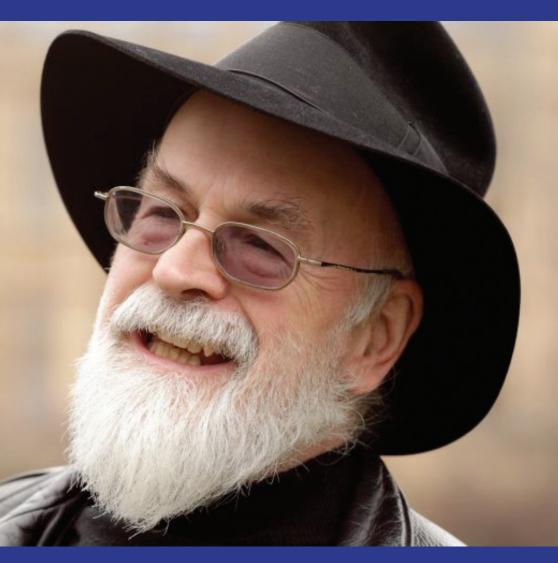
Foundation

The International Review of Science Fiction



Sir Terry Pratchett (1948-2015)

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The International Review of Science Fiction

Editor: Paul March-Russell
Guest Editor: Andrew Ferguson
Book Reviews Editor: Andy Sawyer

Editorial Team: Cait Coker, Dean Conrad, Heather Osborne,

Maureen Speller

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Editorial

Paul March-Russell

If a week is a long time in politics, then the space of two issues is a long time in *Foundation*. In my editorial to #118, I was celebrating how the theme of Loncon 3's academic strand – diversity – was reflected in the Hugo Awards. Now those same prizes have been plunged into a bitter argument thanks to the conservative factions known variously as the Sad or Rabid Puppies. Much has already been written in print and social media without me having to rehearse the details of the affair. So, as I write this on 10th April, I would like to stand back and make some tentative observations.

The first is that the actions of the S/R Puppies, and the attendant media interest, are wholly disproportionate to what the Hugos signify. For a \$40 supporting membership of Worldcon, anyone can vote but, in practice, few do. Consequently, it becomes an easy matter for any group with an agenda to gerrymander the process. Yet, put simply, why bother? The fact that so few participate is indicative of how little the Hugos matter in the already diverse and expanded field of sf. Of course, an award is always nice for the winner but, unlike say the Man Booker Prize, there is little evidence to suggest that increased sales ensue following the award of a Hugo. In addition, the Hugos have little effect these days upon canon-formation. As a teacher, I am more likely to pay attention to the Nebula, Locus, BSFA, Arthur C. Clarke, World Fantasy, James M. Tiptree and Kitschie awards than I am to the Hugos. Due to the low level of participation, the Hugos are already unrepresentative of the field; this year, more so.

Secondly, the S/R Puppies have sullied the public image of the genre they claim to extol. The media perception of the sf community as riven with in-fighting (think back to the fiasco surrounding Jonathan Ross's nonappearance at Loncon 3) is now almost as commonplace as the geek or the cos-player. Instead, as Glyn Morgan has observed, what now passes for fandom only makes up a fraction of the many who would call themselves fans of sf but who do not take an active part in writing, blogging, reviewing, costuming, etc. In other words, the already unrepresentative image of fandom as embodied by the Hugos is then projected onto the rest of sf culture, first, by the concerted actions of the S/R Puppies and, second, by the interest of the mass media for whom comparisons (and possible affiliations) with GamerGate are an incentive to publish. (It is a sad consequence of the media focus that the announcement of the BSFA Awards received little mainstream attention.)

Thirdly, despite the understandable controversies surrounding gender, sexuality and race, what is dispiriting about most of the nominations is their

lack of quality. Brad Torgersen, in particular, has mounted a campaign against what he sees as elite culture that seems to echo Robert Heinlein's claim that 'one crudely written science fiction story containing a single worthwhile new idea is more valuable than a bookcaseful of beautifully written non-science fiction.' Yet an author like John C. Wright is no Heinlein - indeed, it's another of the disservices to the genre that the S/R Puppies claim to be saving that Heinlein's name has been dragged in at all.

None of this would perhaps surprise Robert Silverberg who despaired of the genre and its gatekeepers as far back as the mid-1970s. I am delighted that Rjurik Davidson has chosen Silverberg to be his focus for our new writer's feature. The late Sir Terry Pratchett, another author quick to ridicule the gatekeeping tendencies in sf and fantasy, is commemorated by, amongst others, Stephen Baxter and Neil Gaiman. I am also delighted that this issue contains a special section on video-gaming assembled by assistant editor Andrew Ferguson. Despite the controversy of GamerGate, video-gaming is a further indicator of how the sf field has diversified and expanded into numerous other media beyond the controls of would-be custodians. Lastly, this issue contains two important announcements: one is the reintroduction of the SF Foundation Essay Prize for postgraduate and non-tenured researchers, the other is a call for papers on the topic of utopia to be published in Foundation #124 (summer 2016) to mark the 500th anniversary of Sir Thomas More's *Utopia*.

Next issue will feature articles from Loncon 3 on the topic of diversity in world science fiction. If your puppy is sad or rabid, then may I suggest #121 will be the perfect antidote?

Sir Terry Pratchett (1948-2015)

On 12th March, 2015, Sir Terry Pratchett died, after a long and much publicised battle with Alzheimers disease. It is no exaggeration to say that Sir Terry almost single-handedly widened public understanding of the disease and made it a fit topic for discussion. Yet, the wit, wisdom, compassion, and dignity that he brought to his campaigning were all of a piece with his writing and, in particular, that of the Discworld novels. Sir Terry was universally popular within the sf and fantasy communities – he touched many lives, had numerous friends, and worked with more than a few of them. One of Sir Terry's most characteristic aspects was the extent to which his writing became a focal point for others' – a sure sign of its and its creator's generosity and open-heartedness. Instead of a single obituary, we have asked a number of those who knew, admired and collaborated with Sir Terry to supply their thoughts on him. Together, they indicate something of the diversity of this extraordinary, multi-faceted individual.

Stephen Baxter

I first met Terry Pratchett at an awards event over twenty years ago. Terry, famous for his comic fantasy, had in fact grown up as a fan of science fiction, and indeed had written in the genre, and always remained a reader. Over the years we would bump into each other at conventions and other events: 'Steve! What news of the quantum?' he would cry on seeing me. At a dinner party in 2010 he mentioned a science fiction project he'd set aside long ago, and we'd long outstayed our welcome by the time we'd decided to collaborate. After that we developed our *Long Earth* novels through phone calls and long face-to-face working sessions – once in the back of a car on the way to Downing Street; this was Sir Terry Pratchett, after all. The project worked because of our shared enthusiasm for the material, and because, after his family, Terry loved nothing more than to work. I'll always be glad we got the chance to make those books happen. And I'll always remember his last words to me, on the phone: 'Steve - I've got it - Yggdrasil! Cheerio!'

Stephen Briggs

Terry was funny, loyal, supportive, waspish – a man I could certainly always rely on to say what he really thought about stuff I'd done. Working with him was fast and fun – frequent phone calls (pre-internet), a lot of laughs – we shared a common background in humour – the Pythons, *Princess Bride, Time Bandits* – at book signings we'd often drift into *Life of Brian* ('Crucifixion? Good... line on the left, one cross each') and then amble off into running entire scenes from memory much to the confusion of book-clasping fans.

I am tremendously grateful to Terry for the opportunities he gave me to change my life in ways I would never have thought possible. It's been masses of fun - working with Terry to design a whole city from a very brown field site, and creating an entire world map - how cool is that? We truly have,

as we often used to write at book signings, 'Climbed ev'ry mountain and forged ev'ry stream' - we've 'wandered each and ev'ry by way'.

I owe Terry a huge debt of gratitude. It's a real privilege to be a part of creating even a small part of his wonderful world, and it's something which I never take for granted. I am proud to have been the first person ever to dramatize the work of Terry Pratchett. I'd be lying, though, if I said Terry loved all my dramatizations of his books. But he certainly didn't hate any of them, and he did recognize that sometimes even his favourite bits had to be cut to re-shape a book into a play. I do have plans for future Pratchett dramatizations - it's just a pity that Terry will no longer be there in person to see them - and corner me in the pub to let me know what he thought!

Andrew M. Butler

There was a moment at a convention panel when someone asked Terry Pratchett, standing in the doorway, what he thought about what a critic had said about his work. 'I just write 'em,' he replied. 'It's up to you smart buggers to explain to me what they mean.' I suspect this was a well-rehearsed ad lib. Authors vary in their response to literary analysis. Some would rather not see it, some fight back, some engage. Pratchett largely demurred but my experience is that he had gained an *ad hoc* protective wall.

I was a Pratchett reader. I only met him twice, but I saw him on various panels at conventions. Being a Pratchett writer came later, because I was inspired to write things. After my last project, *An Unofficial Companion to the Novels of Terry Pratchett* (2007), I confess that I walked away. It had become work. But that is to get ahead of ourselves.

Back in about 1994, I went with Robert Edgar to a conference on Mikhail Bakhtin. Bakhtin's work on the carnivalesque was relevant to Rob, but I think I just tagged along. Listening to the discussions, it occurred to me that they should be talking about Pratchett and Death, so 'Terry Pratchett and the Comedic *Bildungsroman*' was born (published in *Foundation* #67 (1996)).

The Pocket Essential Terry Pratchett (2001) and Unofficial Companion were both commissions. The former led to my being summoned by Pratchett's agent to Gerrards Cross - he feared that I was writing a biography and noted that I had spoken to no one connected to Pratchett. Having read the manuscript, he said kind things and offered corrections. Some readers become defensive on Pratchett's behalf and the Unofficial Companion suffered from comparison to Stephen Briggs' indispensable work - but this was meant to cover both major characters and themes within the Discworld, but also influences on Pratchett and real world facts. Even the cover (carefully cleared with copyright holders) caused a kerfuffle. But it upset some readers that it wasn't all adulation on my part.

When I criticize popular culture, it's because I love it so much and want it to be better. Fantasy, comedy and bestsellers all deserve to be taken seriously - and Pratchett worked within all three categories and made statements that deserve attention and should be remembered. One day I will go back. When I'm smart enough.

Neil Gaiman

In the thirty years that we were friends, I only recall Terry Pratchett sounding uncomfortable once. I saw a fair smattering of the rest of the emotions – joy, frustration, delight, anger, grief, and the rest – but uncomfortable not so much. I was reading an advance manuscript of one of the books, written long enough ago that it arrived in my house on a three-and-a-half-inch floppy disk, via the Royal Mail, and one sentence struck me with its beauty. So I called Terry, and told him. And I could hear him, a couple of hundred miles away, squirm with discomfort.

Terry liked to pretend he wasn't a real writer, because he just got on and did it, while real writers, he would tell us, agonized over it, and thought about the craft all the time. He just wrote.

And that was such an interesting lie because I do not ever remember a writer more interested in the mechanics and the craft of writing than Terry. 'You know how this one goes...' he'd say to me, and that meant so many things: you know the kind of fiction this is, you know how plots deliver, you know the style you need to adopt in order to convince. He could articulate it: he just didn't like articulating it. And when I called him to talk about the beautiful sentence, I was asking him to talk about things that were too close to home and to heart.

Probably it was why we got on so well; so much of the time: I did know how it went, whatever it was.

He was the most driven author I've ever met, possibly the most driven person. Terry Pratchett the author was wise and great-hearted, Terry Pratchett the person was as gloriously complicated as any human being can be. I miss the author, as we all do, but I miss my friend more.

Edward James

I first became aware of Terry Pratchett back in 1963, when I read 'The Hades Business' in *Science Fantasy*, his first publication and his first story about death. I had by that time joined the first incarnation of the Birmingham Science Fiction group, organized by people like Peter Weston, Rog Peyton and Charlie Winstone. We went en masse to our first sf convention, at the Bull Hotel in Peterborough, at Easter 1964. It was Terry's first convention

as well. He was sixteen, I was seventeen. We spent so much time in each other's company that one con report referred to us as a single individual, sometimes Ednterry and sometimes Terryned. I had never metanyone before with whom it was so easy to bond. His reading tastes and mine coincided almost exactly. We loved Vance, Heinlein, Anderson, Leiber, Wodehouse, and of course, Tolkien. But we didn't just love Tolkien: we discovered that 'Treebeard' was the chapter we went back to again and again...

We communicated between conventions by writing letters, sometimes two or three times a week. His were often illustrated: art was as much a part of his life as writing in the 1960s. He told me about how he cast gold bees, in real gold, inspired by Michael Ayrton's novel about Daedalus, *The Maze Maker* (1967). He sent me sketches of the characters for his first novel, *The Carpet People*, published with his own illustrations in 1971. But we drifted apart. I went to Oxford University; Terry went into journalism. I was much more academically inclined; he was always rather wary of academics. We both got married, Terry in 1968 and me in 1969. As couples we got together a few times. But I took up my first job in Dublin, and after that it was just occasional brief meetings at conventions, and one unbelievably hilarious Chinese meal with him and Neil Gaiman, sometime in the 1980s. I wish we could have stayed good friends; yet oddly enough I still felt close to Terry, because I had his books. We all still have his books.

Paul Kidby

The imagination and humour in Terry's writing always inspired me to draw, and his insightful observations on human nature and the world around us always made me think more deeply about what I was drawing. I think our work fitted together well, creating a complementary harmony between words and pictures; I believe a lot of this was due to our mutual respect for each other's crafts and joint understanding about how we wanted to portray the ideas and characters of Discworld. His creativity bought so much joy and inspiration to so many of us. It was an honour and a privilege to work with him; I valued his friendship and owe him a great debt of gratitude.

Farah Mendlesohn

I was introduced to Terry Pratchett's work in 1986 by a friend at the University of York. I was steeped in fantasy so the early books worked very well for me. Once he got the hang of actual plotting (and in particular, endings) somewhere around *Mort*, I was hooked. Like most of Pratchett's readers I found it was the wit, intertextuality and vivid characters that grabbed me. But in the end, it was the rigorous ethics that captured me for life.

Good Omens (1990), co-written with Neil Gaiman, Only You Can Save Mankind and Small Gods (both 1992) may be the three great theological texts of fantasy. They talk about what it means to be human, and perhaps more important, about how being just and compassionate is not about being kind per se, but about keeping your eye on the ball of what matters. They emphasize that what matters in life is never about responding to what others do to you, but focusing on what you need to do with and for others to continue being yourself. There are other books by Pratchett (and Gaiman) which offer ethical guidance, but these are the ones that I return to.

In 1999 the Science Fiction Foundation wanted to raise its profile and generate some income. Edward James, Andrew M. Butler and I suggested we try a book, and we wanted something we were pretty sure would sell. Despite the then popular perception of a Pratchett fan (skinny bespectacled teenage boy in a basement), we knew that Pratchett fans were diverse, well educated and hungry for attention. We were all fans, and we knew some pretty clever other fans. So we asked them to write for us. They knew, as we did, that Pratchett was not too fond of literary critics but that he would be much too polite to say so when his fans presented him with *Guilty of Literature* to sign.

Ian Stewart

My biologist friend and fellow sf fan Jack Cohen introduced me to Terry Pratchett in 1990. The three of us met up several times a year. We thought about writing a popular science book based on Discworld, but Terry pointed out that Discworld runs on magic, not science. Eventually we found a solution: Roundworld, a magical containment field that keeps magic out. Inside is our universe. The wizards of Unseen University could then get really puzzled by the difference between science and magic, and Jack and I could write chapters on real Roundworld science. The Science of Discworld became a bestseller and spawned three sequels. It was great working with Terry and being allowed to play in his private universe. He was wise, generous, and smart: Jack and I learned a lot from him about how to write. He set high standards and made us work very hard on the plan of each book before agreeing to collaborate on it: we wrote 18 different plans for SoD2 including a Martian invasion scenario that got an immediate thumbs-down. The day before we were due to sign the contract for the fourth book, Terry phoned to say he'd been diagnosed with PCA. So we put it on hold, and Jack and I doubted it would ever get written. But four years later, Terry raised the issue himself, said he was really, really busy... so it was a good time to write the book! By that time he could only read letters an inch high and had to dictate every word; his persistence and determination were amazing. This is

a typical example of his generosity and commitment to friends and fans. He was always thinking about others. He enriched our world, and his books will continue to do so for a long, long time.

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Guest Editorial

Andrew Ferguson (University of Virginia)

In 1962 a team of MIT students with access to a PDP-1 computer made available a demo program they had been working on in their spare hours: *Spacewar!*, a spaceship combat simulator. Though simple to look at - two ships rotating around one large sun, amid a decorative background of stars - the game was deceptively complex to play, as each player had to stay clear not only of opponent torpedoes, but also the gravity well of the central star, while also preserving precious fuel and ammunition. All this required working four separate switches, the last of which triggered a randomizing 'hyperspace' effect that could warp one player's ship into perfect position for a kill shot on the other, but could just as easily make the ship self-destruct or dump it straight into the sun. Out of very basic icons and limited programming power, the MIT crew built a highly complex player-vs-player environment, in which every contest was similar, but no two quite the same.

In this sense, early videogaming has much in common with early twentieth-century science fiction. It is fitting that *Spacewar!*'s lead programmer, Steve Russell, took inspiration from Doc Smith's Lensman books: although not reflected in the game's necessarily spartan design, the 'glowing descriptions of spaceship encounters and space fleet maneuvers' in Smith's space operas provided an answer to the question of what to do with spare computer equipment and processing power (Brand 1972).

Since that early success, video games and science fiction have often made use of each other's icons and operations. Games have taken settings familiar from many an sf story, from the alien encroachment of *Space Invaders* to the planetary exploration of *Metroid*, and from the time travel of *Chrono Trigger* to the post-apocalypse of the *Fallout* series. Meanwhile, science fiction, in books like *Ender's Game*, films like *The Last Starfighter*, and TV shows like *Red Dwarf*, has often made use of videogaming within its created worlds. Both fields regularly, even obsessively, address questions of identity, embodiment, and representation, as well as the constructions and constraints of culture; both also are constituted in the often-fraught relations between fan groups and society - when not veering into the actively antisocial, as with Gamergate and the Rabid Puppies (cf. Wingfield 2014, Waldman 2015).

Science fiction and video games can both also boast strong scholarly communities - multiple generations' worth, in the case of the former, while the latter has been one of the most exciting and expansive bodies of criticism in the twenty-first century. However, it is only quite recently that the evident overlap between the two fields has inspired scholars to consider either in

terms of the other. After decades of recognition primarily in lists of media making use of science-fictional elements, video games are now beginning to receive full-chapter treatments in critical companions (cf. Schmeink 2011, Frelik 2014, Jagoda 2015), in addition to excellent (if outlying) individual considerations of games and series within literary-critical frameworks (e.g. Hourigan 2006, Stuart 2013, S. Attebery 2015). Game studies, meanwhile, has tended to reckon genre not by a game's position within any given megatext, but rather by the experience or mode of play on offer. Whether that be platformer, first-person shooter, puzzle, role-playing game, or any other, still the generic codes are secondary to the game's fundamental procedures. Thus while game scholars are often quick to acknowledge the influence of science fiction on the medium, it is often as a preliminary before following the study of genre into different territory (e.g. Wolf 2002, Jenkins 2004, though see also Card 2008).

It is evident that both fields have much to learn from the other, and likewise that the process of doing so is still in its early stages. One area of particular promise is that of *process*: modes of receiving and navigating texts. Neil Tringham draws on Robert Scholes' 'structured fabulation' to posit a link between sf's world generation and 'the complexly simulative rule systems that underlie many recently developed types of game' (Tringham 2015: 2); videogame studies may help sf scholars further their understanding of the genre as procedure – possibly in accordance with the 'parabolas of science fiction' developed by Brian Attebery, Veronica Hollinger, and others (B. Attebery and Hollinger 2013). Meanwhile, many of the critical moves made within science-fictional or otherwise fantastical frameworks can help elucidate the moves made within videogames and gaming cultures, as with Mackenzie Wark's playful analysis of *Deus Ex* (Wark 2007), or Adrienne Shaw on the importance of diverse representation in fictional gameworlds (Shaw 2014).

The essays here make further forays into this shared but still largely unmapped territory. Pawel Frelik leads off, linking the practice of modding - reworking software or hardware to present alternate gaming experiences - to fantastic world building; through that link, Frelik identifies a political consciousness at work, however nascent, within the modding communities for bestselling games such as *Skyrim*. Tanya Krzywinska explores the 'conspiracy hermeneutics' required of the player within the role-playing game *Secret World*, delineating along the way the concerns and tropes of the Weird in games. Jennifer Kelso Farrell identifies a cyborg mode of critique inherent within another sf subgenre, steampunk, *Alice: Madness Returns*. David Chandler looks at process as failure or malfunction in the glitched aesthetics of ruin in *Fallout 3*'s post-apocalyptic Washington, D.C. Robert Yeates brings together two further chronotopes of the fantastic,

the failed utopia and the haunted house, in considering the uncanniness of *Bioshock's* city of Rapture. And Allen Stroud reports from within the processes of contemporary game design, development, and crowdfunded marketing, in an account of his involvement in the world building of *Elite: Dangerous*.

Taken separately, each of these pieces is a testament to the fruitful intersections between science fiction and videogame studies. Taken together, they constitute an invitation to strike out and find one's own intersections - for the field is vast, and the labourers as yet few.

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Changing Realities: Video Game Mods, (Micro) Politics, and the Fantastic

Pawel Frelik (University of Warsaw)

Video games have often been charged with an insensitivity to politics. Science fiction and fantasy have been as guilty of this as other genres and, indeed, ideologies that can be labeled as (neo)imperial and neoliberal inform a significant percentage of major sf and fantasy games, including titles that seem to be progressive in other spheres. The subsequent instalments of the sf trilogy Mass Effect (2007-12) may have increasingly extended a range of available 'romance' options to include same-sex relationships for both sexes, but, at the same time, the series' mechanics of resource acquisition falls little short of free-for-all plunder and neocolonial exploitation. In fantasy, World of Warcraft (2004-) has provided its players with the attractive opportunities for social interaction and community-forming, but it also offers 'a convincing and detailed simulacrum of the process of becoming successful in capitalist societies' and 'reinforces the values of Western market-driven economies' (Rettberg 2008: 20). Such games' narratives and privileged styles of gameplay thus become, quite literally, installers and instillers of ideologies in subsequent generations of gamers. The dire condition of fantastic gaming is brought into even sharper relief when sf and fantasy games are juxtaposed with literary texts in these genres, long tools of ideology critique and vehicles of critical alterity. Are fantastic games a lost cause, then, when it comes to politically critical thinking?

Not necessarily - but not because gaming houses are likely to be swayed by progressive politics or ecological consciousness. Certainly, the detailed diagnosis of complicity offered by Nick Dyer-Witherford and Grieg de Peuter in Games of Empire: Global Capitalism and Video Games (2009) does not extend to all titles. There are some major games that attempt to undermine or at least problematize noxious politics, such as Bioshock (2007), which has been read as a critique of the logic of Objectivism (Packer 2010). Elsewhere, independent developers pursue alternatives to the normalizing ideologies of the majors with such titles as Papers, Please (2013), a game that, through positioning the player as a border guard in a dystopian Eastern-European state, exposes 'the banality of evil' and functions as 'a terrifying and elegant illustration of how inhumanity is created through systems' (Juster 2013). However, some of the most interesting forms of political engagement in fantastic gaming can be found in the modding subculture.

The following article argues for an intimate connection between the practice of modding and the genres of science fiction and fantasy. It first

offers a brief introduction to the phenomenon of modding and sketches out its definition and contexts. It then mentions several fantastic mods and proposes critical frameworks within which they can be discussed. Finally, it problematizes the cultural presence of mods by tracing links between the fan modding practice on the one hand and the video game industry processes and dominant ideologies on the other.

