will most likely draw more readers to *Lock In*.



Alastair Reynolds, *Poseidon's Wake* (Gollancz, 2015, 608 pp, £18.99) and *Slow Bullets* (Tachyon Press, 2015, 192 pp, £10.08)

Reviewed by Will Slocombe (University of Liverpool)

The Poseidon's Children trilogy, which began with *Blue Remembered Earth* (2012) and *On the Steel Breeze* (2013), comes to an end in *Poseidon's Wake*. The reader is uprooted from Earth and our solar system, where the previous books were primarily set, to a colony in a distant solar system where a small number of people have colonized the planet discovered at the close of *On the Steel Breeze*. Descendants of Eunice Akinya – the Akinyas being the family at the heart of the preceding novels – travel to another distant star in response to a brief but tantalizing message: 'Send Ndege'. Kanu, another Akinya descendent and ambassador to the synthetic intelligences that have now taken over Mars, is also travelling to the same location, unbeknownst to both parties and albeit for slightly different reasons. The Watchkeepers – vast synthetic intelligences beyond even the Martian machines – follow the progress of humanity, orbiting the planet Poseidon and its mysterious technology.

As should be obvious by this point, it is difficult to summarize this book without reference to the other two in the series. Although it can ostensibly serve as a standalone novel, and whilst it is feasibly possible to read it without reading the other two first, to do so would miss much of the colour that Reynolds has brought to the series as it has developed, and especially to this, the final book. One of the main elements of the series, for instance, is Reynolds' description of humanity's first teetering steps into space exploration and colonization. For readers familiar with his Revelation Space universe, neither this novel nor the series has the same galaxy-spanning feel, as it gradually unfolds a trajectory of human expansion into the solar system, and then towards the stars. Moreover, although a number of familiar motifs are present within it (such as tensions between synthetic, transhuman and human intelligences), such themes are given various twists, not least in the continued plot developments involving the Tantors (genetically engineered elephants) or Eunice Akinya's re-embodiment as an artificial being and what this might mean philosophically.

One of the most notable differences between this and his earlier works,

then, is the human scale of the action. I have long admired Reynolds' ability to tell individual stories against large backdrops, and this novel is no exception, but it feels even more small-scale, domestic even, in terms of character interactions. Many of the relationships are marital, ex-marital or familial, and Reynolds' focus on the Akinyas throughout the trilogy matches perfectly with his desire to examine how people shape and are shaped by the momentous events around them. The trilogy – and *Poseidon's Wake* particularly – doesn't have a big point, or even a major idea; it's aim is seemingly not to make readers sit up and say 'that's clever!' but to ponder, mull or consider how such revelatory events as occur in this novel impact people on an individual level. This is in no way a criticism for there are some big questions in this work, it's just that it is a thoughtful rather a showy book, and slower-paced and less-plotted than many of his earlier works.

Its closest associates in some respects, perhaps unsurprising given his recent collaboration with Stephen Baxter, are Baxter's *Proxima* (2013) and *Ultima* (2015), as *Poseidon's Wake* deals with perhaps the biggest question – 'what's the point of existing?' – just as *Ultima* turns out to do. In *Poseidon's Wake*, however, this is characterized through a lost race of aliens, a group of AIs who want to access their knowledge, and the humans and their associated synthetic intelligences trying to work out how to react to the discovery that the universe could end at any second – but in a way that finds meaning at the heart of existence despite that. Some readers may find this somewhat trite, but I find it rewarding to see that Reynolds can turn his hand away from hard-edged, dark and potentially pessimistic stories towards a different kind of tale. It comes as no surprise to read that many reviewers and readers have come to see this as a fairly optimistic book in Reynolds' oeuvre. *Poseidon's Wake* is a paean to human experience and endeavour, not in any jingoistic or particularly anthropocentric sense, but in terms of how humanity exists and can find meaning in existence beyond the facts, mathematics and physics without resorting to a knee-jerk spirituality.

Fast forward to another Reynolds story. We're no longer in the same universe as the Poseidon's Children books, but in the novella *Slow Bullets*, Reynolds returns to the far future of humanity that has given him such fertile imaginative ground in his previous fiction. As with *Poseidon's Wake*, however, this feels like a more mature Reynolds at work; despite the setting, *Slow Bullets* is again not Reynolds dealing with galaxy-spanning action, but a tightly-written, claustrophobic tale of a group of disparate individuals trapped on a spaceship. Everything is falling apart here – social cohesion, humanity, the spaceship itself, even individual identities. It shares a partially similar sentiment to *Poseidon's Wake*, in the sense that it is important to continue to strive, even when it feels meaningless, but *Slow Bullets* articulates this in a far different manner.

The conceit behind *Slow Bullets* is the eponymous technology, an implant that functions like a personal history, occupation record and medical

identification chip all in one. This is not an especially new idea but, due to various circumstances, these bullets can a) be used as a form of slow execution or torture device and b) come to define your identity over and above anything else. This is then set against a what-can-go-wrong-will-go-wrong situation: a character awakens to find their arch-nemesis on a spaceship, but nobody can prove their own identity, or what side they were on in the war; the ship is crumbling, losing its recorded data; and, oh look, there's a hostile alien race that means very little of humanity has survived. Now what do you do? Here, in *Slow Bullets*, the familial of *Poseidon's Wake* has morphed into the tribal, and the answer to that big philosophical question – 'what's the point in struggling to exist in a hostile universe?' – is less optimistic and more fatalistic, something along the lines of 'well, what else are you going to do?'; an idea that gets re-iterated in various ways throughout.

Reynolds' exploration of this idea in *Slow Bullets* is, again, not showy. It's a slow burn of a novella, not a bright flare, and all the better for it. There are no grand revelations or epiphanies, but instead a gradual building and dissipation of tensions, alongside a form of narration that keeps the reader questioning what is being presented. What both *Poseidon's Wake* and *Slow Bullets* suggest is that Reynolds has yet again managed to switch tones and styles in his writing, but retain his sense of perspective and invention to still keep readers hooked. It also suggests that what comes after will probably be something completely different again, and I for one am intrigued to know what that will be like.

Foundation

The International Review of Science Fiction

123

In this issue:

In addition, there are reviews by:

Of books by:

Cover image/credit: Alastair Reynolds c/o Barbara Bella (2011).

Foundation Vol. 45.1 No. 123 2016