Despite the centrality of modding practices to the very nature of the gaming industry, there is no single accepted definition of a mod. The term has been used to refer to a broad range of reworked materials: from userinterface customizations and patches, to non-official expansions, which add new levels or maps to games, to total conversions, which replace all assets in a game, often resulting in a game belonging to a different thematic genre. Machinima, a form of filmmaking utilizing game engines, also belongs in this division, as does hardware case-modding, which calls attention to the material conditions of software production (Simon 2007: 189). A related taxonomy describes the purpose of modding. Many mods are technical fixes that eliminate what are perceived by gamers as, or simply are, code deficiencies or bugs. Others are aesthetic improvements and upgrades, often to older titles, which increase the resolution of graphics or improve the visual appearance. A rapidly growing number of mods are educational tools, particularly in the teaching of history. Finally, artists' mods constituted some of the earliest interventions into original games but also recontextualize the gaming medium in the art gallery spaces, where such mods are often exhibited.

As a cultural phenomenon, modding manifests across the entire array of game genres and conventions, but I would like to suggest that there exists a special relationship between modding and the fantastic genres, which is grounded both in their intertwined histories and the very nature of the practice. In fact, it is not an exaggeration to assert that the beginnings of video games and modmaking are inextricably interconnected with science fiction and fantasy. Although William Higginbotham made a simple tennis game on an analog computer in 1958, it is Spacewar!, written between late 1961 and February 1962 by Steve Russell and other MIT students, that is considered the ur-video game. The game spread like wildfire, so much so that in 1963 Stanford administrators ordered students and faculty to stop playing Spacewar! during daytime hours (Borland and King 2003: 26). IBM forbade its researchers to play it in the early 1970s and had to retract the ban a few months later after 'a few suddenly uncreative months of joyless research' (Brand 1972). Spacewar! was an instant runaway success that paved, if not blazed, the way for the contemporary video game culture. Except for its very first iteration, it was also technically a mod. Since the game was not released in any official format, the copies that kept mushrooming around the country

in the following decade had to be hacked - in other words, modded - to run on other mainframes and minicomputers, often incompatible with the original PDP-1 for which the game was written. Changing the original of the game was from the start an essential part of the gaming subculture. In the next two decades, many games were written using processes and tools that would nowadays be considered as characteristic of modding, even if the name itself was not used. Christiansen sees many arcade games, including such sf titles as *Super Missile Attack* (1981), effectively as mods (Christiansen 2012: 32-4). Several years later, Stuart Smith's *Adventure Construction Set* (1984) allowed for coding graphical adventure games for personal computers and included the pre-bundled *Rivers of Light*, based on the epic of Gilgamesh, often cited as one of forebears of modern fantasy.

Julian Kücklich notes that although Castle Smurfenstein (1983) is commonly considered the first true mod, the modding subculture really exploded within another science fiction title, Doom (1993), which was, arguably, 'the first game to be deliberately designed for modmaking' (Kücklich 2012: 13). By first making available Doom Editor Utility (1993), which enabled the players to create their own levels, and then freeing Doom's source code for non-commercial use in 1997, id Software pioneered a new type of the relationship between producers and fans, while also benefitting from the move commercially (Au). The modified version of the company's next game engine implemented in Quake (1996), Doom's successor, was used to power Half-Life (1998), another highly successful science fiction title. To this day, Half-Life and Half-Life 2 (2004) remain two of the most popular choices for modders and have spawned a number of successful modifications. Some of the earliest level-editing tools, which mobilized fans' creative energies, were also packaged with fantasy and sf games. Valve Hammer Editor, whose original version Worldcraft was made available as early as in 1996, was subsequently used to create maps for Half-Life, Half-Life 2, and various other games based on the Source engine, while Bethesda Softworks' The Elder Scrolls Construction Set (2002) first shipped with Morrowind (2002), a bestselling and critically acclaimed open-world fantasy game.

The intimate relationship between mods and the fantastic is borne out by the numbers. Among Greg Finch's 'Top 10 Game Mods of All Time' there are five sf and fantasy titles (Finch 2011). At the Mod Hall of Fame website, among the top mods for eleven years between 1996 and 2012 (not all years are covered), ten out of seventeen source games are science fiction or fantasy, as are twelve out of twenty one best mods. Genre mods have also traditionally topped the end-year charts at the ModDB, the largest online repository of fan reworkings, which, as of March 2015, lists 11,190 mods in 20 thematic categories. Among them, science fiction accounts for

2,947 and fantasy 1,178 (with further 1,659 mods labeled as horror). Finally, according to *PC Gamer*, among the twenty best total conversion mods ever, only six cannot be classified as science fiction or fantasy and four of those are built on sf and fantasy source games (Livingston 2015).

These statistics reflect, I assert, a special relationship between fantastic genres and the practice of modding that extends beyond their historical kinship. Naturally, fan interventions can, and very often do, concern genreneutral aspects of games: they equip the player's avatar with a torchlight, improve the quality of wall textures, or change the detail of in-game foliage. On the other hand, it is imaginary worlds that especially invite amateur creativity. Powerful vehicles of storytelling, science fiction and fantasy are, first and foremost, genres deeply invested in but also immediately defined by world-building with very few constraints and limitations. Such creative freedom can also be perceived behind the impulse for fantastic modding. Whether inspired by pre-existing narratives, such as A Game of Thrones (2012), a total-conversion mod for Crusader Kings II (2012) released a mere three months after the source game, or self-conceived mods, such as The Nameless Mod (2009), built on the basis of Deus Ex (2000), fantastic mods are the gaming medium's equivalent of fan fiction, fan edits, and reworked trailers, forms in which the fantastic also accounts for much of the production.

Science fiction and fantasy mods exemplify what can be called the cultural oscillations of fantastic imagination between the potential of absolute difference from the here and now and the specificity of individual texts. If science fiction is indeed a genre that, using unreal scenarios, seeks to convey a sense of the malleability of the future, and if fantasy does this for the more general, although not necessarily less systemic, contours of the imagination, then this sense is necessarily curtailed and demarcated in individual texts. Consequently, novels or films are frequently judged by their supposed failures to achieve the 'true' potential of a given story or scenario. Their futures or alternative worlds thus become instances of immobilized imagination, often perceived as frozen or stunted before a set of novums or fantastic parameters could mature or develop fully. The resultant sense of disappointment, combined with the conviction that one can imagine things better, informs much of the contemporary fan production in the form of fan fiction or fan edits, but also, more broadly, the dialogic character of the literatures of the fantastic, whose megatexts are constituted by an evergrowing rhizomatic network of responses, resonances, and revisions.

In this oscillation between the genre's potential and the text's foreclosure, which provides impulse for further visions and revisions, video games in general and game mods in particular seem to be a particularly privileged medium. By providing the players with a degree of agency and confronting them with choices that may – although, to be fair, do not always – influence

in-game events and change the shape of the represented world, video games engage the 'what if' question much more actively than literary fiction or cinema. At the same time, however, their slice of potential is often aborted or unfulfilled like in most other sf or fantasy texts, if not more so, given the collective authorship of game design and the frequent compromises necessitated by market demands. The flexibility of game code, particularly when fostered by technical affordances and studio policies, invites course corrections in the form of mods. Science fiction and fantasy mods thus defrost the frozen potential of specific game titles and restart the oscillations of imagination. What is more, the modifying visions and revisions need not concern unmodified games only – many modding projects build on other mods or their own earlier versions, inducing oscillations within oscillations.

The bilateral transactions between players and developers involved in game modding, as well as those between players themselves, have far-reaching consequences. While in the last two decades many culture industries have operated very fan-friendly ships, there is no other domain of electronic entertainment in which the blurring of divisions between amateur interventions and professional labor extends so far. David B. Nieborg and Shenja van der Graaf note that total conversion mod projects bear a 'striking resemblance to the organization of the game industry's production and marketing logic' (Nieborg and van der Graaf 2008: 182) while Hector Postigo points out the benefits of harnessing fan creativity by digital industries (Postigo 2007: 311). Game-modding may well be the most technically demanding form of fan participation, but the uneasy relationship between amateur fans and professional companies also complicates the political aspects of modding.

Dyer-Witheford and de Peuter note that, in the sphere of business practices, 'the game industry has pioneered methods of accumulation based on intellectual property rights, cognitive exploitation, cultural hybridization, transcontinentally subcontracted dirty work, and world-marketed commodities' (Dyer-Witheford and de Peuter 2009: xxix). There is no other culture industry that is more globally structured, more internationalized, and more deceptively egalitarian than video games. These particular socioeconomic circumstances of the game industry make the medium particularly susceptible to hegemonic discourses and ideological bias. For instance, simulation games such as Sim City (1989) and Colonization (1994) have been shown to privilege imperial mindsets not only in their narratives but also in the game mechanics, which regulates the players' behavior (Jenkins and Fuller 1995: 57-72). In science fiction, this conservative bias aligns video games with such media forms as spectacular blockbusters and sf action movies, many of which offer figurations of neoliberal spaces (Bould 2008: 182-8) but also actively promulgate the economic politics

of late capitalism. The fact that the majority of AAA-list games are parts of transmedia franchises, whose politics are at best vapid and at worst noxious, does not encourage political critiques, either.

In his discussion of motivations for modding, Sotamaa distinguishes five primary 'passions' behind it: playing, hacking, researching, artistic work, and cooperation (Sotamaa 2010: 246). One other motivation missing from this list is, increasingly, the desire to become recognized by the makers of original games, and, indeed, there are numerous examples of careers in game design being launched by successful mods. All these motivations are strengthened by the fact that, in the last two decades, there have been very few game developers who specifically forbid modding.² Several, most notably Valve Software, Epic, and id Software, have particularly encouraged it by releasing their source code to the public and bundling games with level-editors and other tools that allow players to experiment with the marketed form of a game.

None of the motivations mentioned above openly addresses questions of politics, but this does not mean that modding is a neutral activity in this respect. Many early modding interventions were considered hacker art (Huhtamo 1999) and their discussions tended to 'position mods in clear opposition with the products of corporate media culture', proposing them as 'a new way of revealing the means and questioning the truths of mainstream media' (Sotamaa 2010: 240). Waco Resurrection (2003), Eddo Stern's and C-Level's artistic reworking of the 1994 Waco events based on the Doom engine, in which the player assumes the identity of David Koresh and has to purge the compound of his enemies, is one example of such artistic political mods. However, the availability of such mods as gallery installations severely limits their political potential and popular appeal.

Naturally, the practice of modding is also deeply embedded in the political economy of the industry. Johnson goes as far as to suggest that the popularization of modding emerged at the time of transition from an industrial information economy to a network information economy, which resulted in 'new relationships between games and players and ... a new set of possible fan practices in relation to corporate intellectual properties' (Johnson 2009: 53-4). Its discourse, Postigo notes, emerges at the intersection of what he calls 'modder and developer narratives' (Postigo 2010). Despite being very much a grassroots phenomenon, modder communities and their individual members do question 'why they do what they do' and discuss 'how technologies affect their place in what is clearly understood to be a business'; they 'do not proceed blindly into participation' (Postigo 2010). In this article, however, I am more interested in the political potential of mods as texts, rather than as material commodities of politicized markets. For this, one needs to look at several examples, which, although not even the

proverbial tip of the iceberg, demonstrate the ways in which fan re-workings can engage politics.

DayZ (2012) is a multiplayer, open-world mod based on the tactical shooter ARMA 2 (2009) and its expansion pack ARMA 2: Operation Arrowhead (2010). Described by PC Gamer as 'one of the most important things to happen in gaming [in 2010]' (Lahti 2010), the mod injects the player into a fictional post-Soviet state, Chernarus, ravaged by a virus turning the population into violent zombies. Apart from mere survival, the mod has no other goals or win conditions, which, in some ways, makes it an anti-game and a conscious interpellation of many gaming conventions. The political potential of DayZ can be found in its capacity to lay bare the viciousness of players. Given a recent spate of open-world zombie-survival games, including Dead Island (2011), State of Decay (2013), and Dying Light (2015), it is easy to see the mod as yet another instance, although a particularly challenging one, of the burgeoning subgenre of survival games. Given its logic and mechanics of play, though, DayZ seems to be less a zombie-survival and more a human-survival game. While the subsequent revisions of the mod and now an alpha of its standalone version have introduced various collaborative options and toned down its initial starkness, the original mod was incredibly brutal in its candid portrayal of humanity. For every death by zombie, there were three deaths by other players and the mod's early forums were full of despairing messages from embattled veterans of Call of Duty games, incapable of surviving more than three minutes in DayZ.

A range of mods for Skyrim (2011) makes for an even more interesting case study. The fifth instalment in the Elder Scrolls series, the massivelysuccessful Skyrim is a fantasy-themed, action role-playing game in which the player's character is set to defeat Alduin, a dragon prophesied to destroy the world. Among others, the game has been praised for the complexity of gameplay, the refinement of character development, as well as the extent, diversity, and artistry of the open world, which for many players has become the sole reason to engage in the game. The basic game was followed by three official add-ons, but Skyrim's phenomenon can be best gauged by the number of mods. Bethesda Game Studios had traditionally cultivated relationships with creative fans in their earlier titles, including previous part of the Elder Scrolls franchise and Fallout 3 (2008), but Skyrim has proven exceptional in this respect. Steam Workshop hosts over 25,000 and Nexus, the company-endorsed database, over 33,000 mods, possibly the highest number ever for a single title, even assuming a degree of overlap between the two communities. Their range is naturally very broad, from minor adjustments such as the refinement of rain drops or a new set of insects, to more advanced improvements such as the introduction of the character's hypothermia index, to the larger systemic mods, adding new lands and

locations to the game's world.4

Given the focus of this article, of most interest are the mods that concern politics, which in Skyrim readily translates into economy. In the original game, the player can trade, buy, and sell goods, but the economic system is rather flat and undifferentiated. A range of mods has appeared in response to this perceived shortcoming, offering a range of factors complicating the circulation of goods and services. For instance, 'Trade Routes' (2014) dynamically adjusts the gold value and merchant supply of all kinds of goods, both material and magic-related. The adjustments are tuned and arranged in such a way that they create two separate networks of profitable trade routes. 'Trade and Barter' (2013), in turn, introduces an extensive complex of indices related to the player's status, relationship to NPCs, location, knowledge, and behavior. It even takes into account the character's race, admitting that while 'racism is ugly, it's also an unfortunate fact of life' (Kryptopyr 2013). Most interestingly, each of these options, including the racial attitudes, can be adjusted or turned off by the player, thus allowing those using the mod to express, or simulate the expression of, their political allegiance in the game.

Even more problematically, *Paradise Halls* (2013) introduces to the world of *Skyrim* the institution of slavery, which is mentioned in the lore of the Elder Scrolls universe, but is absent from the unmodded version. The mod began as a simple add-on but has now become a platform for other users' mods that address such specific aspects as 'Paradise Halls Extender: Slave Capture Spells and Poisons' (2013) and 'Immersive sex slaves' (2013), with the author of the latter defending the legitimacy of the mod in the following way: 'If you have issues with the concept of slavery take it up with Bethesda. They are the ones who initially introduced it to the Elder Scrolls franchise, along with cannibalism, drug addiction and a ton of other potentially objectionable practices' (Mutifex 2013).⁵

The above descriptions may appear somewhat underwhelming from the point of view of traditionally understood politics, but this sense may be a consequence of the fact that politics in general tends to be deployed in games differently than in film or television. Unless a game specifically addresses the questions of governance or intercommunal relations, which relatively few science fiction and fantasy games do as their main preoccupation, the presence of politically charged topics is subdued and very often implied in the constraints and affordances of the game mechanics rather than foregrounded in the narrative. Consequently, most mods, including those to science fiction and fantasy games, that possess any political import will target rather discreet elements of the original titles and alter their relatively minor aspects. This makes the traditional modes of interpretation, primarily applicable to thematic events, characters, and

scenarios, insufficient. Instead, it is far more productive to regard these mods that engage political issues in one way or another as instances of what Rita Raley calls 'tactical media' and what Alexander Galloway and Eugene Thacker have in mind when they write about 'exploits'.

Although Raley's original texts were various media projects informed by political activism and dissent and grounded in art circles, including socalled persuasive games and art mods, her terms and observations can be extended to video game mods at large. Borrowing her term from Michel de Certeau's distinction between tactics and strategies, as outlined in The Practice of Everyday Life (1980), she defines tactical media as 'not oriented toward the grand, sweeping revolutionary event; rather, they engage in a micropolitics of disruption, intervention, and education' (Raley 2009:1). At the core of most of these projects is 'disturbance' as well as 'intervention and disruption of a dominant semiotic regime, the temporary creation of a situation in which signs, messages, and narratives are set into play and critical thinking becomes possible' (Raley 6). Raley also stresses 'distinct temporality' and 'ephemerality' (Raley 2009: 7), points out their articulation through performance rather than as static objects (Raley 2009: 12), and notes their 'fleeting' and continually morphing character (Raley 2009: 13). Noting that de Certeau's clean distinction may not be readily applicable in the world of digital media, Raley redefines tactics as 'tools for users who are also producers' (Raley 2009: 16). Resonances with the active fandom and their production are unmistakable and modders seem to fit the description even better than fan film editors or fan fiction writers.

Alexander Galloway and Eugene Thacker's The Exploit: A Theory of Networks (2007) provides another theoretical framework which can help understand the micropolitical operations of modding projects. The authors note that in protocological networks, 'political acts generally happen not by shifting power from one place to another but by exploiting power differentials already existing in the system' and that '[p]rotocological struggles do not center around changing existent technologies but instead involve discovering holes in existent technologies and projecting potential change through those holes. Hackers call these holes 'exploits' (Galloway and Thacker 2007: 81). It does not take much to see that modders attempting to alter the original games precisely look for such 'holes', whose absence, on the other hand, often accounts for the relative lack of systemic mods for certain titles. Important to their definition is the assumption that the very activity of finding and exploiting such gaps in protocols is in itself political. Consequently, providing in-game characters with flashlights can be treated as a micropolitical intervention, and the development of slaver mods for Skyrim doubly so: because it integrates the practice in the game narrative and because it challenges Bethesda's lip-service mention of slavery in the

universe's lore by making it real within the gameworld.

As tactical interventions and exploits, science fiction and fantasy mods can be read as double critique. On the one hand, they highlight the blind spots of game producers and expose their compromises: in the case of Skyrim, its economic naivety, which is particularly jarring given the complexity of character development and combat simulations. The existence of such mods as 'Trade and Barter' and Paradise Halls can also compel the players to consider the extent and the character of reallife economic conditions, many of which remain normally hidden or are accepted unreflectively. On the other hand, however, fantastic mods, much more so than modifications for historical or quasi-realistic titles, expose the lacunas of imagination among the modders themselves. Because the development of mods is so decentred, very few researchers have looked at them as a phenomenon at large, but the repositories such as Nexus offer this possibility. And what mods improve and fix is as interesting as what they do not. With over 30,000 mods for Skyrim collected. Nexus has no mods that offer ways of solving conflicts other than violence and intimidation. Among all economically-oriented mods investigated there is not a single one that would imagine an economic system other than capitalist or precapitalist. Given the almost unlimited moddability of the game's engine and the number of existing modifications, such absences are very telling. Calling them indicative of the poverty of imagination would be certainly unfair, but such absences certainly demonstrate the pervasiveness of certain socioeconomic ideologies in general and the dominant ideologies of gamedesign in particular. And while the political conservatism in historical mods can be, at least hypothetically, explained by the reluctance to break the players' immersion in the 'true' milieu of the times, including those times' ideological blind spots, the absences of certain challenges in science fiction and fantasy modifications cannot be so easily defended.

Given the extensive technical and logistic affordances of the modding subcultures, fantastic mods function both as admirable evidence of the vibrancy of individual and collective creativity and as painful reminders of the limits of the same imagination as well as the degree to which current economic or political ideologies constrain the capacity to construct truly alternative futures. Fredric Jameson famously quipped that it is easier to imagine the end of the world than the end of capitalism. That mainstream games are complicit in this is understandable. Without belittling the wealth of existing mods, the deficiency of radical solutions to various kinds of absences and problems in game mods speaks to a more widespread condition of our imaginaries. Having said that, one could also look for its reasons in the very structures that make modding possible: editing tools and access to the games' code. Numerous scholars from McLuhan to

Manovich have pointed out the central role of the medium's contexts, or what Michel Foucault called 'dispositif', in the range of possible expression. From this perspective, modding opens as many doors as it closes, offering a degree of creative freedom, but one invisibly policed by the limitations of the tools at hand. Modders' reliance on the 'master's tools' as well as the professional aspirations of fan programmers may stunt their subversive potential and turn them into the very tools of the system they have a capacity to challenge. Having said *that*, as mentioned earlier, the very character of the mod as a media form privileges Raley's tactical micro-interventions and Galloway and Thacker's exploits, rather than huge systemic alterations. In 'The Politics of Gamers: Does What You Play Reflect What You Believe' (2014), Paul Reid suggests affinities between political convictions and the players' preferences for certain gaming genres. One could, I think, equally productively ask: 'Does how you mod reflect what you believe?

Endnotes

- ¹ The genre system in video games is largely defined differently from that in other media, which, more often than not, rely on thematic determinations. Researchers in game studies suggest taxonomies largely reflective of a type of cognitive or haptic interaction required from the player. Wolf enumerates as many as 42 different types (Wolf 2011: 117), including adventure, flying, platform, role-playing, and strategy, each of which can accommodate diverse thematics, such as mafia story, action, techno-thriller, military, or science fiction with little influence on the actual experience of gameplay.
- ² In some cases, when mods have been mistakenly removed from sharing sites for supposed copyright violations, companies are very quick to reaffirm their commitment to the policy of openness (McDouglas 2015). The instances of mods being 'foxed', permanently removed by community operators at the request of the owner of the original IP, have been relatively rare compared to the total number of mods available, although not unheard of.
- ³ See also Hong 2013, Hong and Chen 2014, Nieborg and Graf 2008, and Poor 2013.
- ⁴ There are also highly specific mods for *Skyrim*, such as 'Hysteria', written by Lisa Hermsen and Elizabeth Goins, based on a series of late nineteenth-century stories, most centrally Charlotte Perkins Gilman's 'The Yellow Wall-Paper' (1892).
- ⁵ Slavery mods have been a more constant presence in historical and simulation games such as those belonging to the *Civilization* series (cf. Mir 2012).

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Conspiracy Hermeneutics: The Secret World as Weird Tale

Tanya Krzywinska (Falmouth University)

Through close consideration of the multiplayer online game *The Secret World* (Funcom, 2012), this article works towards a definition of 'Weird Games' as a basis for advocating the aesthetic potential of Weird fiction for digital games. While the Weird tale shares some features with the Gothic, it has a very distinctive form, as summarized by H.P. Lovecraft:

The true weird tale has something more than secret murder, bloody bones, or a sheeted form clanking chains according to rule. A certain atmosphere of breathless and unexplainable dread of outer, unknown forces must be present; and there must be a hint, expressed with a seriousness and portentousness becoming its subject, of that most terrible conception of the human brain – a malign and particular suspension or defeat of those fixed laws of Nature which are our only safeguard against the assaults of chaos and the daemons of unplumbed space. (Quoted in Joshi 1990: 6; my italics)

The Weird tale may be regarded broadly as a part of twentieth-century populist or even trash writing but it also has a place in digital games and, like the Gothic, it crosses genres and (plat) forms. Indicators of its presence in indie games include Alone (Greenwood Games, 2013), developed to break the fourth wall of the immersive context provided by Oculus Rift; Dear Esther (thechineseroom, 2012), which pushed horror grammar towards atmosphere rather than action; and The Binding of Isaac (Headup Games, 2011). To these can be added examples from prior, bigger-budget games such as the Lovecraftian homage Eternal Darkness: Sanity's Requiem (Silicon Knights, 2002), the early entries in the Silent Hill series (particularly 1 and 2; Konami, 1999 and 2001), and the Twin Peaks-like Deadly Premonition (Access Games, 2010/2012), where a real-time mechanic contributes to the creation of its version of the Weird. More than simply adaptation, the Weird is exerting an influence on the formation of innovative contemporary game grammar, largely in contention with established conventions. The analytic framework around this assertion is based on an investigation of the ways that the participatory and rule-based nature of digital game form shapes, at a fundamental level, the ways that the Weird tale manifests in games, a term that I shall truncate to 'Weird' so as to relocate it outside text-based literature and place emphasis on its affective coordinates. My proposition is that there are certain properties of digital games that are capable of generating a new dimension within the affective experience of Weird.

The Secret World (TSW) provides a fitting example of the ludic

adaptation of the Weird tale and offers a means of exploring the adaptive possibilities within games for Weird fiction. In TSW these possibilities emerge through the specific use of intertextuality, which is pivotal in the production of what might be called the 'conspiracy hermeneutic'. As a disturbance in the symbolic order generated by the specific nature of computer-based media, the conspiracy hermeneutic is intended to create for players a strong sensation of Weird. Central to this claim is the idea that at the conjunction of participatory game media and the characteristic features of Weird fiction there lurks a powerful means of fundamental disturbance that has transformational and critical potency. Such potential is ably illustrated by the derangement of schematic and conventionalized boundaries between the signification of fact and fiction, producing a vast and dizzying network of looped refractions and recursive intertexts that are intended to induce vertigo and to scatter asunder the coherence and stability of the symbolic order. Working with, and undermining, our inbuilt will to mastery and knowledge, the Weird of the game leaves a frisson of doubt within any comforting sense of rational certainty and authority. It does this by making precarious the basic distinction between fiction and fact and thereby causing the frameworks by which we assign meaning to fall into disarray. We may have physical mastery over the game's interface, but unlike the affective trajectory of standard games, that mastery is frequently belittled and devalued in the face of monumental, obscured, and occulted powers - even if with a rather less melancholic affect than is the case with games such as Eternal Darkness: Sanity's Requiem or Limbo (Playdead, 2010). TSW is therefore trying to innovate an 'action-based' game grammar in an open-world setting rather than reframe it elsewhere or use a more linear, closed world, as is the case with Limbo, Eternal Darkness, or Alan Wake (Remedy Entertainment, 2010). In blending together Lovecraft's critical attempts to locate the sphere of Weird with a type of paranoiac, everything-is-true reading that underlies conspiracy theory and Graham Harman's 'Weird Realism', this article claims that Weird has an aptitude for ludic participation that is most apparent in its power to recast tired regimes of player sovereignty. Weird becomes present where the medium of games is used against itself.

The Weird tale can appear hard to distinguish from other related genres such as fantasy, supernatural, horror, Gothic and science fiction; critics often tend to overly tribalize such imagination-based fiction based on taste (much as occurs with rock music). The value of such labour is not so much that we can beat our friends in late-night arguments about what stories belong to which tribes (as fun as that might be), but instead lies in the help that such distinctions can provide in the identification of the more subtle threads, tangential intertexts and elusive affective intentions of Weird fiction. In their

introduction to Realms of Fantasy, Malcolm Edwards and Robert Holdstock outline five settings for stories that fall into the fantasy, supernatural, horror, Gothic, and science fiction camp: stories set in the past; those set in present-day lost worlds; those on other planets; those in the distant future, and those in fantasy Earths quite separate from our own, but with affinities to it (Edwards and Holdstock 1983: 7). Weird does not however fit neatly with any of these, and the fact that it doesn't tells us a great deal about the weirdness of Weird. Principally, Weird fiction takes place in the here and now: there is no comforting distancing device of placing events in the past or the future, or indeed in a constructed 'secondary creation' such as Middle Earth or Azeroth. Equally, Weird is devoid of the epic qualities so common in fantasy and has no principled, valiant or intrepid heroes such as Aragorn or Conan, nor even an anti-hero like Michael Moorcock's Elric. There is never much action, bar perhaps some wild flailing about and, possibly, some running away. Weird might therefore be said to be in its best sense the antithesis of epic fantasy and technological optimism: tech-noir, for example, is marked off by its Weird negativism and pessimism. While I have rather confidently asserted its differences, S.T. Joshi cautions that 'the weird tale [...] did not (and perhaps does not now) exist as a genre but as a consequence of a world view [...] If the weird tale exists now as a genre, it may only be because critics and publishers have deemed it so by fiat' (Joshi 1990: 1).

This does not mean that newer, altered uses of the term Weird are not legitimate or interesting; far from it. The adoption of the Anglo-Saxon word 'Wyrd' for example has rich resonance with outsider art, mystical and occult fiction, and shamanistic practices. However, the definition of 'Weird' as addressed here in the context of games is guided by Lovecraft, mainly to provide a starting point for understanding its presence in games and its existing and possible relationships with the games and game form. Joshi suggests that it is Lovecraft's insistence on psychological realism that leads it away from Gothic; although in an overly tidy manoeuvre he locates Gothic temporally within novels written in the late eighteenth and early nineteenth centuries. While E.T.A. Hoffman's short tales might be characterized by psychological realism, their distinctive mode is apparent. For example, the plot of 'The Sandman' (1817) revolves around the fatal, conspiratorial misreading of events on the part of the mad central character, thereby framing the supernatural as subjective and not as a property of objective reality. This diegetically grounded 'conspiracy hermeneutic' is therefore a feature in keeping with the Gothic, rather than fully occupying the domain of Weird. Specifically, Weird is a property of reality; it is not an effect of psychology, even though it might be taken as symptomatic of a character's imagination by that or other characters. The supernatural in the context of

Weird is not metaphysical or mystical, even though it might appear to have such properties. As Joshi says, it is 'not *ontological* but *epistemological*: it is only our ignorance of certain laws that creates the illusion of supernaturalism' (Joshi 1990: 7; italics in original).

Adding a further dimension, appropriately, to this conception, Graham Harman places emphasis on the otherness of real when explaining the value of Lovecraft's Weird: 'reality itself is weird because reality itself is incommensurable with any attempt to represent or measure it [...] when it comes to grasping reality, illusion and innuendo are the best we can do' (Harman 2012: 51). Harman insists that Lovecraft is a writer of great allusive subtlety rather than a literalist genre hack, while Joshi claims that the appearance of Lovecraft's work in the pulp magazine Weird Tales may have made Weird into a genre but caused 'the contemptuous dismissal of all weird work on the part of academic critics' (Joshi 1990: 3). The appearance, then, of Weird in games has much to live up to, mixing as it does horror with allusive intimations of the dark sublime. Weird clearly has the power to appeal across the pulp-elite divide and like the Weird tale, digital games have been described as wasteful, populist adolescent pulp and a new, highly sophisticated art form.

In his 1927 essay *Supernatural Horror in Literature*, Lovecraft lists some characteristics that help identify the properties of Weird:

Indeed we may say that this school [romantic, semi gothic, quasi moral] still survives; for to it clearly belong such of our contemporary horrortales as specialise in events rather than atmospheric details, address the intellect rather than the impressionistic imagination, cultivate a luminous glamour rather than a malign tensity or psychological verisimilitude, and take a definite stand in sympathy with mankind and its welfare. It has its undeniable strength, and because the 'human element' commands a wider audience than does the sheer artistic nightmare. If not quite so potent as the latter, it is because a diluted product can never achieve the intensity of a concentrated essence. (Lovecraft 1973: 43)

Atmosphere over events; malign tensity; psychological verisimilitude; appeal to the impressionistic imagination; and a lack of any sympathy for humanity: these are helpful coordinates through which to assess any claims to Weird in games, as well as a lens through which to evaluate *TSW* as Weird fiction.

In setting the scene for the analysis of *TSW* as a ludic addition to the pantheon of Weird tales, it is noteworthy that many prototypical Weird tales make use of codes and ludic elements. As Jon Peterson has argued, Robert Louis Stevenson's *Treasure Island* (1883) contains various elements that have proved important to games. But an equally significant tale is Edgar Allan Poe's 'The Gold Bug' (1843), based on a cryptographic puzzle which works

to involve the reader as puzzle solver above and beyond the narration. This extends therefore beyond the usual code of enigma that Roland Barthes claims is integral to story-telling (Barthes 1990: 17): the enigma is not solved simply by 'reading on', forward through the text, but instead by the reader putting work into become more than a reader. The enigmatic dimension to storytelling, reading, and games proves important for the discussion of the conspiracy hermeneutic of *TSW*. Suffice to say for the present that connections with games are part of the Weird tale from early on and it is this capacity that contemporary games regularly mine. In its highly reflexive and baroque way *TSW* invokes a complex web of literary and popular cultural sources as a means of producing Weird and in so doing constructs its conspiracy hermeneutic by attempting to dissolve the boundaries between myth, fiction, and reality.

It is part of normative game grammar for players to act on the situation that a game presents them with - the term 'player' is predicated on this supposition. A fundamental feature of games is their array of feedback systems through which game and player respond to one another - a player acts in response to a situation and the game responds, often in ways that lead a player to understand their action as either helpful or unhelpful towards achieving a winning condition (or at least not failing in some way). In this sense we can consider feedback as an 'event' in the computing and design processes of game; players expect games to be predictable, rulebased entities, which grates against Lovecraft's coordinates of Weird. In addition, the possibilities open to players are often yoked to pre-scripted narrative events that are causally linked. Even the most ambient games are therefore event-heavy. The entire construction of place, time and mise-enscène are dovetailed with affordances for action both in terms what the player is able to do and how the game feeds back. Games then are largely event-based, and, more than that, these events are very often regulatory. In this sense the logical and purposive construction of games, with their stable currencies and balances, and our pleasure in their regularity and predictability, is very far removed from the anti-human irrational dissonance of Weird. TSW draws on this normative vocabulary and indeed formal characteristic of games. Players build their character's powers through the accumulation of skill points gained from killing enemies and running quests of various types. In skilling-up, new areas of the map open up to players and more difficult quests and dungeons become available. The quest and dungeon structure that constitutes the principal mode of gameplay is eventbased, even if there are many atmospheric devices throughout the game. Regularity and predictability are built into gameplay so that players are able to plan the trajectory of their character and manage risk; the game provides much information to help the player in these regards (maps, location of quests, health bars, experience-point tracking, numeric hit statistics, etc.). Like many games, there is an ethos of building knowledge and skill towards an increase in purchase power in the game's world. There is however a considerable attempt in *TSW* to shift the game away from the traditional dungeon-crawler, which emphasizes gathering loot in a world clearly coded as fantasy, towards a play experience thickly encrusted in atmospheric intertextual details drawn from a huge range of sources, thereby acting as a Lovecraftian counterweight to the event-based form of games. In weighting the game against events and towards atmospherics, it begins to coincide with Harman's definition of Weird, where the medium of games is used against itself.

Unlike similar games such as Star Wars: The Old Republic (BioWare, 2011-) or World of Warcraft (Blizzard Entertainment, 2004-), TSW is set in a version of the 'real' world in which the supernatural and the occult have become manifest, making the familiar strange as in Weird and recent TV series such as Buffy the Vampire Slayer (1997-2003), True Blood (2008-14), or Penny Dreadful (2014-). The real-world context helps the story move closer towards Lovecraft's requirement for psychological verisimilitude. There is no doubt that the supernatural exists and that lack of ambiguity in the game frames it squarely as occult fantasy, thereby shoring up a basic distinction between real and imaginary, although some features of the game do chip away at these markers. In terms of existing game grammar, the game overturns the expected role-playing alignments of 'lawful good' and 'lawful bad' or neutral and chaotic and aims for far greater moral ambiguity. It is hard to judge if the three institutionalized factions (Templar, Dragon, and Illuminati) are good, evil, neutral, lawful, chaotic, or something guite different. All three have dubious moral standing, the details of which are well beyond the sphere of knowledge of the player-character. This works against the usual 'knowable' and quantified world of system-based games. The factions' shaded history provides a further layer of enigma that plays into the conspiracy hermeneutic. Psychological verisimilitude arises out of this, as the player-character is shown to be a mere speck on a vast opaque canvas. Here different rhetorics of monstrosity crowd into the scene and many intimations call into question the 'humanity' of the individual factions and what player-characters may do under their aegis. Although operating in secret, the various factions are in conflict, struggling to gain or retain power even as other forces are seeking to destroy humanity. This precarious situation is the premise on which the atmospherics of malign tensity rest, while also providing motivation for the standard role-playing practice of player versus player (PvP).

The format of PvP in the game has three flavours (termed Battlefields, Warzones and Fightclubs) and there is no world-based PvP or specialist

server. Warzones differ little from standard 'Capture the Flag' and 'King of the Hill' formats; while the persistent Battlezone can turn PvP into player versus environment (PvE), arguably representing an invisible or occulted force that underlines the game's conspiracy milieu. The character awakens at the start of the game to find that they have acquired a strange power that emanates from their body and are called to join one of the three factions, which players have already chosen (based in the first instance on little knowledge of the nature of that faction) on a previous screen. In terms of the narrative arc, joining a faction is justified as their only option if they are to develop their nascent powers and help in the fight against the forces seeking to destroy humanity. There are no playable fantasy races dividing the game off from other sf or fantasy-based games: all available characters are coded as human, are gendered, with a wide range of racial characteristics available. In addition, the game is very fashion-conscious, with clothes and accessories stores available in a vast range of styles - and paid for with in-game or out-of-game currency - to help players express themselves. The world might be in peril yet players are strongly encouraged to look stylish in the face of adversity. The palpable sense of humanity that is created through these (inevitably normative) elements is aimed at bridging the gap between player and character but differs from the polarization of human and monstrosity of much fantasy fiction (in games as elsewhere). Creating a bond between player and character and at least intimating something of the vulnerability of the human is, however, important if the full effect of Weird is to come into play.

While ostensibly the game world is signified as the world we live in, distortions in the space and time continuum are evident from early on, giving the otherwise Gothic signification a science-fiction feel, yet nonetheless creating the vertigo that's emblematic of Weird. Very early on in TSW the player is treated to a cutscene where they stand on a tube train platform and look out into the infinite void of cosmic space. This spectacle generates a sense of vertigo, physically, psychologically, and metaphysically. As established by Lovecraft, non-Euclidean geometry alongside juxtapositions in scale becomes a ready means of evoking the Weird. It is in this mode that atmosphere and psychological verisimilitude take centre stage in the game - even if both are generated through the evocation of (oddly) familiar signs of Weird. If the game did not use such devices so reflexively in the context of the grammar of an MMORPG (massively multiple online role-playing game) and as a means of undermining the position of the conventional hero, then the experience offered by the game would be simply quotidian. However, there is a problem that arises between the expectations of player agency and mastery in the context of a Weird MMORPG.

In Lovecraft's 'The Dreams in the Witch House' (1933), Walter Gilman

is beleaquered by dreams and haunted by increasingly alienating sounds and visions. Rather than being an active hero, he is largely passive and terrified throughout the story, occupying the role of 'false hero' - unable to act, to save the day, as is common to Gothic fiction. Gilman becomes a somnambulant participant in a satanic pact and when he finally finds the wherewithal to react to prevent the sacrifice of a child, he is bested, and ends the story dead with his heart eaten out. Alongside this passivity, and indeed by virtue of it, Gilman is involuntarily flung beyond normative space and time, as boundaries between waking and dreaming collapse in an affective palette of paralysis and bewilderment. These are signified by disarranged perspectives, impossible geometries, and fathomless abysses causing certainties to fall in a welter of unresolved enigmas. Confounded by drumming cacophonies of sounds and dim memories of agreements without agency, Gilman is left dumbfounded and confused. He is subject to an occult conspiracy that he has no grasp of and thereby becomes an emblem of paralysis and involuntary action. This runs counter to the normative, positivist trajectory inherent in most games. Given that human activity, technology and computing are often integral to a belief in progress, it isn't too far off the pace to argue that Weird games work against their own medium (or least the discourse that surrounds that medium).

The experiences of gaining mastery, problem-solving, and improving skill are principal pleasures for players, driving the design of many digital games. This is a problem for games that follow Gothic or Weird pathways and particularly so given that the false hero is so fundamental to them. As Manuel Aguirre has written, 'A key to Gothic thus resides in its centring the flawed character as protagonist [while] the standard hero of traditional tales is often demoted to a helpless or passive stance' (Aguirre 2013: 11). Even in TSW's opening cutscene, the player-character's newly-found power comes at the price of visions and dreams that disturb the borders of knowability, reality, and fixed identity. When considered in the round, the representation of humanity conjured by the game is far from 'good' or heroic; humans are either in a state of banal denial or foolishly questing for the acquisition of knowledge and power over others. This is evident in the design of the game's PvP modes. While TSW's PvP differs little from the usual structures that support for players a sense of mastery and skill, the act of 'killing' player-characters from other factions while the world burns, ambiguity is already raised morally - all the more so because of the game's general moral greyness. Nonetheless at some level the 'human' is still valued in all its fallen and confused state; it is even defined by such. This conception provides the door for the game's entry into the types of affect and atmosphere associated with romanticism, pathos, and tragedy. To this is added a distinctly Schopenhauerian pessimism, much as would

be expected of any text that makes a claim on Weird. In this, even though perhaps obliquely, the game is at least somewhat consonant with Lovecraft's Weird counsel for a lack of sympathy for the human. This is drawn out through the absence of redemption or anything more than short-term resolutions, and the overwhelming presence of entropy. There is of course as in an MMORPG, just the endless return of temporarily slain monsters and the striving for more skill points. The tensions and oscillations between game form/grammar and Weird can be observed through a closer look at TSW's gameplay and the way that it constructs its conspiracy hermeneutic.

Players find their first mission on Solomon Island, located off the coast of New England where, in a geographically appropriate manner, there is an outbreak of Lovecraftian Mythos. In this area the game draws on a very specific and highly influential regional accent of the American Gothic to create its ludic version of Weird. The ingénue player-character arrives in the area's main town, Kingsmouth, to discover a running battle between living and dead townsfolk - seemingly a classic zombie-apocalypse situation. Players are requisitioned by the local sheriff to run errands as well as to fulfil the factional requirement to investigate the manifestation. It soon becomes plain that zombies are the least of the town's troubles and symptomatic of a far more dangerous threat to humanity. While later the player will be sent to investigate other locations, Egypt, for example, the player spends a lengthy period in the New England area, pursuing a range of goals and engaging with a range of appropriate myths and texts. The game is much more open than, for example, Alan Wake; players are free to guest, indulge in exploration, shop, gather, or fight other factions. Players can also easily visit other areas of the game world by virtue of fast-travel device known as Agartha, a kind of mystic, faster-than-light underground railway system wherein a distortion of the space-time continuum is harnessed to enable players to travel quickly and easily. The game emphasizes world-building and slow-burn character development, and the sense of progress that this implies does sit incongruously with the intention of Weird, although unlike most MMORPGs there is no expression of level that consolidates the progression system. Nonetheless a polyphony of Gothic accents are brought together as a means of creating a strong sense of 'worldness' for players; and indeed that world is never what it appears to be; nor are players ever afforded full revelation of what governs the world. Polyphony abides there in the range of signification mobilized by the game, creating a fabric of competing narratives and intertexts that add complexity and mitigate across narrative closure: in addition to American Gothic, we encounter steampunk and Victorian Gothic, Eastern mysticism and martial arts, witchcraft and various versions of folk magic, and occultism and occult systems, ranging from John Dee through to post-quantum theory Chaos Magic. All these

intertexts also help to turn away from events as primary towards imaginative engagement and atmosphere produced by enigma and textual richness.

The New England area locates the game firmly within the literature of Weird as an offspring of American Gothic. This location is ripe with stories and histories well suited to a strongly Weird theme. As in magic realism, myth and reality are interlaced. What the player encounters in Kingsmouth is a catastrophe that has objective reality in diegetic terms. It is not a subjective projection of a delirious author, as with Alan Wake which revisits a similar scenario in John Carpenter's film In the Mouth of Madness (1994). As suits the formal specificity of a multiplayer online game, players of TSW fight collectively and ostensibly for the survival of the human race, within which the player plays their small part by trying to make meaning from their place and limited agency in this world of enigmatic obscurities. TSW is a game pieced together from many fragments and in that sense it is consciously multiply authored. The game's environment is testimony to this. The closeness of the name 'Kingsmouth' to the Innsmouth of Lovecraft's short stories 'The Call of Cthulhu' (1928) and 'The Shadow over Innsmouth' (1936) is enough to alert the literate player to an important legacy requisite to the American Gothic and to Lovecraft's 'fictionalized New England landscape' (Joshi 1990: xvii). Entry into the town also reveals street names, visible on the in-game map, such as Dunwich Road, Arkham Avenue and Lovecraft Lane. Other popular American Gothic texts are evoked in the names of landmarks such as Poe Cove and Elm Street. A short trip down the Dunwich Road confirms that we are knee-deep in Lovecraft's Mythos: boxes of rotting squid lie abandoned yet half-eaten on a zombie-infested street, and if we follow the trail of empty boxes we arrive at the sea, to be greeted by a large tentacular sea monster, who seems to regard the player as a large and tasty squid. The boxes state in bright lettering 'Fresh from the deep to your door' and 'Product of the USA', subtly suggesting, rather against the ethos of Lovecraft's cosmic horror, that human activity may well be implicated in the plight of the town. The first group task (the Polaris dungeon) that the player encounters is, of course, to defeat an enormous tentacled sea-monster: Cthulhu in all but name (although Lovecraft aficionados might suggest that given the location it should really be the much less well-publicized Dagon). The game is thickly populated with many and diverse intertexts, the effect of which is to interpellate the player into the game space by making use of their prior knowledge of horror and gothic texts. In this, the game is tailored to a genre-literate audience (in terms of Gothic, Weird and horror as well as MMORPGs/RPGs) who already have an investment in the subject matter.

In making use of Weird's psychological verisimilitude, *TSW* achieves a distinctive blend of fact and fiction. This is underlined through the structures and properties of conspiracy theory and the type of reading that is intrinsic

to conspiracy theory. The game, and indeed the player, forges connections that transverse usual boundaries, paying little attention to their signifying frameworks. All signs regardless of their status - iconic, symbolic, or indexical; real or imaginary - are to be read and decoded as components of a great hidden (occulted) system. The game environment is itself a text to be read in this way, as is clear from an early guest 'The Kingsmouth Code', in which the player must seek out Illuminati signs inscribed into the fabric of the town's infrastructure by the town's founding fathers, which indicate their secret activities and quest for power. Games rely heavily on properties of the game space to convey story, thereby placing the player in the role of investigator. Playing any game requires, at some stage, acts of close reading. In the context of a game drawing on the Gothic, close reading is not only constitutive of a ludic mode of engagement but also fuses that engagement to thematic syntax. The requirement of close reading has a particular resonance with Poe's detective, Auguste Dupin. The investigative act of gathering and attending to fragments in order to construct story is a central mechanism of the game and one that is infused with a conspiracystyle approach to reading. Lore fragments are scattered around the gamespace, often hidden in hard-to-locate places or encountered randomly while undertaking other tasks. These provide an extensive backstory, often contextualizing places, people and situations. If collected, players can read, for example, about the plight of the trawler The Lady Margaret at dock in Kingsmouth's harbour, what its crew encountered at sea and brought back to the town, all delivered in the same peculiarly encrusted enunciative style of Lovecraft's writing. This story arc dovetails into another strand of lore entitled 'The Fog', a clear homage to Stephen King's novel. Players can also learn more about the town's Illuminati past, and the character Beaumont who sought to steal from them, providing a large link in the main story-quest chain. There are still many enigmatic gaps, however; the lore fragments never guite give the whole story, just limited perspectives that do not add up to omniscient authorial statements.

Story here is a multi-dimensional assemblage, and is more powerful, far-reaching and enigmatically rich as a result. It is more than simply a way of giving meaning to progress bars, instead it is a complex and carefully constructed tapestry locating the player in terms of place and time, encouraging a close engagement with the game as text. Like the conspiracy theorist, the player of *TSW* is invited to put together an assemblage of signs in order to ascertain and elaborate on underlying patterns ak Robert Shea and Robert Anton Wilson's conspiracy-based *Illuminatus! Trilogy* (1975).

Nowhere is this made more apparent than in the game's investigation quests. There is a limited range of different types of quest activities available to players, clearly designed to appeal to different play styles. Some involve

stealth-style missions, others collection-type activities, while others send the players down a central story-arc, but the most innovative and Weirdly laden are the investigations, with materials similar to those that are at work in Poe's tales of ratiocination. There are several in each geographical zone of the game. One such example, entitled 'Angels and Demons', is undertaken in the Egypt zones. The player seeks to find out if a company operating in the zone is a front for something 'murkier'. On entering their offices, the player encounters a dead employee, bearing an ID card that can be retrieved from the corpse. This provides a clue to gaining access to the man's email system and it is delivered as a type of riddle: 'My surname is common in classic literature. And my clearance level is the key.' The ID card shows that the man's name is H. Glass and his clearance level is 'Gold-bug'. Appropriately, the player must codify 'Glass' to gain entry to the computer. This guest is neatly emblematic of the way that TSW translates the Weird into digital game form, without losing sight of either its investigative and overdetermined hermeneutic dimension nor its wider textual heritage and, at the same time. goes some way towards using the medium of games against itself to create at least for some players a Weird sense of paradox and ambiguity.

In many such missions, the player must gain a good knowledge of the geography and have a decent graphics processor in order to view all the signs and notices that litter the game space. In addition to the game's wiki, the in-game internet browser is designed to help players make sense of the more abstruse clues, looking up verse and chapter in the Bible for example in the case of 'The Kingsmouth Code', or hunting down the source of the Gold-bug. Bringing the internet into the game softens the border between fiction and fact, in accord with both Gothic and conspiracy tales. This is exemplified when undertaking a mission to find out the backstory of Sam Krieg (a hard-drinking, world-sour horror writer and homage to Stephen King) where the player must look for a clue on a cover of one of his books that can only be found online. One of the advantages of the blurring of fact and fiction is that it adds depth and diversity to a given narrative; it is often the case that horror has often tried to convince the reader in various ways not just to suspend disbelief, but instead to read psychotically and believe, providing further encouragement to a conspiratorial reading. The presence of puzzles, enigmas, and fragments invites the player to go deeper into the text, the ludic hermeneutics of which can be regarded as an innovation in the way that players are engaged and marking a significant and powerful addition through the use of game media to Weird fiction.

To conclude, the type of paranoiac reading that successful Weird generates is produced by the conspiracy hermeneutic but is also of course the outcome of an individual's subjective inclinations and serendipitous correspondences. The investigation quests and intertextual flurries of *TSW*

are geared to appeal to those sensitive to such pleasures; for those players less inclined to such approaches, the game creates atmosphere in other, more immediate ways. However, the game has not done well commercially, suggesting a limited market. But I would claim the game as a welcome innovation in MMORPG design, with the tools provided by Weird pushing at the boundaries of what game media is and how normative that grammar has become. TSW occupies a space that has been hollowed out by writers such as Umberto Eco, Kenneth Grant, and the more recent neo-Weird fiction of China Miéville. Conspiracy and magic become closely bound: hidden connections are sought out and imagined, fictions are regarded as true, perspectives become deliberately distorted and, thereby, normative distinctions and assumptions are challenged. The Secret World goes some way towards accomplishing that by sowing such chaos into its design, well beyond simple style and aesthetics. Following Lovecraft's coordinates of Weird fiction, the game creates its media-specific version of Weird through the vertigo of infinite, detailed, impressionistic, and overdetermined correspondences. Intensifying this is the way that the 'real' internet is woven into the fabric of the game, breaking its medial frame and opening to an ecology of tangential connections, interconnections, paranoia, and conspiracy.

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Psychology is Technology: A Steampunk Reading of *Alice: Madness Returns*

Jennifer Kelso Farrell (Milwaukee School of Engineering)

Despite being 150 years old, Lewis Carroll's Alice's Adventures in Wonderland (1865) and Through the Looking-Glass and What Alice Found There (1871) remain goldmines for pop-cultural references and re-imaginings. What in part makes the works so fascinating is that they appeal to adults and children equally. Martin Gardner suggests that Carroll's 'doing away with morals' opened up an entirely new genre for Victorian children (Gardner 2000: 62). When compared to children's tales written by the Brothers Grimm, Charles Dickens and Hans Christian Andersen, Carroll's books are relatively moralfree. Bad people are not necessarily punished and even good ones may be morally ambiguous. Both groups, furthermore, are subject to the violence common in Victorian children's tales (cf. McGeorge 1998: 109-17), and to beheading in particular. Gardner points to a tension between depictions of physical violence, and perceptions of real-world emotional or psychological violence: the Queen of Hearts' 'constant orders for beheading are shocking to those modern critics of children's literature who feel that juvenile fiction should be free of all violence and especially violence with Freudian undertones. [...] My guess is that the normal child finds it all very amusing and is not damaged in the least' (Gardner 2000: 82).

This tension is at the heart of the Spicy Horse game Alice: Madness Returns (2011). The game is a sequel to American McGee's Alice (2000), which put the player into the mind of the catatonic Alice Liddell after she had witnessed the death of her family members in a fire assumed to have been caused by her cat, Dinah. The game begins in 1875, approximately ten years after these deaths, with Alice confined in the Rutledge Asylum. The goal of the 2000 game was for Alice to fight her way out of her catatonic state and back into the functioning world through levels starting with Dementia and ending with Heart of Darkness, where she defeats the Red Queen so that Wonderland can shed its nightmarish overlay and be restored as the place of Alice's childhood fantasies. At the end of the game, an apparently healed Alice finally leaves the asylum with her copy of Adventures in Wonderland underarm.

The sequel takes place one year after the events of its predecessor. Alice is now a 19-year-old woman who cannot leave her childhood behind, living in a world of physical, emotional, and especially psychological violence. The opening to *Madness Returns* shows her in a psychiatry session, undergoing hypnosis and psychotherapy while trying to piece her mind back together

after the traumatic incidents of the previous game. The game's first images are a ticking clock and a swinging key, both symbols of the hypnosis treatment she is undergoing. Alice is speaking to her psychiatrist, Dr Bumby, who wants her to forget the memory of her family's death and go to Wonderland. As they are speaking, more keys come out of the darkness until we see Alice as a child, holding her toy rabbit. Alice utters, 'It's not a dream. It's a memory and it makes me sick!' We briefly relive the fire that killed her family and left her an orphan. Bumby forces Alice deeper into her subconscious despite the horrors that live there. Although Bumby is clearly the game's villain, it is the combination of Victorian psychology and Freudian psychoanalysis that affords him such control over Alice and other patients. To combat this hybrid social and scientific practice, Alice draws on another anachronistic blend of technologies: steampunk. *Alice: Madness Returns* functions as a steampunk critique of psychotherapy.

This may seem like an unlikely target for a science fiction video game, especially one marketed as third-person action-horror, but such a move is common to steampunk: 'Through its combination of history and speculative fiction, steampunk is uniquely positioned to explore ideas that have their roots in our past, and to consider and critique social and technological solutions of past, present, and future alike' (Siemann 2014: 3). While Alice is hacking her way through monsters, piecing together the mystery of the train, and collecting her memories, she is also undoing the damage done by Bumby's therapy. Once again she confronts the Red Queen, but this time she understands that the Queen is her sister, Lizzie. Alice realizes that it is not the Red Queen who is the enemy, but rather the mysterious entity known as the Dollmaker, later revealed as Bumby's Wonderland identity. As Alice puts her memories back together she comprehends that she did not kill her family, nor did her cat, Dinah, but rather that it was Bumby, who had been sexually abusing Lizzie and set fire to the Liddells' home in order to hide his crime.

The player finds Alice living in a decrepit home for orphaned and abandoned children presided over by Bumby. Her surroundings are gritty and dingy, rendered in a palette of washed-out greys, beiges, and creams. The other children mock her, calling her a murderer. When confronted, Alice states, 'I'm past a cure. Terminal condition.' She is haunted by hallucinations of Wonderland, and by a secret that threatens both her and her childhood fantasy land. Bumby has led her to believe that her guilt and anger have taken the form of an Infernal Train, which is running amok through Wonderland, destroying everything in its path. The train's origin is seemingly confirmed by the denizens of Wonderland, as familiar characters ranging from The Mad Hatter to The Mock Turtle to The Carpenter accuse her of creating it. Her victory from one year previous has warped Wonderland into a steampunk

apocalypse.

Bumby's ultimate goal is to erase Alice's memories and turn her into a malleable toy who bears the guilt for the murders of her family. In that sense, Bumby embodies a grotesque version of Victorian moral management akin to the male antagonists of Gothic and sensation fictions by Wilkie Collins and Sheridan LeFanu, amongst others. He also represents a common characterization of steampunk concerns, where 'dreams of progress, both scientific and social, are revealed as dangerous drives to impose one's own order on others' (Rose 2009: 328). Bumby's progressive social science covers up his violent imposition of order onto Alice and other patients.

One can see his manipulation at work in his conversation with Alice as she undergoes hypnosis at the outset of the game. As she attempts to recover memories of the night her family died, Bumby utters the following phrases:

Let go of the memory, it's unproductive.
Your preference doesn't signify.
The cost of forgetting is high.
Memory is a curse more often than a blessing.
Humans are a slave to memory. Memories must be strictly managed,
Alice

As Alice is deep in hypnosis, she begins to talk about her former Wonderland friends. When she finds herself in a boat with the March Hare, she comments how things are different. Bumby responds with 'Change is good, it's the first link in the chain of forgetting.' Throughout the session, Bumby tries to get Alice to go past the events of her family's demise and go to Wonderland, which she insists is dead to her. Bumby discourages this line of thought and pushes her further into Wonderland. The game shifts from cinematic gameplay to animation reminiscent of nineteenth-century woodcut illustrations. As Alice begins to realize that all is not right in Wonderland, the characters distort, distend, and eventually explode in a tide of blood. The scene ends when Alice is leaving her session and we hear Bumby tell his next patient, 'The past is dead'.

Michel Foucault in *Madness and Civilization* (1961) pointed to the nineteenth century as the moment that both madness and the cure to madness were moved into the realm of guilt as defined by that century's 'moral methods' (Foucault 1998: 182). What once had been a spiritual concern became a cause for shame on the part of both the sufferer and the sufferer's family: 'Psychology, as a means of curing, is henceforth organized around punishment' (Foucault 1998:182). Instead of using psychoanalysis for its stated purpose, to aid in 'the uncovering of increasingly deep and defended unconscious material' (Summers 2011: 14), Bumby uses it to prevent Alice from remembering the night of her family's deaths, and also

to instil by convincing her she started the fatal fire.

This treatment of Alice epitomizes nineteenth-century psychology, especially in terms of what was understood about memory (see Pedlar 2006). Mental illness was considered a reflection of an individual's degeneracy. In true Victorian spirit, Alice's mind must be studied scientifically as well as morally in order for her infirmity to be understood. This desire to fully know an object is something that the Victorians and steampunks share. As Margaret Rose explains:

This interplay between geneaology (the Victorians are our distant forebears) and analogy (we are very much like the Victorians) is a key feature of steampunk historical representation, because at the same time as historical change is asserted by the genealogical model, the fundamental idea of progress is negated by the analogic model. (Rose 2009: 328)

But while the Victorian desire for reason drove scientific and medical advancements, it also justified social and political controls, and made possible abuses by the likes of Bumby. Steampunk, on the other hand, 'never leaves this pastness unmolested, as these technologies are reimagined in deliberately fantastic or anachronistic ways' (Rose 2009:

222). From a theoretical standpoint steampunk is most often concerned with 'learning to read all that is folded into any particular created thing – that is, learning to connect the source materials to particularly cultural, technical, and environmental practices, skills, histories, and memories of meaning and value' (Forlini 2010: 73). In steampunk, technological re-imagination is found not only in stories, but also in a do-it-yourself arts and crafts aesthetic, with steampunkers often creating their own costumes and accessories up to and including prosthetics that merge flesh and machine.

In Alice: Madness Returns, this steampunk fascination is exhibited through renderings of familiar characters as cyborg or clockwork beings. The Dormouse has melded with a motorized wheelchair and the Mad Hatter's limbs can be pulled off and on with ease. One game chapter is devoted to children who have been combined with dolls forming strange sentient chimeras. Alice herself can become a clockwork cyborg when she dons the Hattress Dress (fig. 1). The primary dress Alice wears - leather with buckles and grommets, with a bow on the back made out of a clock surrounded by leathery wings - is





simply labeled 'Steam', and while it is inspired by the apocalyptic steampunk world of the Mad Hatter, it is not directly patterned off him (fig. 2).

While much of steampunk is concerned with technological artefacts and the relationship between owner and object, this does not mean that a science itself can't also be examined; for instance, explorations of eugenics and transhumanism abound in steampunk literature (Hodder 2011, Kenyon 2010). Unlike eugenics or transhumanism, psychology evolved primarily in the sphere of popular culture: a true social science, in the sense that it was not solely developed in laboratories by medical experts who brought it to the public consciousness, but rather introduced through magazines and newspapers and other forms of public discourse (Shields 2007: 95). In the United States, for example, psychology was quickly embraced by advertisers as they sought new ways to part the burgeoning middle class from its hard-earned money (Schlereth 1991: 157).

Alice: Madness Returns shows how psychoanalytic narratives can be altered and deployed as a means to controlling another individual not only economically, but in all aspects of life. The game's critical focus on psychology as a technology of the modern world is what truly defines it as steampunk. To accept psychology as a potential technology is not far-fetched, considering how much work was being done in the nineteenth century in an attempt to understand the brain as a physical object and not just a metaphysical center. What if the technology in question is the human body, specifically, the human brain? This makes the body itself a steampunk object. As Rebecca Onion argues, for steampunk, technology and the human body are not just similar, but also permeable to one another. The danger that is inherent in the relationship between body and object is 're-cast' as 'evidence of the aliveness or volatility of technology' (Onion 2008: 149), and is in need of the discipline psychology provides.

Psychology came into its own as scientific study in the 1870s when it moved away from its roots in philosophy and into more rigorous empirical science. In the 1890s the first psychological clinic was established and psychology tests were introduced. Freud's psychoanalysis, however, separated from other psychological research by linking psychology and storytelling, so that the analyst controls the narrative of the patient's neurosis. It is the Freudian fixation on the organic origins of madness that emphasizes the analysis of dreams, which pushes the practice of hypnosis,

and fuels the practice of psychoanalysis. Carroll himself felt that there was a connection between dreaming, the waking world, and madness; as a diary entry from 1856 elucidates: 'May we not then sometimes define insanity as an inability to distinguish which is the waking and which the sleeping life?' (quoted Gardner 2000: 67)

While Madness Returns is set two decades earlier than Freud's work, it is clearly his science that is being examined and critiqued; this sort of anachronistic historical play constitutes the game's novum. By introducing psychoanalysis prior to its historical development, the story is allowed the narrative freedom to create its own fictional narrative using minor historical characters (Rose 2009: 323-5). By taking Alice Liddell, who inspired the Carroll books, and building an alternate history around her, the game challenges the contemporary world's understanding of the Alice stories. As Suzanne Barber and Matt Hale comment:

Scrounging through the 'junkyard' of history, steampunk authors and artisans employ the nineteenth century, and more generally the documented past, as a reservoir of conceptual and material fragments of previous cultures and ways of being. It is from these temporally rendered units of human creation that steampunks craft counterfactual histories. (Barber and Hale 2013: 165)

The new narrative asks us to evaluate our own attachment to the stories and their accepted histories, as well as our relationship with the violence embedded within the original texts.

Freudian criticism has done a great to deal to both help and hinder contemporary understandings of the Alice books. Freud's own assessment of *Alice's Adventures in Wonderland*, written thirteen years after the book's publication, was that it was a book about 'the mind keeping as its solitary prisoner its own dream of a world' (quoted Rackin 1991: 10). Indeed, Freud's influence can be seen in *Alice: Madness Returns* as the psychosexual drama unfolds in Alice's real world, alongside the horror story unraveling in her psychosis. If Alice is a prisoner within her mind, then Bumby is using his knowledge of Freudian techniques to make himself her jailor.

Alice's goal throughout the game is to retake control of her own narrative from Bumby. As she pieces together the events that led to her family's demise, including her sister's sexual abuse and the true cause of their deaths, Alice realizes that the doctor has used his skills and knowledge of psychological science to keep her in mental limbo, with the ultimate goal of adding her to his child prostitution ring. Bumby's psychoanalytic treatment seeks to exploit the more Victorian notion that the two hemispheres of the brain bestowed two different personalities, one good and the other evil (Maher and Maher 1994: 75). Alice is split into two people, her real world

persona and the woman she is in Wonderland. One is meek and confused while the other is dangerous, cunning, and rebellious. By bringing out the 'good' personality, Bumby is suppressing the 'evil' one that was supposedly responsible for her family's deaths. But this also serves to limit Alice's agency, and prevent her from playing any part in her own story.

In terms of gameplay this can be guite frustrating, as 'real-world' Alice does very little besides walk and run. She does not jump, carry objects, or interact much with her environment. The Alice of Returns is not the proper Victorian girl who struggled against the illogical and mercurial world of Wonderland. That seven-year-old girl with whom most readers are familiar is gone. In her place is a teenager who is sarcastic, snarky, rude, and most importantly, violent; one who will not accept the role Bumby has for her. Donald Rackin notes of Carroll's Alice, 'Often we find "poor Alice" (one of the narrator's favorite epithets) crying over what we - and the narrator find amusing' (Rackin 1991: 108). Spicy Horse's Alice is no such creature. There are no tears for her; instead of crying and helplessly watching the events unfold around her, she is more likely to pick up her Vorpal blade and slice her way to a solution. This is an empowered Alice, a subversion of the Victorian child she once was. Not only is she eschewing expected etiquette in order to survive, she is embracing the increasingly mechanized late-nineteenth-century world in which she lives. In this sense the games are a continuation of the original books. If one sees the Alice stories as a collective examination of a child's mind going from naïve psyche through adolescent development to burgeoning adult, then it makes sense that Alice would continue to develop, adjusting from the physical and fantastical violence of childhood to the technological and psychological violence of the adult world.

As Stephanie Shields comments of Victorian society, emotion in nature and regulation was used as a means of describing and defining not only differences between races and socio-economic classes but also between men and women: 'women's traits, especially emotion, were described as complementary to men's and how, through this maneuver, unequal distribution of social and economic power and status hierarchies was justified and perpetuated' (Shields 2007: 93). In this case, 'complementary' means that for each strength a sex demonstrated, it would have an equal weakness that would be a strength in the opposite sex. British and American psychologists used the concept as 'the basis for the hypothesis that females were more likely to be nearer to the average in physical and mental attributes, whereas the distribution of males on these dimensions was wider' (Shields 2007: 94). Thus it was more likely for men to be exceptionally intelligent (or exceptionally stupid) than it was for women, who were relegated to the narrow slice of the spectrum, that of 'average'. Women were further hindered

by intellectual development being considered as a female weakness, thanks in part to earlier sexual maturity, or the monthly menstrual blood loss preventing adequate brain development. This was complemented, in turn, by increased emotionality, sensitivity, and perception. But even then, 'Women's emotion, feminine emotion was portrayed as lacking the power and energy ascribed to masculine passion, identified with an inferior and ineffectual emotionality' (Shields 2007: 98). Women thus exist to establish a balance between the sexes; but, by design all categories are defined or dominated by male attributes, in order to establish why the status quo is right and true.

Alice's problems in the real world are compounded by her family's solicitor squandering her inheritance, leaving her impoverished, with no clear way to improve her situation - another form of degeneracy in the eyes of Victorian society. In Alice's time, such degeneracy was often fostered by residence within the ever-growing steam-powered industrial cities - or, perhaps, it was the city that prevented natural degenerates from succumbing to their lower evolutionary status. In one scenario the environment of the city, with its overcrowding, malnutrition, air pollution, raw sewage, and other unsanitary conditions, was the source of mental illness. In the other scenario, the city actually allowed lesser individuals to survive: 'Poverty, especially in a form that became known as pauperism, was defined not as an environmental condition that could be remedied with the provision of resources but as an inherent attribute of this personality type' (Maher and Maher 1994: 74). Though Alice fits this 'personality type' because of circumstances entirely beyond her control, she is still consigned to the pauper class, dependent on those who see her as a subject for experimentation, or a means for their own gratification - but only for as long as she is useful to them.

Bumby confirms this at game's end, after Alice regains her memories and confronts him in a train station. Bumby reminds her of her status, and why no one will listen to the true narrative of her family's demise: 'A hysterical woman, former lunatic, roaring accusations against a respectable social architect and scientist? My God, Alice, who would believe you?'. He dismisses her as a 'psychotic, silly bitch' then tells her to get going as her replacement should arrive at any minute. Alice snatches his pocket-watch, the tool of his psychological control; then morphs from the Alice of the real world into the Alice of Wonderland, exchanging her pauper's rags for her steampunk attire before shoving Bumby into the path of an oncoming train. The steam-powered locomotive becomes the Infernal Train of vengeance, as Alice channels the violence of the Carroll originals to reclaim her agency.

Rather than reverting back to real-world Alice, she stays as the Wonderland version and exits the train station to a world that is an odd hybrid of Wonderland and Victorian London. Large colorful mushrooms,

oversized gaming implements, and enormous tree roots stand next to dingy brick buildings, and the gas lamplight is overshadowed by a n eerie glow from the unearthly sky. The game closes with a voiceover from the Cheshire Cat:

Ah, Alice, we can't go home again. No surprise, really. Only a very few find the way and even then most of them don't recognize it when they do. Delusions, too, die hard. Only the savage regard the endurance of pain as the measure of worth. Forgetting pain is convenient. Remembering it, agonizing. But recovering the truth is worth the suffering. And our Wonderland, though damaged, is safe in memory ... for now.

Unlike American McGee's Alice, Madness Returns ends on a note of ambiguity. Alice's battles within Wonderland and Victorian society have left her mentally scarred and unable to return fully to either realm. Through the lens of steampunk, Alice: Madness Returns underscores the nineteenth century's continual need for information and knowledge even at the cost of the subject of study. Psychology's reliability is questioned and its practitioners are subjected to scrutiny. Alice Liddell, a minor historical character, becomes the center of a new narrative in which she is not whole nor is she healed by the end of the game but she represents the fusing of science with her own history as she approaches the future.

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Retro-future Imperfect: Glitch and Ruin in Fallout 3

David Chandler (University of Tulsa)

In the year 2077, after millennia of armed conflict, the destructive nature of man could sustain itself no longer. The world was plunged into an abyss of nuclear fire and radiation. But it was not, as some had predicted, the end of the world. Instead, the apocalypse was simply the prologue to another bloody chapter of human history. For man had succeeded in destroying the world - but war, war never changes. (Fallout 3)

Fallout 3 opens with a flickering light bulb or fuse, part of some ambiguous and antiquated piece of technology attempting to function in the derelict husk of a city bus. The vehicle's radio plays The Ink Spots' 'I Don't Want to Set the World on Fire' as the camera zooms out to show a dilapidated city street and the Washington Monument stands still recognizable despite a few missing pieces in the distance. The slow reveal establishes the game's setting as well as one of its central thematic tensions: the ever-encroaching obsolescence of the technology of the age and that same technology's refusal to guit. The game's opening narration continues this exposition, ruminating on the cyclical nature of war and violence while images of grave stones and bombed-out suburban streets provide stock visual fodder built from a pile of post-apocalyptic clichés. Indeed, the game at large functions as a type of interactive post-apocalypse megatext, drawing aesthetic inspiration largely from Atomic Age science fiction literature and cinema where the optimism in the promises of atomic energy is weighed against its destructive potential. Fallout 3, however, is not a video game concerned at large with the destructive potential of the atomic bomb for the purpose of providing a moral tale. Instead, the game embraces the results of such destruction to explore the creative potential of a broken world by encouraging the player to test the limits of the game itself in ways that often result in numerous glitches, revealing the architecture at work beneath the game's surface. The broken machinery and ruinous locales become reminders that the game, as a piece of media, is just as unfixed and fractured as the post-apocalyptic world on display. By prioritizing player agency in an environment built from detritus, Fallout 3 invites the player to seek or to create alternate modes of play that illustrate an emergent freedom afforded by the post-apocalyptic sensibility reflected in the game's aesthetic design.

To understand Fallout 3's relationship with ruin and glitch first requires elucidation of how technological and ludological limits inform the concept of agency. Technological boundaries often appear alongside the restrictions of play, referred to as affordances, that property of video games that allows the player certain degrees of agency within the digital environments: areas

to access, actions to perform, characters to encounter, etc. These limitations are set by a game's engine, the software framework on which the game is built. In *Unit Operations*, lan Bogost explains the functions of a game's engine:

The engine's principal effort, rendering, has nothing to do with actual gameplay. Game engines also abstract routines for characters and objects in the world; manage physics routines to keep objects from falling out of the world and to dictate their interaction; and provide sound management, artificial intelligence (AI), network communications, scripting and tools. (Bogost 2008: 60)

The engine performs tasks that the player never glimpses, showing instead the results of unseen calculations and functions in the form of the game proper. A game's engine dictates the aesthetic and capabilities of a game and make it function as efficiently as the hardware and software allow.

While the engine builds the field of play, it also dictates (in a much more muted sense) the types of play afforded in the game's environment. In *Half Real* (2011), Jesper Juul refers to such affordances as 'rules' as they relate to traditional game theory, mostly to impose limitations on play and define the game with a set of specific instructions (Juul 2011: 57-59).¹ Depending on the power of the engine, only certain actions are permissible, especially in a game as vast and detailed as *Fallout 3*. Video games, however, are seldom content to simply provide such boundaries. By their interactive nature, games allow enough player agency to constantly test the limits of the engines and gameplay, and this agency contains the potential to rebel against the very architecture of the video game, thus opening the game up to further exploration.

It is precisely this type of gameplay Peter Krapp refers to when distinguishing 'between playing a game and playing with a game [...] whereas the former teaches one the game through navigating the game's commands and controls, the latter opens up to critical and self-aware exploration' (Krapp 2011: 77). Krapp's description of playing with a game requires an awareness of a game's boundaries as set by the software's engine. Bogost, too, points out that games (and any other simulated system) 'vigilantly encourage trespass over their borders' (Bogost 2008: 25). To interact with a game this way is to test the strictures of its established rules and to discover the limits of its affordances. Testing these boundaries reveals 'a basic asymmetry between the relative simplicity of the game rules and the relative complexity of the actual playing of the game' (Juul 2011: 73–5, emphasis in original). Games implicitly ask players to navigate this tension in order to vest in the player the opportunity to discover ways of

playing that could potentially undermine the system.

When players attempt to act beyond the opportunities the game affords them, they are often met with a system or software malfunction, or glitch. The term itself is vague, blurred designation, often encompassing all general software mistakes, user-generated or otherwise. In their lexicon entry on 'Glitch', Olga Goiunova and Alexei Shulgin provide a general definition for the titular error:

A glitch is a singular dysfunctional event that allows insight beyond the customary, omnipresent, and alien computer aesthetics. A glitch is a mess that is a moment, a possibility to glance at software's inner structure, whether it is a mechanism of data compression or HTML code. Although a glitch does not reveal the true functionality of the computer, it shows the ghostly conventionality of the forms by which digital spaces are organized. (Goiunova and Shulgin 2008: 114)

A glitch, then, provides a glimpse into the mechanisms that drive textual production. Encountering a glitch is looking under the hood of a machinic process that lies at the heart of software design. Glitches disrupt the immersive properties of video games and remind the player that the medium has frontiers open for exploration and exploitation.

Krapp asserts that the glitch is evidence of a genuine aesthetic unique to software and its relationship to the machines that run it. He says specifically of video games, 'If one postulates that computer games are an adaptive response to the omnipresence of computing devices [...] the fact that games afford users significant room for error is an important deviation from the common assumptions about the strictures of human-computer interfaces' (Krapp 2011: 76).2 Of course, glitches are not exclusively usergenerated. They can occur at seemingly random moments, and they correct themselves just as often as they cause system crashes, which affords the moniker'glitch' an understandably vaque definition.³ Goriunova and Shulgin, much like Krapp, nevertheless agree that the glitch 'can be claimed to be a manifestation of genuine software aesthetics' because glitches inform 'computing's aesthetic core, as marks of (dys)functions, (re)actions, and (e) motions that are worked out in human-computer assemblages' (Goriunova and Shulgin 2008: 111). Essentially, glitches take on aesthetic properties in games because they acknowledge both the systemic affordances of the game's engine and the player's agency to test those affordances. They reveal unintended avenues within the game that can only be accessed by pushing against the engine's capabilities.

This aspect of game design - the potential malfunction of the game's engine due to user manipulation - manifests in *Fallout 3*'s aesthetic of brokenness: shattered machines, intentionally glitchy gameplay, ruinous

settings. The franchise began when the now defunct Interplay Entertainment developed and published *Fallout* in 1997, an isometric role-playing game (RPG) set in a post-apocalyptic United States. In the game's fiction, a nuclear war caused by resource disputes between China and the United States turned the world into a barren wasteland, fracturing society into small factions that compete for survival. The game begins when the Vault Dweller (the game's protagonist) emerges from his or her home in Vault 13 to secure the vault's water supply and defend the people from an impending mutant attack. The player has 500 in-game days to accomplish these tasks, (though the game was later patched to allot the player much more time), and the flexibility of *Fallout*'s role-playing system allowed for multiple means to accomplish these goals, with violence and diplomacy serving as the opposite ends of the gameplay spectrum.

In 2008, developer Bethesda transformed the series considerably when the creative team swapped the isometric camera for a full three-dimensional world in *Fallout 3*, rendered through its use of the Gamebryo and Havok engines, the former modeling most of the world and the latter providing the basis for animated physics. The core idea behind the game remains the same (the player controls a vault-dweller who steps out into an irradiated world), but changes to the gameplay and visual style completely revamp the franchise template. Players no longer have to complete tasks in an allotted amount of time, and they have the option of controlling their customizable character in first- or third-person. This change in camera perspective makes what had been a static, purely tactical perspective into a cinematic experience more akin to Atomic Age science fiction film.⁴ The advancements in video game technology allow for more complex gameplay systems, further transforming a rudimentary combat system into a more nuanced mixture of real-time movement and turn-based play.

This structural departure from the earlier titles mainly made possible a far more expansive world. As a result of this grandiose scope, the game is riddled with glitches, most appearing unpredictably and causing the game to crash or character models to behave in strange ways. The game's openended design, however, incentivizes the same types of gameplay that test the game's limits, as Bogost and Krapp discuss, and with such a myriad of gameplay options, the player often discovers new glitches whenever she manipulates the game and strains its engine. Because these glitches appear in an environment strewn with defunct retro-future technologies and freakish character models, distinguishing between an intentional example of media distortion and an actual engine error becomes difficult (and at times, impossible). The game anticipates the disruptive potential of glitch by setting the game in a world already broken by nuclear holocaust. Further, this embrace of disorder provides a reflection on how the medium itself is

always operationally unfixed.

The most apparently nebulous and unstructured aspect of *Fallout 3* is its central narrative, or lack thereof. The post-apocalyptic genre has seen many different narrative incarnations, but Matthew Wolf-Meyers posits that such stories exist to ultimately reveal three readings:

1.) The re-advancement of technology, thereby allowing the reader to perceive the inevitable triumph of technology in a more primitive society than his or her own, 2.) A warning against war, which is simply political in that it attempts to defuse militaristic leanings within the culture that has influenced the author to produce the novel, or 3.) The neo-Luddite reduction of modern society (or possibly near-future society) to a simpler version, sometimes also allowing the author to entertain 'inevitable' historical cycles if the narrative spans the chronological development of a culture of post-apocalyptic survivors. (Wolf-Meyers 2008)

Wolf-Meyers admits that any one text can contain aspects of each scenario, and *Fallout 3* is no exception. The game's atmosphere and landscape is much more carefully cultivated than its plot, relegating the central narrative, the protagonist's search for her father, James, to being more an excuse to explore the wastes of Washington D.C. than a complex plot or character study. If *Fallout 3* were to be read in Wolf-Meyers' terms, his third option concerning historical cycles would most closely align with its themes, albeit through atmosphere and isolated incidents instead of a narrative arc.

Indeed, Fallout 3 illustrates the exhaustion of its own narrative structure in the game's beginning by employing a bildungsroman opening section that equates the game's tutorial with the protagonist's growing up in stages, each chapter representing a portion of the character's life. The player begins the game at her character's birth in Vault 101, one of the few surviving underground safe havens where people escaped the nuclear holocaust, and chooses her character's sex and future appearance. The player learns the mechanics of locomotion when the protagonist is a toddler and chooses certain personality traits to invest in from an in-game children's book titled You're SPECIAL!⁵ On the protagonist's tenth birthday, the player learns the game's shooting mechanics as well as how to use the Pip-Boy 3000, a device that monitors the character's health, equipment, location, and numerous other aspects. The game skips six years later to the protagonist's teenage years, when she takes the G.O.A.T. (Generalized Occupational Aptitude Test) that confronts her with hypothetical scenarios and offers multiple responses from which the player must choose in order to discern the character's profession.

This lengthy tutorial ends when James, the character's father, breaks

out of Vault 101, and the Vault's overseer sends a security team to detain the protagonist, prompting the player to escape to the wasteland. Before the player leaves the Vault completely, the game offers her the option to completely re-customize her character (sex, race, skills, etc.), deleting the previous hour's progress in favor of breaking the game's already established fiction. Essentially, the entire *bildung* story can, through player agency, be rewritten. That *Fallout 3* readily prioritizes the player's choice rather than narrative structure reveals the game's exhaustion with the mechanics of character-building, essentially shattering the illusion of narrative importance in the game's first few hours. The player gets a glimpse behind the façade of video-game tutorializing masking as narrative importance by breaking the game's established fiction.⁶ Though this moment of narrative incongruity may not directly relate to the medium's being unfixed from an object-oriented perspective, it does show that cohesive narrative is not the primary concern of the game's design.

After the bildung section in Vault 101, Fallout 3's narrative proper is largely player-discovered. The main guest of the game's campaign involves finding the protagonist's father, whose goal to power up a broken water purifier (nested in a converted Jefferson Memorial) is opposed by the Enclave, a totalitarian regime loyal to an artificial intelligence posing as the president. This central plot exists alongside numerous others drawn from the world of Atomic Age science fiction cinema. One guest, titled 'Those!' pits the player against an army of giant fire ants that have overrun a town outside the city in a parody of the 1954 movie Them!, a movie about giant mutant ants caused by atomic testing. Other quests include stealing the Declaration of Independence, disarming or detonating a nuclear bomb, and helping a local shopkeeper write her Wasteland Survival Guide. Each quest is a self-contained, optional event. They range from the politically incisive (leading a group of ghouls in revolution against those who brand them as second-class citizens) to drive-in cinema schlock (joining a group of subway-dwelling vampires).

Fallout 3 essentially uses these types of story in bulk to create an almost encyclopedic catalog of pulp narratives, not necessarily to celebrate the history of popular post-apocalyptic fiction but to reveal the exhaustion of such narrative tropes and to reconstitute them into components of a larger narrative-making machine. The game does not insist on the importance of these stories as stories. Rather, Fallout 3 uses these self-contained quests, each with individual plots, to inform a larger emergent narrative design. These segments function independently as moving parts, identifiable as stock plot types from the history of science fiction that, when reconstituted in a game, become active mechanisms of a larger system.

This becomes more apparent as the player constructs her own narrative

in the Capitol Wasteland. The world changes according to her decisions. Depending on the moral choices made, the player can net positive or negative 'karma', prompting citizens hearing of the player's exploits to react accordingly. Even the radio announcer Three Dog (who establishes the protagonist's moniker as the 'Lone Wanderer') recounts tales of the player's actions, condemning or lauding him or her as the game progresses. Nearly every person who plays the game encounters it differently due to its emergent play systems, distancing the game from its progressive-type franchise predecessors. Since quests can be completed in any order or even ignored completely, the player can actively resist the game's already openapproach to narrative design. *Fallout 3*, then, becomes a game not about progressing through the wastes, or even restoring Washington D.C. to its former state. Rather, it emphasizes and revels in the creative possibilities offered by a broken world in which the idea of story itself is shattered.

It is fitting, then, that the world to be explored is in ruins. The formal capital of the United States has been shattered but still remains recognizable for different means of interaction. Evan Watts notes how ruin can represent subversion, saying, 'If physical structures of society serve as a tangible manifestation of the parallel destruction of the social structures of that society, then ruin imagery comes to be associated with societal subversion and freedom from social constraints' (Watts 2013: 249). Concerning the material presence and function of ruins, Julia Hell and Andreas Schöle assert, 'The ruin is a ruin precisely because it seems to have lost its function or meaning in the present, while retaining a suggestive, unstable semantic potential. The ruin has blurred edges in more ways than one. As an aesthetic and conceptual category, it is uniquely ill-defined' (Hell and Schönle 2010: 6). As clearly as ruins provide evidence of a functional society as well as its eventual collapse, they also suggest alternate realities, opportunities to rethink standing symbols of social order or works of architecture.

Throughout the Capital Wastes, the player finds characters reappropriating fractured structures and materials for new, sustainable uses. Moira Brown, a junk and supply merchant in the town of Megaton, offers a central philosophy for life after the apocalypse in terms of living among detritus instead of exercising the impetus to restore order:

Did you ever try to put a broken piece of glass back together? Even if the pieces fit, you can't make it whole again the way it was. But if you're clever, you can still use the pieces to make other useful things. Maybe even something wonderful, like a mosaic ... Well, the world broke just like glass. And everyone's trying to put it back together like it was, but it'll never come together the same way. (Fallout 3 2008)

She finds the creative potential of brokenness, but such creativity often

mixes with necessity in Fallout 3's fractured landscape. Shantytowns dot the landscape. An old aircraft carrier now serves as a multi-tiered makeshift city. Subways and metro stations play host to communities of monsters and wary survivors alike. Watts asserts that some are even transformed 'in ways often antithetical to the common social meanings associated with them - for example, the Lincoln monument is now home to a group of slavers. These juxtapositions reaffirm the mutual ruination of physical and social structures' (Watts 2013: 257). Not all national symbols, however, are so perverted. Rather, most are reconfigured in significant ways for the new world to serve specific functions in the game's fiction. A group called the Brotherhood of Steel recondition the Washington Monument to act as a giant radio tower for Galaxy News Radio, a pseudo-anarchic radio station that updates the world about the goings on in the Capital Wasteland. The Jefferson Memorial, too, has been transformed into a giant water purifier. The ruins are necessarily repurposed to sustain a new social order through functionality rather than symbolism, most of which have profound mechanical effects. A bombedout apartment, for instance, can be used as a sniper's nest. Crumbling overpasses that once made travel more convenient have now been turned into impassable cliffs. Here, the aesthetic of brokenness allows the player to interact with a familiar environment in an unfamiliar way.

Fallout 3 accomplishes a similar feat with its retro style. Watts points out that, though the nuclear war that created the Capital Wasteland took place in 2077, 'all the destroyed advertisements, holograms, and music heard on the radio that represent the pre-war United States are distinctly inspired by, or, in fact, directly taken from the American culture of the 1940s and 1950s, in a cultural critique of the unbridled optimism of the era' (Watts 2013: 257). The game takes place in a post-apocalyptic alternate America where Atomic Age optimism never faded, thus the broken values reflected in the ruins are hardly contemporary ones.⁸ Fallout offers a timeline completely separate from actual events. Much like narrative, history is broken into pieces, to be reconstructed together by the player only should she wish to sift through documents or actively seek out knowledge of the past.

These elements - ruinous environments, open-world structure, a lack of narrative authority - invite close readings of symbolic representation, but Fallout 3's fractured setting and affordance of player agency invite critical readings of its interactive space as well. In Gamer Theory, McKenzie Wark cultivates a theory of 'gamespace' in which digital worlds are ruins to be explored by 'gamer theorists', critical players who act as archaeologists (Wark 2007: 22). To scrutinize and move through digital spaces in experimental ways is 'to play more intimately with [them]', and Fallout 3 offers countless alternative avenues to pursue (22). Navigating the dilapidated landscapes encourages play that tests the boundaries of the game's technical and ludic

affordances, and the game even anticipates players' finding their ways to difficult areas. Tom Bissell writes about how such experiences are endemic to storytelling in open-world games:

Teeming with secrets, hidden areas, and surprises that may pounce only on the second or third (or fourth) play-through – I still laugh to think of the time I made it to an isolated, hard-to-find corner of *Fallout 3's* Wasteland and was greeted by the words FUCK YOU spray-painted on a rock – video games favor a form of storytelling that is, in many ways, completely unprecedented. (Bissell 2011: 3)

When the game anticipates the player's accessing certain areas, it often rewards the player for her experimentation with shortcuts, hidden caches, or in Bissell's case, humorous environmental artwork. The game encourages such exploration by hiding items or in-game jokes (often called 'Easter Eggs') for the diligent player who decides to forgo clear pathways and venture from the visible path.

But Fallout 3's landscape of rubble and detritus also provides numerous makeshift platforms the player can use in ways that the designers may not necessarily expect. A game Fallout 3's size naturally has its glitches and errors, and part of the game's appeal rests with the numerous malfunctions that can be exploited for tactical gain or that simply provide a bizarre, unexpected change to the world. Recently, a player named Tom Roe achieved the world record completion time of finishing Fallout 3's main campaign in twentythree minutes, thirteen seconds (Hurley 2014). Roe does this by forcing the game to 'quick save' (a method of saving the player's progress without pausing the game to access a 'save menu') enough times to reveal seams in the digital environment. He then manoeuvres through these thin separations (a strategy referred to as 'clipping') to access an area underneath the visual shell of the normal environment. When he breaks through a wall before the character's GOAT test, Roe finds and navigates a skeletal structure of the game that looks literally like the architectural framework of the game's world. In other words, he forces the game to glitch without completely breaking it or causing it to crash. The result is a human-machine fusion of textual expression that reveals the software's struggling mechanical processes behind the field of play, one that can only be achieved by acting as the type of game 'archaeologist' Wark proposes.

Other instances of environmental manipulation can occur without the player testing the game's digital boundaries. *Fallout 3* (like almost every other game of its open-world design and exhaustive scope) is notorious for geographical spots that can trap a player's avatar and force a restart in order to continue the game, yet these same fissures can be used to set glitch traps for enemies, tripping them up as the game's physics engine runs

unexpectedly into the modeled textures. These instances can be exploited to the player's tactical advantage, such as making a difficult enemy easier to engage, yet to do so the player must confront the game's technological limits. The only consequences of such system errors are narrative ones because such moments break the rules of engagement and other immersive aspects of the game. Again, *Fallout 3* eschews narrative cohesiveness in favor of an exploration model of gameplay wherein the player can use the ruined environment and how characters predictably navigate it to her advantage.

Less mechanically useful is the aptly named 'gore Princess' glitch. The character Princess, a young girl acting as mayor of a community run by children, is sometimes rendered without her skin textures, turning her into a walking mass of viscera and bone. It is an unnerving sight, but the character model functions the same as if it were rendered as intended, prompting no reactions from the other characters in the town. Other instances include characters' floating far above the environment or clipping through doors and walls. Moments like these are so ubiquitous that for players and the characters in the game these operational errors are so normalized that they become part of the game's broken aesthetic. Encountering a character model that behaves oddly or loads incorrectly is hardly any more bizarre than the ridiculous character models (two-headed Brahmin cattle, super mutants, talking corpse-like ghouls) or some of the central gameplay conceits (weapons far too old to work as well as they do). As often as Fallout 3 uses its ruinous environment to represent the collapse of an older social system, the unfamiliarity of the game's setting and atmosphere normalizes the presence of technical glitches. The ubiquitous presence of these glitches allow the player numerous ways to interact with the operational system of the game. The brokenness of the setting and the ability of the player to reject the impetus to 'restore' the Capitol Wasteland to its former state transforms the modernist approach to textual glitch that embraces the creative energy of error. The aesthetic of machinic decay acknowledges that the hardware and software can create alternate textual realities.

At times these alternate realities are threatening. The abandoned Dunwich Building operates as a space in which glitch and intended brokenness are virtually indistinguishable. Likely named after H.P. Lovecraft's short story 'The Dunwich Horror', the structure exists as the Capitol Wasteland's most famous haunted house and the subject of many rumors among the world's denizens, and the area uses the aesthetic of glitch to cultivate an atmosphere of unease. For instance, to enter the building, the player faces south, but when the room loads, the player's character faces north. While this inconsistency appears to be a mistake in design, other similar incidents – such as a severed head that twitches as if it is clipping through the environment, a door that opens on its own, and a brief flashback

that looks like a video malfunction - inform an overall intention of textual unpredictability. Here, glitch becomes evidence of a ghost in the machine, a disruption in the normal order of processes governing the digital space that creates different, terrifying realities beyond what constitutes as 'normal' for life in the Capitol Wasteland.

Though the Dunwich Building is an isolated area where glitch bleeds into narrative design, the game incorporates glitch design into its primary combat mechanics: the Vault-Tec Assisted Targeting System (V.A.T.S.). Using V.A.T.S. breaks the game's real-time action by allowing the player to stop time and queue up attacks to specific body parts. 10 Activating the system prompts a hiss of static as the targeted enemy becomes shaded in a pixelated shade of green, reminiscent of a monochrome monitor, and the game shows the player her chance to hit by means of a percentage above each targeted area. The slow motion camera that documents the attack makes the unnatural movement of the characters all the more noticeable as limbs clip through the environment and each shot fired sounds simultaneously loud and distant, as if picked up from a faulty receiver. V.A.T.S. transforms violence into a mediated pantomime of real-time combat, revelling in the gonzo-style mechanical spectacle of play. Breaking the narrative flow of the game to choose how to shoot an enemy based on a percentage shows the player the algorithmic systems for her to exploit, but unlike the unintended errors that players can use to gain an advantage, seeing these processes creates a combat strategy within the affordances of the game. Glitch aesthetics fashion a way to find new gameplay opportunities that blend cinematic hyper-violence with the functional aspects of ludic engagement.

The clearest indication of Fallout 3's appropriation of the creative potential of broken systems, however, appears in the campaign chapter 'Tranquility Lane'. The Lone Wanderer's search for James leads her to Vault 112, where Dr. Stanislaus Braun has imprisoned the vault's populace and the protagonist's father in a simulation of his own design - a black and white picturesque virtual neighborhood akin to those depicted on 1950s and 1960s television. The player must enter the simulation and save her father, either by following Braun's cruel orders (which Braun delivers via his virtual form as a ten-year-old girl) to sow discord and violence among the people or by activating a failsafe switch that crashes the system and either kills or releases the people of Vault 112. Tranquility Lane acts as a microcosm of the game at large: a simulation of a place out of time and space at the mercy of an operating system susceptible to crashes. Should the player decide to crash the system, she must activate seemingly innocuous objects in a particular order that has an illusion of randomness. In other words, the player must force a systemic 'glitch' for the Tranquility Lane program to malfunction and open access to an area hidden from users who only

play within the boundaries of the simulation. With 'Tranquility Lane' Fallout 3 not only acknowledges the confining prospects of a digital system, it encourages the player to attempt to trespass those boundaries. Of course, doing so still fits into the narrative parameters of the game's campaign. Nevertheless, the Tranquility Lane mission distills Fallout 3's open-world philosophy that digital environments exist to be broken apart to unleash the creative potential of games.

While it is tempting to read these systems as recognizing or aestheticizing glitch and error as more evidence of the game's commitment to retro-future technological kluge, juxtaposing these moments against the game's larger design reveals a more intimate connection between glitch and player agency. The Tranquility Lane section shows that *Fallout 3* anticipates its own malfunction and indeed its own obsolescence as an already retro-futuristic object, a game waiting to become as anachronistic as the technology on display. The glitch, however, as a recurring element in Capitol Wasteland's vast irradiated planes, remains a dynamic presence in the game, keeping the game from falling into a Tranquility Lane-type hypostasis. *Fallout 3*'s emergent gameplay, therefore, set in a post-apocalyptic environment, enables the disruptive power of glitches in an already ruined space, not to lament its potential for destruction but to embrace its capability to fashion new ways of interacting with digital spaces.

Endnotes

¹Juul's larger argument, that video games exist at the intersection of rule-based classic games and fictional/digital worlds, suggests that gameplay follows a 'classic game model' grounded in rule-based systems of inputs and outcomes (Juul 6-7). For Juul, these are the processes that dictate affordances beyond software or hardware limitations.

²The 'error' Krapp describes here is not software malfunction but human error. Games anticipate players' mistakes in order to instruct, and a byproduct of this design choice (intentional or not) is an open space for 'potential deviations and alterations' (Krapp 2011: 76).

³Goriunova and Shulgin address this broad conception of what constitutes 'glitch' by saying that, with such a general definition, 'it might be difficult or impossible to distinguish whether [any given] particular glitch is planned or the results from a problem' (Goriunova and Shulgin 2008: 111).

⁴During his retrospective presentation at the 2012 Games Developer

Conference, lead designer Timothy Cain cited films such as Forbidden Planet and A Boy and His Dog as direct influences. See Pitts 2012.

⁵The book's title is a nod to the franchise's S.P.E.C.I.A.L. (Strength, Perception, Endurance, Charisma, Intelligence, Agility, and Luck) system, which allows the player to spend skill points in any category to customize her play style. Spending points in the Strength category, for instance, gives the player's character more effective melee attacks while the Charisma category will allow for different conversation options that open confrontations to diplomatic solutions.

⁶Another similar moment that allows the player to assert control over her character's choices occurs when the player takes the G.O.A.T. The test's administrator, Edwin Brotch, tells the protagonist that many students dismiss the test and offers to fill out the test should the player decide to skip it: 'If you want to skip the test, just tell me how you want it to come out and I'll take care of it myself.' This moment, while woven into narrative more organically than the choice at the end of the Vault 101 segment, provides a meta-joke about the tediousness of contrived RPG statistic building. Standard RPG form, it seems, is just as breakable as any other aspect of game design after the apocalypse.

Watts cites architect Lebeus Woods, who writes of the inherent freedom found in ruins: 'In their damaged states they suggest new forms of thought and comprehension, and suggest new conceptions of space that confirm the potential of the human to integrate itself, to be whole and free outside any predetermined totalizing system' (Watts 2013: 248-9).

⁸Watts' larger argument specifically concerns the more focused social paradigm of gendered society rather than social values at large. In these respects, Watts explains that the game's setting does little to address how these former constructions of gender have changed in a freer, ruinous world (Watts 2013: 256-7).

'The source of these supernatural disturbances is an obelisk in the building's basement that was disturbed by an employee named Jaime, and the player only finds this information in audio logs that offer glimpses into the building before it fell into decay. In one diary, Jaime references an entity named Abdul Alhazred, the name of the 'Mad Arab' scribe in Lovecraft's Cthulhu cycle.

¹⁰This entrance of turn-based combat is intentionally reminiscent of the franchise's previous instalments, albeit with a more cinematic perspective. Even earlier incarnations of gameplay are recycled and repurposed in a broken world – another piece of digital detritus made suitable for a new environment.

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Bioshock and the Uncanny: The City of Rapture as Haunted House

Robert Yeates (University of Exeter)

The video game Bioshock (2007) takes place in the city of Rapture, an underwater metropolis housing the greatest scientists and artists of their time in a sanctuary free from the constraints of traditional city and political life. Rapture is built to be a utopia, boasting the great achievements of modernity in its museums, libraries, theatre, laboratories, hospital, and the spoils of genetic research in food and plant life. Yet when the player arrives in Rapture it is an urban ruin, a world that embodies the failings of the Randian Objectivist philosophy upon which it is based. The ruined environment of Bioshock is an unheimlich (uncanny) space, which enables it to function as both a compelling and unsettling sf world and a metatextual comment on the game world itself. Rapture draws awareness towards the relationship of the game player to the game world through its use of the uncanny, questioning the affordances of this space and the role of the player in choosing their actions. ('Affordances' here refer to the abilities afforded to the player of video games in exploring and interacting with the game world.) Matthew Beaumont writes that the effect of the uncanny in sf can be to disrupt preconceptions, proposing that 'the estrangement effect [...] can be especially unsettling if it suggests more than simply that the apparently solid culture and institutions characteristic of capitalist society will be different at some scarcely conceivable time in the future, but also insinuates that, incipiently at least, they are already different' (Beaumont 2006: 230; emphasis in original). Rapture presents just this form of uncanny sf world - in its architectural and aesthetic forms, its utilization of the figures of the 'Little Sisters', and its self-reflective choices regarding the player-character of Jack, it brings into question the stability of the game world itself. In its uncanny elements, Rapture operates as an unheimliches or haunted house, and by extension refers outwardly to the nature of the game world as a haunted space.

Anthony Vidler writes of how the uncanny has 'found its metaphorical home in architecture: first in the house, haunted or not, that pretends to afford the utmost security while opening itself to the secret intrusion of terror, and then in the city, where what was once walled and intimate [...] has been rendered strange by the spatial incursions of modernity' (Vidler 1992: 11). The 'labyrinthine spaces of the modern city', he writes, 'have been construed as the sources of modern anxiety, from revolution and epidemic to phobia and alienation' (Vidler 1992: ix). These are ideas highly

appropriate to the city of Rapture in *Bioshock*, a place designed to be both sanctuary and city. The utopian ideal city is in a process of ruination, its genetically altered inhabitants having revolted against the power structures that once governed the city. Abuse of and dependency on the substance ADAM, a material that induces genetic mutation and gives its users unusual powers, has caused a citywide breakdown, and the citizens are left haunting the hallways and rooms of Rapture and enacting violence on each other and on the player-character Jack. Where once the city aspired towards the enlightenment in its elevation of the sciences, industry, and art, the environments that the player traverses are cloaked in darkness, and several of the encounters that make up the narrative of *Bioshock* involve the entering of 'dark spaces': shadowy locations that inspire fear and paranoia, such as a hospital that has become a morque, luxury apartments inhabited by corpses, a farmer's market made hostile to human life by a frenzied apiary, and a theatre used as a torture chamber. Vidler explains that the philosophy of the enlightenment had a literal consequence in architectural forms: the 'conventional wisdom of modern urbanism' is to 'flood dark space with light' in the form of transparent space, which, 'it was thought, would eradicate the domain of myth, suspicion, tyranny, and above all the irrational' (Vidler 1992: 168). As shown by Bruno Latour's Paris: Ville invisible (2004), the establishing of a city of light naturally involves the suppression of dark places, but these dark places will eventually return. Rapture's utopian idealism attempts to suppress realms of darkness and uncertainty by creating modern spaces of enlightenment, but what is suppressed is destined to resurface. As genetic mutations and civil unrest invade these spaces Rapture falls back into the violence that these dark spaces contain, both literally in the shadowed hallways of Rapture and figuratively in terms of the body in the form of the epidemic.

Rapture is a city born of man's hubristic attempt to create light where once there was darkness, as neon signs, building illumination, and searchlights are introduced to the eternal night of the ocean depths. The exterior landscape of Rapture, viewed from the bathysphere on the player's initial descent and from the glass walkways between buildings, is emblematic of the 'architecture of the night' introduced by Raymond Hood and illustrated in a book of the same name edited by Dietrich Neumann (Neumann 2002). 'Architecture of the night' describes the attention placed on the visual appearance of the city at night, as the new 'building material' of electric light expanded considerations of urban design from the 1920s onwards. Illuminating a building from below inverted a building's daytime appearance, meaning that architectural structures needed to be designed with a nocturnal double in mind. In its incorporation of the contemporary aesthetic models of film and theatre lighting and its utilization of modern

electrical technology, this could have become a fully-fledged art-form of the future. The full potential was never fully realized, however, and as the utopian future visions of architecture of the night came up against the real-world limitations of costs and energy shortages, that aspect of architectural design is now less commonly explored.

Rapture presents a vision of night architecture from its heyday. The cityscape exhibits a rich architectural panorama: ambitious art deco skyscrapers adorned with coloured lights and illuminated advertisements for high fashion, stage shows, and casinos are visible through the murky water, and its avenues are traversed by schools of fish and whales in place of motor vehicles and streetcars. Mary Woods describes how the presentation of a nocturnal urban aesthetic was developed in the early twentieth century in the photography of Alfred Stieglitz, with what she terms 'skyscraper noir'. Where others avoided the 'halation of street lamps, light streaks shimmering on wet pavement, and extreme contrasts of lights and darks', Stieglitz embraced these qualities of night photography, layering nocturnal urban scenes to create cubist collages in which buildings are 'reduced to ghostly, skeletal frames' (Woods 2002: 71-2). Stieglitz generally avoided the inclusion of art deco buildings in his photographs, however, viewing them as vulgar icons of popular culture, until Georgia O'Keeffe made a series of night paintings of New York in the 1920s. Utilizing the same abstractions of form and contrasts of light and dark, O'Keeffe incorporated art deco precisely because of its contemporaneity and relevance to the modern urban milieu. Works such as American Radiator - Night (1927) present a combination of Stieglitz's skyscraper noir aesthetic, of abstract forms and conflicting, unsteady tones, along with the modern art deco subject bathed in the light of the architecture of the night. The external appearance of Rapture could be pulled from these works, composed as it is entirely of the illumination of art deco forms in the otherwise dark environment of the deep ocean. As much as Rapture shows a romantic and grandiose modernity in its architecture, it also appears, in accordance with the work of Stieglitz and O'Keeffe, as a melancholy, haunted environment, which revels in the 'self-destructive beauty of the megalopolis' (Woods 2002: 75). The use of art deco and night-time architecture brings to mind the darkened, neon-lit streets of film noir. The equation between the American city and the criminal underworld of film noir is made explicit by the use of private investigator Booker Dewitt as the lead character of Bioshock Infinite (2013). Rapture is guite literally an underworld, well below all other cities on earth; this also foregrounds the corruption of the utopian ideal embarked upon by Ryan Industries, and the violence and depravity found in the hallowed halls and community buildings of the city. As the city returns to darkness, the player is confronted with flickering lights, sparks from neon signs, and

toppled lamps casting long shadows, and is forced to enter these spaces of increased uncertainty, instability, and danger. Moreover, Bioshock is unusual among games of the 'first-person shooter' genre in that it does not equip the player with a flashlight, thereby retaining control of the scene lighting and shepherding the player towards dark spaces when desired by the story. As Elisabeth Bronfen writes, the darkness of night can create a powerful uncanny effect: 'As our sight diminishes, other senses - notably our faculties of hearing and of the imagination - come to be increased, and this results in 'disorientation, which can be either fascinating or threatening', and a world which 'is harder to characterize; it shifts between the familiar and the unfamiliar' (Bronfen 2008: 51). The dark spaces into which the player is forced in *Bioshock* conjure such anxiety, as one is made to feel unsure if one is hunting or being hunted by the deadly enemies of the game, the uncannily inhuman Splicers. For Sigmund Freud, fear of losing one's sight is a preoccupation of works evoking the uncanny, though what re-emerges from the unconscious into the light can be equally as unsettling (Freud 2003:136-40). The world of Rapture, characterized by dark spaces which prohibit players' cognizance of their surroundings, and light spaces which force horrific imagery into view, is a prime environment for increased paranoia and ghoulish fears.

Space thus operates as threat in the game, reflecting a violence inherent in all architectural spaces, but especially in the modern metropolis. The construction of architectural forms is a process laced with violence: structures are charged with dormant cruelty and they will ultimately meet with a violent end. Lewis Mumford writes that all living, built environments will end in the 'Necropolis', 'a common graveyard of dust and bones' and 'fire scorched ruins' (Mumford 1961: 53). More recently, Terry Smith has discussed how the built environment bears the violence of its inception in the form of inevitable ruin: 'from at least some of its beginnings, and certainly throughout its unfolding, architecture has had various degrees of violence built, as it were, into it. All building does violence to natural order and offers to its human occupants the bargain that they surrender to its constraints on them in exchange for its protection of them' (Smith 2006: 6). In other words, he writes, the "modern" has [...] become historical' (Smith 2006: 8). The need to constantly resist the inevitability of violent ruination is an anxiety that plagues cities, and one that finds brutal expression in *Bioshock*.

This historicizing of the modern is additionally enhanced by the antiquated aesthetic that *Bioshock* presents. Jack reaches Rapture in 1960, but the city was built in the 1950s and its aesthetic draws heavily on the 1940s, 1930s, and even 1920s. In depicting the decaying city of Rapture, as Grant Tavinor writes, 'decaying art deco facades, faded Hollywood socialites, and echoes of Hearst, Hughes, and *Citizen Kane*, are combined

with period music and philosophical and literary references to produce a coherent artistic statement' (Tavinor 2009: 92). More specifically, though, the aesthetic of Bioshock is an example of retrofuturism, particularly the optimistic speculation of the Atomic Age and the Space Age. Referencing Disney's Tomorrowland, Scott Bukatman describes retrofuturism as comfortingly quaint visions of tomorrow, styled in the manner of *The Jetsons* and Googie architecture, revived from the past in order to be 'simultaneously mocked and desired' (Bukatman 1991: 59). The past visions of the future are expressive of innocence and a potential paradise lost, in a present in which the progress promised in post-war years gave way to 'the dataist era' and disembodying cyber-spaces which 'exist independently of direct human experience or control' (Bukatman 1991: 60-1). Sharon Sharp supports this idea, writing that 'retrofuturism functions as comfort for assuaging the technological anxieties of the present' (Sharp 2011: 26). Bioshock invites readings of an innocence lost in the pursuit of technological progress, not least in the naming of the tools of genetic mutation ADAM, EVE, and the Gatherer's Garden.¹ The strong retro-futurist aesthetic can also be seen in the jolly cartoons that accompany the acquisition of new 'plasmids' (powers resulting from genetic mutation), as the player-character develops. Although the videos clearly state that the primary purpose of most plasmids is to inflict physical harm on Splicers, the tone of the videos is reminiscent of a 1950s public service announcement, with cartoon drawings, a sprightly and carefree voiceover tone, and the optimistic catchphrase, 'Evolve Today!' As such it seems to present a kind of innocence and naïveté with regards to the consequences of the genetic mutation it represents.

The architectural style of the city, too, can be described as retrofuturist. The floodlit architecture of the night, as Neumann writes, bears a clear link with futuristic urban scenes such as those created by Hugh Ferriss. A draftsman and architectural visionary, Ferriss, and particularly his collection entitled 'Metropolis of Tomorrow', greatly influenced architectural rendering in the 1920s and 1930s in connecting 'nocturnal illumination' and 'glimpses of the architectural future' (Neumann 2002: 61). In recreating the illuminated art deco facades of 1920s and 1930s America, Rapture evokes a time when these architectural designs were expressive of modernity at its peak, and the optimism of the future that was to come. Gary K. Wolfe writes of a tendency in sf to mourn such past visions of future metropolises, and how this often manifests in fantasies of destruction: the failure of 'innocent urban extrapolations [...] might well be indicted, given the realities of urban life we have come to face since those predictions were first made. [...] The innocent visions of the past have become the traps of the present' (Wolfe 1979: 86-7). The failure to realize utopia means that the city becomes a barrier 'that must be broken, [and] a past that must be transcended' (Wolfe

1979: 93). This is much the case in *Bioshock* as Rapture's grand design, symbolized in retro-futurist architecture, results in a dystopian city that must of necessity be demolished.

Just as the visual aesthetic indicates antiquation, so too does the musical score that accompanies the game. The game's soundtrack includes several tracks emblematic of 1930s and 1940s America, including songs by Cole Porter, the Ink Spots, and the Andrews Sisters. William Gibbons details the choice of music in Bioshock, focusing in particular on Bobby Darin's 'Beyond the Sea' (performed by Stéphane Grappelli and Django Reinhardt), the song that greets the player on their initial descent into Rapture: 'The lyrics, assuming the player knows them, reinforce the idea of travel to a better place; a life filled with love and happiness awaits the narrator "somewhere beyond the sea". This optimism, however, soon reveals itself to be painfully ironic, as the utopian promises made by the song have long since dissipated' (Gibbons 2011). As Jack and the player literally and figuratively submerge themselves into the game world of Rapture, this optimistic aesthetic becomes an ironic statement. Bioshock is filled with such early-twentiethcentury-style texts, used in a way that establishes their ironic distance from the reality of Rapture. The effect of such stylistic choices as the plasmid videos, the architectural design, and the soundtrack is an aesthetic of innocence and optimism jarring against the death and destruction that now characterizes Rapture. The contrast vividly shows how the utopian dream became a dystopian nightmare, but in so doing it also comments outside of the text on the Randian philosophy that informs Rapture, and, in using a mid-twentieth-century aesthetic, on the American Dream and innocence of a post-war, and particularly suburbanized, America. They are reminders of a familiar world to the player in their recreation of the popular conception of 1950s America, which may be, as Fredric Jameson points out, a conception rooted more in that decade's popular culture than in its reality (Jameson 1991: 281). In inverting this image, however, it becomes uncanny, and mid-century American life becomes a realm of nightmares. Freud writes of the uncanny as 'that species of the frightening that goes back to what was once well known and had long been familiar' (Freud 2003: 124), and the subversion of this aesthetic becomes all the more horrifying in its being for the player a familiar past.

The game's use of retrofuturism seems to invite similar questions, however, about the experience of playing *Bioshock* itself. With the city situated in an outdated aesthetic, both for the player and in its own diegesis with the incorporation of already aging architectural paradigms, Rapture generates a mood of obsolescence. The scenery is even replete with outdated media forms such as gramophones and film reels, and broken technology including many television screens bearing the words 'Please Stand By',

which call attention to the functionality of the game world itself. Just as we have seen these architectural and media forms become antiquated in the real world, so too have we seen and will we continue to see the technology that developed and houses the game *Bioshock* become outdated, with the Xbox 360 replaced with the Xbox One, the PlayStation 3 with the PlayStation 4, and with personal computers in a constant state of forward development. It is likely that as this technological progress continues, *Bioshock* will come to be viewed as possessing graphics and gameplay affordances as primitive in the way we now view games such as *Pong* (1972) as being primitive. As such, Rapture's retro-futurist aesthetic can be seen as symptomatic of the technological anxiety expressed by Bukatman and Sharp.

Rapture also depicts the collision of different timeframes through its use of ghostly apparitions. As Freud writes, this is a common trope of the uncanny: 'in some modern languages the German phrase ein unheimliches Haus ["an uncanny house"] can be rendered only by the periphrasis "a haunted house" (Freud 2003: 148; brackets in original). Nicholas Royle's The Uncanny foregrounds haunting and the ghostly as vital components of the uncanny, being as it is 'indissociably bound up with a sense of repetition or "coming back" - the return of the repressed, the constant or eternal recurrence of the same thing, a compulsion to repeat' (Royle 2003: 2). One form this takes in *Bioshock* is past iterations of Rapture repeatedly encroaching on the 'reality' of Rapture as it appears to the player-character. As the player reaches certain rooms in the city, a fuzzy, static-like image showing traumatic past events is temporarily superimposed over the present. The use of static in the re-emergence of these repressed memories evokes old or broken television sets, further reinforcing the thematic of technological obsolescence. In an audio recording that the player can discover in the level of Arcadia, the character McDonaugh provides some explanation for the ghostly apparitions: 'Ryan tells me it's a side effect of this plasmid business. One poor sod's memories getting passed onto another through genetic sampling. Leaks. Lunatics. Rebellion. And now bleeding ghosts. Ain't life in Rapture grand?' These segments resemble the repressed memories Freud describes: 'the term "uncanny" (unheimlich) applies to everything that was intended to remain secret, hidden away, and has come into the open' (Freud 2003: 132). This uncovering of a traumatic past not only manifests in this form of dream-like flashbacks, but also comments on the process of uncovering the historical narrative of Rapture: as Jack uncovers recordings and other media that reveal this history, so the player is given a window into the memories of the physical space of the city.

The figures of the 'Little Sisters', little girls genetically altered to collect genetic material, also evoke this realm of spirits and the dead, in their harvesting of ADAM from deceased citizens they describe as 'angels'. As

Jack has his first exposure to genetic mutation, he falls unconscious, and wakes temporarily to see a Little Sister and her guardian, the Big Daddy, standing over him: 'Look, Mr. Bubbles', she says, 'it's an angel! I can see light coming from his belly. Wait a minute, he's still breathing. It's all right; I know he'll be an angel soon'. The mental programming of the Little Sisters was instituted by the character Yi Suchong, as revealed in a recording, 'Little Sisters and Corpses', that did not make it into the final version of *Bioshock*, but that can be found online on the Bioshock Wiki: 'Little Ones are repulsed by the look and smell of corpses. Must find a way to make gathering task more... attractive, maybe if we program them to see bodies as something more appealing: kitty cats, chocolate bars, some other stupid thing these children enjoy'. Seeing corpses as angels is just one part of the idealized double of the ruined Rapture that the Little Sisters experience. As is implied throughout Bioshock, and shown explicitly in Bioshock 2 (2010), they see an idealized world in place of the ruined, dystopian city that the player sees, with rose petals instead of blood, flowers in place of rubble, and the violent Splicers replaced with elegant, amicable citizens.

One of the central choices in the game is whether to 'rescue' or 'harvest' the Little Sisters, respectively freeing them from their macabre task for a small share of ADAM, or killing them in exchange for a larger share. This choice would seem to be a moral one, were it not for the Little Sisters' uncanniness. Though they appear to be young girls, they are in fact mutated beings with glowing yellow eyes. Even their protector seems confused over their humanity, as revealed in a recording also found in the Farmer's Market: 'I find being around them very uncomfortable. Even with those things [sea slugs containing ADAM] implanted in their bellies, they are still children. They play, and sing. Sometimes they look at me, and they don't stop. Sometimes they smile'.2 Their uncanny appearance intensifies the moral quandary of whether to harvest or rescue them. As Ernst Jentsch notes in his study of the uncanny, 'Horror is a thrill that with care and specialist knowledge can be used well to increase emotional effects in general [...] In storytelling, one of the most reliable artistic devices for producing uncanny effects easily is to leave the reader in uncertainty as to whether he has a human person or rather an automaton before him in the case of a particular character' (Jentsch 2008: 224). Of course, the Little Sisters should not really embody a moral dilemma for the player, as they are merely elements of a video game, and not real girls. However, as Tavinor and Gibbons separately report, this moral dilemma does exist for players. They embody, therefore, an unnerving 'double' of little girls, both in the sense that, as mutated monsters, they are an 'other' of girls within the game, while outside of the game, they are not girls at all, but computer generated images and sounds.

Further, the Little Sisters embody an extension of the ruined built

environment, as Evan Watts writes: 'The Little Sisters themselves are in a way another manifestation of ruin, having had their innocence and very humanity stripped from them. They serve as reminders of a culture that was, and as the most striking visual embodier of that culture's downfall' (Watts 2011: 255). What is interesting, however, is that if the player chooses to 'rescue' the Little Sisters they can ultimately be saved, as one of the three alternate endings shows. As such they constitute the hope of Rapture in their innocence. This is a trend that Smith notices in many representations of the dystopian city of sf:

Usually, an alien force threatens the city, above all by bringing out something other in the character of the city itself that seems ready to conspire with, or accede to, the external force. The city is saved, usually, by a person or an event that embodies its innocence. This is, in turn, a personification of the presumption that the city's destruction is imaginable only as an aberration. (Smith 2006: 129)

The 'aberration' that plagues the city of Rapture, the epidemic of genetic mutation, may be effectively defeated by the innocence of these Little Sisters, as it eventually is in the killing of the villain Frank Fontaine. This final battle between Jack and Fontaine is won only in conjunction with the Little Sisters, who set upon Fontaine with their needles, and then offer Jack the key to the city. If the player has chosen to save all of the Little Sisters, the ending shows them being liberated from Rapture to a life of normality. If the player chose to harvest any of them, the ending depicts the brutality of Jack extending beyond Rapture, as the Splicers reach the surface of the ocean and take over a nuclear submarine. The innocence of the Little Sisters must, therefore, be protected in order to quarantine the infectious aberration that has overtaken Rapture.

The player-character Jack likewise serves to subvert the familiar. As in many RPGs, the player learns about the setting at the same apparent pace as the character, being gradually immersed in both the narrative and in the skills needed to interact with the game environment. As we discover later, however, the character of Jack is also a monster, a character genetically developed by Andrew Ryan who then undergoes further genetic transformation in his use of ADAM. The player-character, therefore, further embodies Jentsch's uncanny uncertainty of characters as human or automaton, and, like the Little Sisters, signals in a broader sense the problem of Jack not really being human at all, but an inhuman puppet operated by the human player, according to the restraints of the game world. As well, Jack comes to represent an extension of the uncanny physical space of Rapture. Though he operates in the game as the player's avatar, he is a troublingly unruly being who steals autonomy away from the player at certain points in

the game, such as when he encounters and kills Ryan. The character, though the manifestation or double of the player in the game world, has been altered by the same processes of genetic mutation that plague the Splicers, Little Sisters, and Big Daddies. This troubles the supposed divide between the player-character and the enemies we are encouraged to kill; ultimately, the motives of Jack and the Splicers are the same – to hunt Little Sisters for ADAM – and the limited affordance of the question of whether to harvest or rescue provides only an illusion of moral autonomy.

Each of these uncanny qualities - the use of dark space, the dormant violence of built space, the aesthetic of antiquation, and uncanny player-and non-player-characters - make *Bioshock* a highly metafictional work, inviting readings that go beyond the content of the game to critique the game world itself, and the media devices on which it is developed and presented. The game world is haunted by its future obsolescence, just as is the modern city: with games commonly becoming serials spanning multiple titles - *Bioshock* resulted in the games *Bioshock* 2 and its multiplayer game *Fall of Rapture* (both 2010), and the game *Bioshock Infinite* (2013) with its downloadable content *Lost At Sea Episode* 1 (also 2013) and *Episode* 2 (2014) - which see migration to more technologically advanced consoles or computers and feature significant steps-up in graphics and other technical areas, games always face being supplanted and disfavoured as time goes on. David Chandler writes that the anxiety over the future obsolescence of technology manifests in frequent utilization of the aesthetics of ruin:

As videogame technology evolves, the gulf that separates generations of gaming machines widens, and, though players will undoubtedly hold onto a few titles, the demands of new software and hardware will ultimately colour the way we remember these older games. Games are obsessed with ruins because they are products of a technology always trying to delay its inevitable crawl toward obsolescence. (Chandler 2014)

The city is a place of modern anxiety in *Bioshock*; housing revolution, epidemic, alienation, and fear. Within the hallways and rooms of Rapture, mutated citizens and ghosts haunt the player-character, as dark space invades the theoretically enlightened realms of modernity and progress that the utopia was meant to elevate. Within this space, media technology is shown to be obsolete and decaying, and innocent little girls and even the player's own character appear as monstrous as the enemy Splicers. Overall, the game presents an uncanny double of the modern, enlightened city, as well as a metacommentary on the inevitable obsolescence and ruin of the very devices on which it was created and is played. The game world is cognitively and uncannily estranged from our own world, as well as from itself. Because of the limitations inherent and evident in its construction,

Rapture is haunted not only by the events of its past and the creatures of its present, but also by the inevitability of its future.

Endnotes

¹ Whereas ADAM is the raw form of stem cells used to induce genetic mutation, EVE is a modified version of ADAM powering these genetic mutations. The Gatherer's Garden is where players manage which of their genetic mutations are active at any given time. There are several other points of comparison made in *Bioshock* between the world of Rapture and the story of the Garden of Eden, including the garden of Arcadia, which the player visits, and the Garden of New Eden seen in Bioshock Infinite. ² Several of the characters of *Bioshock* comment on the discomforting and alienating appearance of the Little Sisters. Atlas, for instance, feels the need to assure the player that harvesting these creatures is not an immoral act: 'You think that's a child down there? Don't be fooled. She's a Little Sister now. Somebody went and turned a sweet baby girl into a monster. Whatever you thought about right and wrong on the surface, well, that don't count for much down in Rapture'. The architect of Rapture, Andrew Ryan, is deeply unnerved by their uncanny appearance and their status as monsters, as shown in a recording that can be found in the Farmer's Market level: 'The children with their very long needles, their tuneless songs, their ghastly errands. Their ghoulish, Frankenstein fathers. [...] These children are an abomination'.

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Developing Elite: Dangerous

Allen Stroud (Buckinghamshire New University)

At the start of November 2012, David Braben and his company Frontier Developments launched a crowd sourcing campaign to fund the making of a new video game set in the Elite/Frontier Universe - *Elite: Dangerous* (2014). Although such funding for projects is not new, the rise of internet companies such as Crowdfunder, Indiegogo, Kickstarter and Wefund, offering platforms to launch pitches for projects, is a more recent development. Crowd funding remains a fringe activity, operating as a hybrid between consumer purchase and micro investment. There are few guarantees beyond trust in the organizer and there is a difficulty for both the organizer and backer in determining how much influence they have in the development choices associated with a venture.

My involvement with *Elite: Dangerous* began when I saw the Kickstarter listing on the day it started. I cast my mind back to my experiences of *Elite* (1984) and *Frontier: Elite 2* (1993). I had played them for hours. They had been an escape into another world that had allowed me to imagine what it might be like out there. I followed the crowdfunding campaign through its last days, pledging my support and finding I was not alone. Thousands of fans had come aboard and were sharing their experiences of the previous games. The last days were halcyon as we could all see the project would be successful.

One of the offered 'rewards' from the project was to write a piece of official fiction set in the game universe. A diverse collection of writers, both experienced and inexperienced, had backed sufficiently to achieve these rewards, myself amongst them, with a plan to write and publish *Elite:* Lave Revolution (2014). When the dust had settled, I contacted Frontier Developments and offered my services. My research M.A. had involved the design of worlds in fantasy and science fiction. I thought I might be able to help the company sketch out information for the writers so they could create fictions that would be consistent with the game environment.

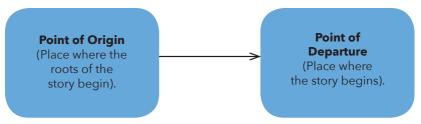
Worldbuilding

As Gwyneth Jones has argued, 'one thing science fiction and fantasy certainly have in common is the imaginary world, a world that must be furnished with landscape, climate, cosmology, flora and fauna, human or otherwise selfaware population, culture and dialogue' (Jones 1999: 11). Since at least the time of Hesiod, who attempted to define the composition and origins of the Hellenistic pantheon, writers have created environments that play an active part within their work. Hesiod's project was complicated by existing stories

so his 'macrotext' had to be constructed to include them. A macrotext is the framework for a specific fictional world, through which a large project of multiple outputs can be devised. It is a structured document, enabling the development of expressions that fit the fictional world, but the elements of structure are drawn together for their function, not because of a predetermined pattern in the narrative. Although also known as a canon or plot bible, neither term really encapsulates its purpose. A world canon might include previously published work and be difficult to alter as it has already been disseminated A plot bible encompasses only plot. The macrotext is formative and evolves along with its outputs, aspiring to be everything required to be known about a world. The expressions enjoy a formative relationship with this catalogue so as to maintain consistency with all other work produced in the same fictional space.

For example, in Hesiod's *Theogeny* (c. 700 BCE) there is an early creation myth that attempts to capture and define the gods of classical Achaea. The disparate nature of Greek society, sharing parts of their religion and culture between city state kingdoms, made for a fractured interpretation of the different aspects of their cosmology. Hesiod attempts to knit these fractures together and, by using a creation myth, determines an absolute beginning, or *point of origin*, for all subsequent writing. In addition to this, Hesiod describes each of his defined pantheon, lending them a visual representation. This is relevant for the choice of who is present and who is not.

The *point of origin* is a practical concept when attempting to construct a macrotext. From here the writer can establish the consequential relationship that brings the events of their world to the point of their story's circumstance; the *point of departure* (see figure 1).



Many fictional creators begin this journey by posing questions, constructing an outline of their world before consolidating it. In this process, the questions asked are just as important as the answers given, since these frame the design. The resultant document is a '42', in reference to Douglas Adams' *The Hitchhikers Guide to the Galaxy* (1978); a collation of important aspects. However, unless this process is employed exhaustively, these remain a starting-point of notes, expanding on the original inspiration

behind the writing idea. By contrast, a fully-fledged macrotext is a planned construct.

Whereas, in Hesiod's case, his macrotext sought to incorporate existing works into a larger canon, in more recent times this process has been used to devise new environments. The benefit for the writer is that this larger canvas allows for many of the problems of consistency and plausibility to be worked out before starting the story and/or involving others. The mutable nature of the document encourages change, evaluation and collaboration whilst also lending successive developments formal coherence.

The macrotext is a form of *ergodic literature*, as defined by Espen J. Aarseth, in that it is a text that that requires more than non-trivial effort to read. It is encoded to inspire other outputs which are released to a mass audience. The encoding of the work is not necessarily overt. The document may evolve and change based on the outputs it generates, but it tries to act as a bridge between each, maintaining their consistency. This temporal state is in itself a form of encoding as those accessing it cannot assume its permanence. Access to it indicates intention to produce further work. It exists between output forms and can inspire all sorts of different work, ensuring each connects and reinforces the other, creating a new form of mythopoeic self-referentiality. It is here that transmedia storytelling finds its guide in cinematic franchises such as *The Matrix* and *Star Wars*. The macrotext defines what exists and what cannot exist. It provides mutable rules in a fictitious world of make-believe so that, in some sense, it operates as a hyperreal construction.

In the case of *Elite: Dangerous* the established canon of the game lay in its three prequels. Game manuals, gazetteers and short story anthologies formed a body of published fiction that was difficult to obtain. In addition, the third prequel *Frontier: First Encounters* (1995) had an in-game news feed, full of ongoing news events, stories and a map of hundreds of star systems, all with government types and differing trade and industry bases, much of this procedurally generated, but with a check system that maintained consistency between each player's version of the game.

The original *Elite* had constructed a set of eight galaxies with two hundred and fifty-six star systems in each. However, these were procedurally generated, making them almost identical in look. The system names were allocated from a database, none of which resembled names given to actual star systems, making the whole experience a fantasy. The game's release came with a manual containing some fictional references and a novella, *The Dark Wheel* by Robert Holdstock. In *Frontier: Elite 2* the galaxy was remodelled. A small selection of fictional systems from before were retained (these were the systems the player had started on in the previous game) but the rest were taken from astronomical star charts. The Sol system and Earth

made their first appearances and the minimal backstory of the previous release was upgraded and connected to our own time period. For the first time, a galactic date referenced our own time. The game was set in AD 3200 and came with a manual, gazetteer and a collection of short stories. The gazetteer, in particular, established the backgrounds of several systems and gave a thin timeline, listing notable events that had occurred between 1993 and 3200.

Mindful of my task, to produce working background material for the game and for the fiction projects to be produced alongside it, I set about writing a more detailed historical account. I took my cue from the style of the manual, and used the tone of a history text, narrating events. Where a major event was mentioned, I examined it, looked for other references, assembling all information before adding character and context to give it flavour, all the while tracking every addition I had made. I recalled history books I had read when I was younger. The ones with strong characters were always more memorable. I remained conscious that all work that I did was conceptual. Frontier Developments would take my ideas and decide what should be used and what should be rejected, but by having someone provide an initial blueprint, they could pick and choose. These draft guidebooks became the first incarnation of our macrotext.

Within this developmental process, some participants arrived to develop their novels, others to determine source material for *Elite: Dangerous*. In the franchise release accompanying the computer game there are currently eleven official novels with a role-playing game to follow. By ensuring that the older works fit into the revised background, audiences who may have played or read them are hopefully more accepting of the new version. With such a large body of work being produced in the same setting, by so many different writers and designers, the detail and consistency of background becomes a priority to preserve the connected qualities of each artefact, so that the consumer can see them as a whole fictional entity.

The majority of writers already had ideas as to what stories they were going to tell, but often these stories were based on their own experiences of the Elite franchise and would have to be made compatible with the new game. Throughout the process, the fiction writers had access to a private forum to ask specific questions of Frontier Developments about particular aspects of the game and how they would be implemented, so as to make their stories as close to the game experience as possible. Final judgements on difficult questions would be given by Michael Brookes the executive producer of the game, in consultation with the rest of the Frontier Developments team. This consultancy remained ongoing as writers queried elements of the design that had either not yet been determined or were not thought of.

The World's Creator

The parameters afforded to a writer, working by negotiation in a world devised by someone else, are challenging. The opportunity and access have to be weighed against the restriction of not having the final say over what is or is not permissible within that world. The architect, in this instance David Braben, wishes to maintain their vision even whilst accommodating potential improvements. Similarly, the other creatives involved can only put down what they have managed to envision from the text already given.

This method of working is not new. The architect could be thought of as a wealthy patrician commissioning a sculpture for his Roman villa. Ultimately it is the patrician who must live with the sculpture, not the artist who made it. In other media, however, this example is less relevant. When writing information for an online video game, the interpretation of the architect, the writer, the design team, the programmers and finally, the consumer themselves, comes into play. When this process is multiplied to involve ten, twenty or thirty different fictional works all written by different fictional writers, the boundaries become increasingly complex. Granted, consultation is of a high priority to this process but, ultimately, someone must make decisions. As a writer involved, whether you agree or not, the architect has the right to make those decisions and you must trust that they are making them with the best of intentions for the wider fictional context.

Developing Background and Form

As we worked, the new game premise emerged. The majority of the protagonists were drawn from the previous game publications, their backstories updated to fit into the new game context and published in a series of guides released on the private writers' forum. By using the previous lore as a starting-point, we would reach out to knowledgeable players of the franchise and by determining the function of each component in the new game we would make it feel plausible.

Braben outlined a reversed design principle behind certain science fiction concepts in the game. For example, the use of hyperspace; with a wish to model the galaxy as accurately as possible through procedural generation, the distances involved in the game universe would be vast. To navigate them, the contrivance of hyperspace is essential, as is a fast travel in-system drive. So, Frontier looked at the design based on what they wanted the game to be able to do, compared to what was scientifically possible, and then introduced technical novums to bridge the gap between the two.

Some discussions arose around the use (or not use) of accepted science fiction novums. The contrivance of artificial gravity was a particularly difficult topic. *Elite* and its sequels featured rotational space stations. These formed

an integral part of the game experience, as every player had to learn how to dock, matching their ship to a rotating letterbox entrance. The reason for the rotation was explained in the space station's need to generate gravity. However, a great deal of the official fiction, written and published in the game boxes, ignored the concept and had pilots walking around their spaceships whilst tearing through the star systems. For me, docking the spaceship with this moving structure was a rite of passage in the old games and a requirement in the new instalment. When, however, this information was released to the wider backer community, forum comments suggested many people seemed to have difficulty in accepting a rationale of 'no artificial gravity'. The familiarity of the novum from other science fiction works meant that if we did not use it, but a different method, the latter would jar with audience expectations.

This instance is a practical demonstration of what critics such as Damien Broderick and Christine Brooke-Rose have termed the 'megatext'. The speculations of each fiction, authored by different individuals, are consumed by an appreciative audience but the rationales of pseudoscience used create expectations of convenience for new writers, as readers imagine their worlds through the contrivances of the other science fiction they have read. Brooke-Rose's original premise located megatext-like qualities in J.R.R. Tolkien. By contrast, Broderick identifies the widely different application of his mythology through the frame of the megatext, concluding that it does not apply as neatly as other science fiction examples, which build from the familiar into the unfamiliar: 'So its function is radically unlike that of any "realist" megatext. Since the megatext is not "already known", it cannot fulfil the readability requirement, but on the contrary, produces a pseudo-exoticism, much of which can be savoured simply as such, rather than tactically understood' (Broderick 1995: 59). This is where the practical concerns of world construction and communication differ between the two genres. The techniques of fantasy are more overt, often building escapist realms that focus on the developed miasma and myth already in the mind of the reader. The connection with the real is less about possible futures and more about catharsis.

In the case of *Elite: Dangerous*, the material developed by me came from the parameters of mythopoeia outlined by Tolkien, rather than concerns for scientific accuracy, but this agenda was much more in the minds of Braben and Frontier Developments: 'I think the world has to feel believable. There are a lot of things that are part of that. Having the science right is probably for me, the top priority' (Braben 2014). We found these two approaches were not incompatible. The mythopoeic approach brought themes from the older works, creating layers of meaning for the consumer to investigate. For example, Holdstock's *The Dark Wheel* introduced several concepts

and colloquialisms, some of which appeared in the original game, but also others that were beyond the technology of the time, such as the 'remlok', an emergency EVA device. The development of the fictional background and new parameters of *Elite: Dangerous* meant it was an ideal component to be included. The remlok became a staple of the new fiction, activated in the game when the pilot's cockpit screen was broken, and even appeared as a corporation name in the space station hangar. The remlok serves a function and is a familiar pseudoscientific convenience for the consumer. In the mythopoeia, the name, its spelling and expanded backstory links the new texts (game and written fiction) back to the original works.

A general consciousness of fantasy and science fiction has emerged amongst readers and writers of the genre. This consciousness is quite discerning, in that it will not liken space adventures to sword and sorcery quests with magical rings, but there is still an element of comparing imagined experience. A difference between the two genres lies in the interpretation of this consciousness. In fantasy it is more often seen as a support, in science fiction it can be supportive or critical, often depending on how predictive or escapist the writer is attempting to be. Where the text veers towards planetary romance, it is usually clear the writer is not claiming any prophetic ground and the level of engagement changes. When based in science, and extemporising, the invented technology is examined in greater detail.

It is up to the individual writer how they use this consciousness but their usage will be dependent on the image or interpretation that the reader will already have as to how something should work. If the writer elects to provide a different interpretation of the same idea, then they have to balance the reader's assumptions versus the value of going against them. This balancing act will be further complicated by the relative reading experience of different audiences. That said, there is the need for gameplay to incorporate expectations of fun as well as ideas of legacy and accuracy: 'A spaceship would be silent, but X-Wing fighters aren't really spaceships, they're Spitfires and P 51s' (Roberts 2006: 27).

There is a tension in this approach, notably in the way nostalgia permeates a particular brand of populist science fiction, rather than prioritising the future thinking and rationalized visions. *Star Wars* is often cited as an example of this owing to the composition of its scenes. *Elite: Dangerous* takes the same cue, eschewing Newtonian theories of how motion in space works and taking a lead from what makes a fun experience when playing a computer game, this is dogfighting inspired by World War II, noise in space and nebulas visible amidst the vast blanket of stars. These tropes are part of a particular brand of science fiction, the space opera, and are something the novels must reflect to remain part of the same fictional world in the mind of the reader. In the case of a video game tie-in, much of the visual imagery

can be drawn by the reader from their game experience. This establishes the video game as the 'canon leader': a product which defines how all the other products will be experienced.

Unlike more literary forms, video games are a diversion, played for entertainment and popular interest. The writers and players of games are less interested in future prediction and the exploration of the human condition, but this might be a consequence of its youth as a past-time. The genre of the game is also applied in a different way, encompassing type of play as well as the prevalence of themes:

Videogames can be understood as collections of visual and aural codes designed to illicit a response from the player. [...] Successful playing involves reading these cues correctly and responding accordingly in order to meaningfully engage with the game text: to achieve a high score, to vanquish the enemy, to progress to the next level.

Players are free to ignore, misinterpret or defy these videogame cues. But the existence of such formal systems of signification points to the way games structure the seemingly unstructured interactive gaming experience. (Kirkland 2005)

The nature of an interactive medium is such that the consumer must participate in the experience in an active way to shape the narrative, transforming from reader to player and occasionally back again. The illusions of control in this regard are well documented; there are few games that offer a truly open environment to the player, and those that do often favour impersonality, letting the player shape the character of their in-game participant or 'avatar'. This 'sandbox' idea offers the greatest illusion of choice owing to its lack of enforced linear path and multiple methods of keeping score. The only weakness is when a player hits the edge and the immersive qualities break down.

In the case of *Elite: Dangerous*, the sandbox offered is a procedurally generated Milky Way galaxy: a vast number of space stations, planets and other features to explore and visit, potentially more than any one person could do so in their lifetime. The incredible scale of this game environment pushes the walls of the sandbox back as far as they can go. It does however create another weakness, namely the need to populate this vast arena with content. Much can be done with procedural coding, but to prevent repetition and add to the flavour of what is constructed, the work of writers in the fiction can be incorporated, tying the worlds, characters and contexts into the player's experience of the game. A concise brief on what other outputs are covering in different media ensures greater co-ordination between them and greater chance of immersion for the player.

The Role of Fans

The Elite/Frontier community is an invoked fanbase called to support a franchise via crowd source funding and then involved in the construction of the video game and its fiction. From the start, the pledge reward tiers gave clues as to how the supporters would be able to assist and influence the game's design. The Design Decision Forum allowed Frontier Developments' staff to offer their thoughts on aspects of the game and the fans to comment and suggest changes; the most significant of these being the proposal for in-system travel changing from a series of waypoints to a 'frameshift' drive that allows players to explore the systems they are visiting. With the writer's pack pledge offered as a backer reward for the game in the crowdfunding drive, many would-be authors ran campaigns themselves to raise the funds to afford it. These in turn found ways to involve the fans, offering additional material, early access and character names as rewards to contributors.

From the point of view of Frontier Developments, this level of fan engagement serves a dual purpose. In one sense, the level of critical engagement provides a ready-made means test. In a second, it provides a marketing amplifier as the engaged backers are predetermined to want the game to succeed. This, coupled with an open attitude to posting test game footage online and embracing fan created content, establishes a positive community acting to assist in the game's success. Fan involvement, though, was not always smooth. The posting of initial design proposals led to hundreds of comments in reply, all expressing different preferences for the game's themes. Gradually, as time went on, this settled down and the various forums assigned to pledge tiers now act as evaluation areas with some occasionally featuring suggestions.

The role of the writer has been to enrich and provide a story (or stories) that give a route for people electing to play the game to come up with their own narratives and imaginings attached to their gameplay. At face value, this appears to prioritize the function of stories as vehicles to draw the reader into the wider game experience and, in part, undermine the nuance of the texts themselves. However, as Jones points out:

A typical science fiction novel has little space for deep and studied characterisation, not because writers lack the skill (though they may) but because in the final analysis the characters are not people, they are pieces of equipment. They have no free will or independent existence; to attempt to perpetuate such illusions is hopeless. (Jones 1999: 11)

When considering that the mode or form of the text prioritizes characters as a function towards viewing the imagined world of the writer, or in this case the team behind *Elite: Dangerous*, then the genre lends itself to this collaborative and supportive approach. In the example

of a video game where the player's position is that of a spaceship pilot, operating the controls through a first-person view, the emphasis is placed on the reader/user experience and the way in which their own story in the game echoes that of other characters in the fiction. In *Elite: Dangerous* the supportive fiction projects become 'microplots' (ones that involve personal changes to the characters) to the 'macroplot' (the world-changing consequences) of the game world itself. They mirror the role of the player, who also is a microplot contributor to this vast macro-game environment of a procedurally generated galaxy. The writers can use this perspective, allying their characters with the experience the player will get in the game, thereby invoking specific imaginings. In the accompanying fiction, writers interpreted this relationship in different ways. Some were inspired by the vast expanse of the promised playing field; others looked to the histories of factions or corporations and personified them in the scheming machinations of their characters.

The Tie-in Novel

My own project, *Elite: Lave Revolution* began later than some of the others, owing to my work on the guidebooks. It is set on Lave, the original planet in *Elite*, and tells the story of how the system went from being a dictatorship in the previous games to a democracy in the new game. I elected to tell a story that would showcase some of the lore developed for the game. By choosing a start point of AD 3265, my story could narrate events leading up to the game, starting in AD 3300 and complement it. It would also act as a bridge to the previous game, *Frontier First Encounters* set in AD 3250. Lave's position in the first game had been one of power. By the second and third games it was a backwater. The novel gave me an opportunity to tell the story of why this had happened and how it would change in the future. Mindful that the primary focus was on the forthcoming game, I had no wish to tell too large a narrative, thereby drawing away attention, so the story of one planet's decline under a dictator, named in the gazetteer accompanying *Frontier: Elite 2*, seemed like a good choice.

In writing a novel with a tie-in to a video game, the reader is likely to be a fan of the other elements of the franchise, or be introduced to the franchise through your work (which is quite a responsibility). If they are previous fans and arrive at your text from the game or other material, then the imaginations of some scenes covered by the same content, in this case the flying of spaceships, will be drawn from their experience of the game material. To some extent, an author's own experience of the franchise, for example Michael A. Stackpole, writer of the X-Wing series of novels, can insulate a tie-in fiction from potential criticisms. Unless given an unusual remit, the story must make use of the same contrivances and pseudoscience

utilized by the other texts that are part of the project.

The guidebook resources and source material provided a means for me to tie in all sorts of things from the older games; small references to locations, companies, indigenous life forms, etc. Helping to establish elements for the other writers, and developing content for my own story, not only provided further detail but also informed the procedural generated content. In general, I like writing background, history and concordance information that can be attached to a fictional story. It is this additional data that can give a story a sense of size. Appendices were famously employed by Tolkien in The Return of the King (1955); newspaper articles, historical accounts, police reports and email messages are, by contrast, contemporary enough to be used and adapted into a future context with some stylistic tweaks. Other examples include changes in perspective, coded messages and missing chapters. The finished result is a microcosm of the design principles outlined for the new game and fiction. Elite: Lave Revolution is a layered text, telling the story of individuals caught up in world revolution, in which the closing chapters and appendices provide new perspectives and embellishments on that narrative. Meanwhile, an ongoing news feed in Elite: Dangerous provides an opportunity to link in new stories and seed new story information. Additionally, I left some loose ends in my work to be made use of as plot lines in the video game. The conclusion leaves room for another tale of Lave, set before the game begins in AD 3300.

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The Fourfold Library (1): Rjurik Davidson on Robert Silverberg, *Downward to the Earth*

What is a fourfold library? Unlike its near-cousin, the infinite or total library, it is not exclusively a hyperspatial concept but a trans-temporal construct. Since, for William Blake, 'every part of the City is fourfold', we might care to think of the library as the citadel's mind, simultaneously receiving and transmitting stimuli in an infinite array of connecting relays that extend throughout the body in all directions, in all times. Visitors to the library, though, might regard it as the city's beating heart, so relentless is the pulsation of data traversing its vertiginous aisles and galleys. Not information solely but wisdom also. The relationship of the visitor to the library is, however, a strange one. Since the library constitutes a fold within the space-time continuum - effectively an outside folded back upon itself to create the simulation of there being an 'inside' - it is simultaneously infinite and eternal, and convenient enough to be transported in a pocket-sized wallet

Periodically, the custodians of the library permit one such visitor to inspect an artefact from the groaning shelves. We commence this duration with the Australian author, Rjurik Davidson, and an appropriately transcendent tale...

From Thorns (1967) to Shadrach in the Furnace (1976), Robert Silverberg entered a period of sustained creativity rarely equalled in sf. He composed at breakneck pace a series of intense and introspective tales that tested the limits of the form. Hawksbill Station, Nightwings, Up the Line, A Time of Changes, Book of Skulls, Born with the Dead – in the intervening years none of these have lost their visionary potency. In Silverberg's own words: 'It was a golden time for me [...] I felt able to do anything I wanted'.1

I still recall the shock of discovering these novels, the way they expanded my sense of science fiction's possibilities, and I have often returned to them to see how he achieves his effects. Here were novels that retained a classical form and at the same time delved into the modernist and the experimental. They were serious reflections on the social and psychological, and yet were filled with the sustained imaginative flights – of alien environments and creatures, of strange social set-ups, religions or philosophies – that attract sf readers in the first place. Though Silverberg retained the cool and slightly ironic tone that had marked his writing from the 1950s, he put it to new uses: 'I approached each new book as a unique technical challenge, so that some were relatively conservative in form, some were extremely experimental, and most were somewhere between.'

Of these novels, *Downward to the Earth* (1970) is one of my favourites and well worth examining to see how Silverberg fashioned it as a technical exercise. The novel is a reworking of Joseph Conrad's *Heart of Darkness* (1899). If Conrad's novella is marked by constant ambiguity, *Downward to the Earth* is more plainspoken. Its protagonist, Gunderson, returns half-knowingly to the planet of Belzagor to travel to the Mist Country where the inhabitants undergo a mysterious rebirthing ceremony. The early sections

are filled with a post-colonial melancholy and Gunderson is marked by the guilt and shame of having participated in the exploitation of the planet and its people.

Perhaps the most striking feature of *Downward to the Earth* is its 'world-building', the conjuring of a series of breathtaking alien landscapes with their own flora and fauna. Silverberg offers us the frightening Central Plateau with its carnivorous flora; the glorious Sea of Dust that blazes in the morning light; the Mist Country, cool and shrouded. Each of these terrains are home to their own species, strange jungle things and crystalline parasites, amphibious creatures that can only live in boiling liquid, carnivorous and sentient flora. Silverberg offers us a world of kaleidoscopic beauty and horror. What distinguishes his world-building is its plausibility and logic. He puts to work his knowledge of geography, geology, zoology and biology. Belzagor is not just imagined, but thought through.

In contrast, Silverberg's choice of protagonist runs counter to the rules of commercial writing; he uses none of the standard narrative tricks to make ambiguous characters 'likeable' as unusually skilled, or funny, or to put them through terrible experiences *before* the author reveals them to be unsympathetic. In any case, the idea that readers wish to 'like' a character - as if they are auditioning to be our friend - is a limiting way to read. Silverberg skips these tricks to signal that he is writing a more ambitious literature.

Rather than drive the novel forward by action and consequence, Silverberg builds a sense of mystery by withholding crucial information, even when Gunderson himself knows it. We discover that Gunderson's former lover, Seena, lives up at the Shangri-La Falls with the morally questionably Kurtz, but we are only offered glimpses of their story; for some reason, the second species of the planet, the Sulidoror, now work in tandem with the first species, the Nildoror, though we are unsure why their relations have changed; we know nothing of the nature of the rebirthing ceremony; in return for permission to visit the Mist Country, Gunderson agrees to capture the human Cullen, who has committed some crime, of which the Nildoror will not speak.

Posing these questions, but not answering them, allows for the reader's own imagination to search for solutions. Yet no matter how many times we try to answer them, the questions remain open, pulling us forward at a gentle pace. Silverberg closes them slowly in revelatory flashbacks over the course of the novel. It is a dangerous technique since in withholding too much information (particularly information the protagonist knows) runs the risk of alienating possible readers.

In not only rewriting but also re-contextualizing *Heart of Darkness*, *Downward to the Earth* adds new content to the narrative form and witnesses its transformation. The novel branches off on its own vector

after Gunderson's meeting with Seena and Kurtz. While *Heart of Darkness* ends in something approaching desolation, *Downward to the Earth* ends in Gunderson's visionary experience, which comes straight from 1960s notions of connection and love. The climactic passages are the most experimental of the novel, and worthy of study for Silverberg's radical style and incandescent language.

The influence of one writer on another is hard to judge. When we write, we often do so unconsciously; concocting narratives from a mélange of sources, some private, some acquired from the culture around us, yet more inspired by chance events. Influence is always mediated and complex. Still, Silverberg's influence can be seen in one way or another in my novels Unwrapped Sky and The Stars Askew, as well as in many of my stories, some of which are collected in The Library of Forgotten Books. The candleflowers and bulb-trees of my city of Caeli-Amur; the mould that engulfs the strange species I called the Elo-Talern - each of these would not have been out of place in Belzagor. As in Silverberg (and in M. John Harrison and J.G. Ballard), my characters are often morally ambiguous, filled with guilt or regret. The connection of the social and the individual recurs in my books and again Silverberg's approach seems reflected here (together with Ursula K. Le Guin's and that of realists such as Emile Zola or Victor Serge). As in Downward to the Earth, I often withhold information, creating mysteries that are slowly explained over the course of the narrative (indeed, my story 'Domine', reprinted recently in *The Time Traveler's Almanac*, largely rests on this technique). There are moments when the language in *Unwrapped Sky* - such as Max's merger with the artificial intelligence of the Sunken Library - recalls those moments when Silverberg's characters reach their states of transcendence. As is so often the case, I was mostly unconscious of these echoes during the actual composition of my work: only when I turned my mind to it did the influence become apparent.

Like most of Silverberg's work from that breathtaking decade, *Downward* to the Earth was not destined for a mass readership. Intensity, introspection, alienation, guilt, experimentalism – none of these were likely to attract a huge audience. This fact was to have a profound affect on Silverberg: 'My realization of this, somewhere around 1973, created a disillusionment in me about the hard-core science-fiction readership from which I have never recovered.'

That he should be underappreciated by the academy is more surprising. His vast output, in which he moved between commercial, pulp and literary fiction, certainly makes study of his work difficult. *Downward to the Earth* has its weaknesses. There is a certain distance to the prose which keeps the reader at a remove. None of the secondary characters – importantly the Nildoror or Sulidoror – are fully realized. Gunderson's journey is ultimately

a solitary one in which the other characters act more like markers of his transformation. Feminist readers might find fault in his depiction of the sole significant woman, Seena. Others might detect a dash of orientalism in the depiction of Belzagor's inhabitants. And yet, whatever its faults, *Downward to the Earth* is an impressive achievement, a triumphant example of literary technique. Indeed, Silverberg's influence can still be felt in much of the best contemporary sf. He is one of those who showed us just what the genre can do and just how far it can stretch. For that reason, he is a writer to whom we should still turn.

Rjurik Davidson's *Unwrapped Sky* was long-listed for the Arthur C. Clarke Award in 2015. His latest novel, *The Stars Askew*, will be published this coming October.

Endnote

¹All quotations are from an email conversation between the author and Robert Silverberg conducted in 2014.

Handbooked: Review-Essay

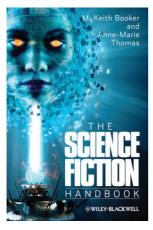
Andy Sawyer (University of Liverpool)

M. Keith Booker and Anne-Marie Thomas, eds. *The Science Fiction Handbook* (Wiley-Blackwell, 2009, 348pp, £20.98)

Nick Hubble and Aris Mousoutzanis, eds. *The Science Fiction Handbook*

(Bloomsbury, 2013, 265pp. £19.99)

Rob Latham, ed. *The Oxford Handbook of Science Fiction* (OUP, 2014, 620pp, £97.00)



It is probably a law by now that every major publisher should have a 'Handbook of Science Fiction', and it is certainly right that there should be differences - critical and ideological - between and within them. With the publication of the mammoth Oxford Handbook of Science Fiction, it may be useful to consider it in the context of some of the other handbooks of the past few years sent to Foundation: what might a 'handbook' be; whatis it intended to do? What is its intended audience? What might it be implying about the shape of science fiction, its history and current preoccupations, its audience and its canon? Some of these questions are addressed directly in these

books; others arise out of a comparison between them.

M. Keith Booker and Anne-Marie Thomas' Science Fiction Handbook begins with a short essay on 'Science Fiction in Western Culture', which considers attempts to define or analyse sf but seems to conclude that its very richness makes this problematic. The decision is made not to include anything like a comprehensive history of science fiction. Instead, the book consists of three main parts: ten brief historical surveys of sf subgenres, representative sf authors, and discussions of sf texts. While there is no overall meta-story of sf, there are numerous parallel or competing stories and the perceptive reader will come to understand that this is as good a way of creating a meta-narrative as any. Generally this works, though there are quibbles. I'd think it fair to want tosee, for example, an entry on 'Alternative History', which is not necessarily a sub-section of 'Time Travel'; while a section called 'Feminism, Science Fiction and Gender' could be taken to imply that we are looking at the broader question of feminist readings rather than that body of texts which have been explicitly written as feminist utopias/

dystopias or in some way to consciously address questions of gender. A section on 'Multicultural Science Fiction' has useful material on sf written from a non White-European perspective which points to some exciting work (although this approach silences the sf voices of non-Anglophone science fiction, from Polish and Russian to Francophone Canadian sf, which have had their own perspectives on otherness), sf from writers of Indian origin is underrepresented, while sf from writers of Chinese origin is not represented at all.

Nineteen short pieces on 'Representative Science Fiction Authors' are probably intended as summaries for students, for few of them are longer than a page and a half, and in many cases add little or nothing to what had already been said about them when their works were discussed in the previous section. They are an interesting mix of 'classic' sf (Asimov, Dick, Heinlein, Le Guin, Orwell, Wells) and newer writers (Margaret Atwood, Nicola Griffith, China Miéville, Ian McDonald, Neal Stephenson), and show the breadth of the field well, though only Wells and Orwell are from the first half of the 20th century. Six writers are Anglophone women. Eight are born after 1945: three after 1960. The meat of the author-based section comes. though, with the twenty 'Discussions of Individual Texts' (two from Wells and one each from the others, arranged chronologically so that we can get a sense of the way sf has developed between 1895 and 2005. There is very helpful material here; the contradictions of Heinlein's Starship Troopers are brought out without standing too firmly upon any of the many misreadings of the novel that abound, though there are amusing swipes at Heinlein's (or his character Dubois') misunderstandings of Marxism. The satire in Pohl and Kornbluth's The Space Merchants is also well presented, though it seems rather a shame that the chance to mention some of Kornbluth's other fiction. is missed: the novel is very much discussed as if it were a work entirely by Pohl.



Hubble and Mousoutzanis's handbook is aimed at providing 'a framework for support for studying sf, or individual works of sf, on a university course' (xvii). Hubble's first chapter 'The Historical Context of Science Fiction' is less a history of science fiction than a discussion of the context of history in science fiction, drawing initially on Fredric Jameson's Archaeologies of the Future (2005) and comparing Philip K. Dick and J.G. Ballard. Following this promising start, Joseph Norman's 'Annotated Science Fiction Timeline' is a useful combination of significant dates in sf and important historical and scientific moments;

helpful contextually but not detailed enough to be more than a rough aide-memoire. Missing are, for instance, Bishop John Wilkins' speculation about the Moon as another world that can be reached, Voltaire's 'Micromegas' (the first short story showing an alien from another world), Margaret Cavendish's The Blazing World (1666), any French future-fiction of the late 18th and early 19th century, and the Wright Brothers' first flight, all of which might be interesting milestones to consider. As such we have a book which is helpful in critical/theoretical discussions and in pointing to such discussions, but only intermittently so in considering texts and how they work off each other.

One of the most interesting pieces here (which does restore this kind of focus) is Adam Roberts' discussion on 'Changes in the Canon'. Much is taken up with the way canon-formation is inextricably linked to questions of gender, race and culture (Roberts begins with reference to the important study of pre-Romantic fiction in Dale Spender's Mothers of the Novel (1986), and goes on to discuss perceptively how a publisher's list of 'masterworks' can still reflect a default white, male canon even when a conscious effort to engage with diversity has been made), but expands what can often be a reductive and repetitive debate by considering some of the collective reading practices that result in canon-formation. Sf readers, he argues, are fuelled by love ('another way of describing a canon would be to call it "a list of SF texts worthy of our love") and shame ('a work of SF can be considered canonical if you ought to be ashamed not to know it'): this latter is not necessarily a judgement call, but the mild embarrassment I feel when I remember that I haven't actually read Carolyn Ives Gilman's Halfway Human (the subject of an examination later in the book). Canon-formation is inherently a question of argument, and handbook-formation is inherently a matter of argument and ideology.

Thus it is interesting (after looking at Booker/Thomas) to consider Chapter Three, the annotated list of 'Major Science Fiction Authors' drawn up by Nick Hubble, Emma Filtness and Joseph Norman, and the 'Case Studies' in Literary and Theoretical texts by Christopher Daley and Jessica Langer respectively which make up Chapters Four and Five. There are nine overlaps between the two handbooks: Margaret Atwood, Octavia Butler, Samuel R. Delany, Philip K. Dick, William Gibson, Robert A. Heinlein, Kim Stanley Robinson, Neal Stephenson, and H.G. Wells. Of Hubble and Mousoutzanis's twenty-one 'Major Science Fiction Authors' eight are women, all write in English, and only two (Wells and Stapledon) flourished in the first half of the 20th century. Of the writers of the era when science fiction crystallized and developed its ambitions (roughly the middle decades of the 20th century) we have Heinlein and (a later generation), Dick and Le Guin: Naomi Mitchison and John Wyndham, whose birth-dates are within a decade of Heinlein's, wrote their sf much later. None are born after 1960. Absent are

writers who might have been said to have had a claim to have constructed sf (Asimov, Bradbury, Clarke), and while Doris Lessing and Margaret Atwood are obvious examples of mainstream writers who have written novels which are clearly sf, many sf readers would argue about the nature of their relationship to the genre. (The summary of Lessing, certainly, is a welcome argument that her comparative neglect within the genre in recent years is misguided.) Hubble's introduction stresses that this list is *not* meant to be 'absolutely the most significant writers in the history of SF' but instead simply 'writers who may be encountered on university courses' (xvii). This rather limits the scope of the handbook, although it is interesting that the rewarding but hardly mass-audience or academically fashionable Mitchison and Christopher Priest are in Hubbard/Mousoutzanis, while Orwell takes a place in Booker/Thomas.

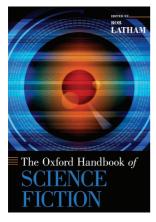
The 'Case Studies' offer Wells' The Time Machine (1895), Ballard's The Drowned World (1962), Russ's 'When It Changed' (1972), Butler's Kindred (1979), and Gibson's Neuromancer (1984), justified as texts that have 'played significant roles in the ongoing evolution of Science Fiction' (75). Again, over sixty years of sf texts are omitted though Daley expertly draws connections between them, especially in the way Wells, Ballard and Butler engage with the idea of time. Langer's excellent coverage of theoretical and historical texts is only limited, perhaps, by the fact that by beginning with Darko Suvin's Metamorphoses of Science Fiction (1979) it denies students the opportunity to reflect upon earlier attempts to establish discussions of what sf might be and do. This is something Andrew M. Butler attempts to do in his later chapter on 'Science Fiction Criticism' which takes a broader and more historical/thematic approach and touches upon fan criticism such as that in Bruce Gillespie's SF Commentary in the late '60s and early '70s as well as author-criticism such as Damon Knight's In Search of Wonder (1956) and James Blish's The Issue At Hand (1964), all material which appeared in fanzines. It might, perhaps, have been overly self-reflective to have considered how histories and handbooks of science fiction themselves create a shaping of the genre, its canon and its reception.

In contrast to the opportunities for discussion raised by these chapters, the sixth chapter, 'Key Critical Concepts, Topics and Critics', is far too slim and scattershot to be of any real use at all. With a mere eleven key critics, for instance, one wonders what the criterion for being 'key' is: I would certainly defend the inclusion of the essentially one-book Kingsley Amis and Sarah Lefanu but there are a number of other critics (many of whom are mentioned within the handbook) who have changed or are changing our approaches to sf.

Aris Mousoutzanis on 'The Science Fiction Film' considers and compares several sf films, from *Metropolis* to *The Matrix*. He raises a number of

interesting approaches (particularly to the idea of sf film as spectacle and sf film being 'self-reflexive' or 'meta-cinematic'), though occasionally there are areas of argument. Any discussion of the 'proto-fascist' nature of *Metropolis*, and indeed its 'misogyny' really needs to consider the role of script-writer/ novelizer Thea von Harbou, and more generally the film's background in Weimar Germany if these descriptions are to be really unpacked and to be of use to students. That there are useful remarks on the passive-aggressive pacifism of *The Day the Earth Stood Still* and the reactionary consequences of George Lucas's decision to eschew experimentalism for conservatism in *Star Wars* shows that nuance can be observed.

The final two chapters, 'Issues of Gender, Sexuality and Ethnicity' (Pat Wheeler) and 'Mapping the Current Critical landscape' (Sherryl Vint) are useful but overlap, and some judicious replacing might have prevented a certain feeling of déjà vu. Wheeler's 'Case Studies' on Gilman's Halfway Human (1998) and Geoff Ryman's The Child Garden (1989) resurrect interesting novels (I shall certainly read Halfway Human) as examples of how sf can tackle issues of otherness, and Vint's survey will be useful for students wishing to explore the current issues in sf scholarship. But because some of the most engaging work (and of) sf is precisely in this area of diversity (Vint rather naturally underplays her own role here), the reader is in danger of seeing Vint's chapter asechoing Wheeler's. If this is avoided, a useful pointer to the richness and openness of current work on sf appears.



In contrast to each of the foregoing, Latham's Oxford Handbook is designed to tackle the big questions. What counts as science fiction in the first place? How does it work? What does it look like now? How does it manifest itself in the world? Although Latham is careful to deny in his introduction that his book is 'a comprehensive work of reference designed to survey the field systematically or to summarize the consensus views' (6), it is a heavy hitter, with essays overlapping in some areas, arguing in others and, as Latham claims, stressing the heterogonous nature of the sf dialogue. Still, specific essays often imply an understanding that sf is British and North

American; reflecting its audience perhaps, but it would have been interesting to have had more on the internationalizing of sf as a natural vocabulary that highlights the work of scholars working on, say, Latin American, Russian or French material.

The book is divided into four main sections: Science Fiction as Genre; Science Fiction as Medium; Science Fiction as Culture; Science Fiction

as Worldview. In total, 44 essays range from Brooks Landon's initial consideration of something that rarely appears in discussions of sf – what do readers and writers really *mean* when they speak of science fiction as involved with extrapolation and speculation? – to science fiction's manifestation as performance art (Steve Dixon) and its influence on advertising and design (Jonathan M. Woodham), as well as what look, from their titles, to be standard 'historical' or 'thematic' surveys (Adam Roberts on the Enlightenment, Lisa Yazek on Feminism) but that, from their context as 'worldview' promise much more.

Landon's piece and Peter Stockwell's essay on sf's 'Aesthetics' (another discussion that tends to be skimmed over once we have ticked 'sense of wonder' or 'sublime') begin with useful jolts to the system concerning how sf works: a discussion echoed later by Joan Gordon. Arthur B. Evans and Gary K. Wolfe consider how histories of sf have been constructed: much has been argued about sf's various origin-myths, but Evans starts off something interesting in his brief discussion about how anthologies (and indeed handbooks) shape histories/descriptions of sf - and even a handful of essays in, we are already looking for longer and more detailed digressions. Wolfe considers the role of fandom in establishing and identifying the literary movements or waves of sf. He sees movements as largely a matter of editors and, later, influential writers, identifying existing movements as: 'less a genuine call for a new kind of fiction than the expression of a desire to see more fiction "like this" (68). This is taken up by Farah Mendlesohn, whose passage on fandom as a 'knowledge economy' where 'the attitude that all knowledge is valuable and that someone else will want to know what you know underpins much of the extracurricular culture of SF fandom' (75) explains much about the attraction and function of fandom. While perhaps she does not go far enough in stressing how much of the basic bibliographical work, canon-formation, and critical discussion came out of this milieu, or its importance for scholarship, she does hint at how, importantly, the shared experience of being a fan can trump reading or writing sf. Gary Westfahl's piece on 'The Marketplace' takes a more critical and ironic tack, describing how (in his view) a field devoted to un-generic, hybrid forms 'has finally become what Gernsback, Campbell, and others had vigorously resisted, a genuine form of popular fiction' (89) and fallen into rigid generic conventions. It is possible, however, looking at the next two essays, to set up counter-arguments. Jess Nevins, indeed, does so when (drawing upon a deep knowledge of the field) he considers 'Pulp Science Fiction' as fixed more to the tastes and requirements of the field's editors. The science fiction short story, he argues, 'came of age in the pulps' (102). Joan Gordon on 'Literary Science Fiction' continues the story as one where sf continued to adulthood, and her discussion of Joe Haldeman's

The Hemingway Hoax (1990) culminates in a thoughtful section in which she discusses how sf engages with what might be called the 'literary megatext'. In beginning, however, with Jonathan Lethem's 1998 essay on the award of the 1973 Nebula to Clarke's Rendezvous with Rama rather than Thomas Pynchon's *Gravity's Rainbow*, she also raises the question of so-called literary respectability or, more accurately, the argument about sf merging with the mainstream, which has been going on since at least the 1960s every time someone notices an sf writer getting 'serious' attention or a mainstream novel using 'science-fictional tropes'. There seems more to wrestle with here than we are given: the model implied by Gordon works reasonably well for US sf, but even here the sense of what we mean when we're pointing to sf seems curiously limited. Michael Chabon's Hugo Award for The Yiddish Policeman's Union (2007) marks, in a sense, the victory of the second of the two wings of sf exemplified by Clarke and Pynchon, though in saying that 'the literary mainstream has not yet been so generous' one might respond by citing the Nobel Prize for Literature given to Doris Lessing.

It may be argued that such a discussion is best served in the next chapter, Victoria de Zwaan's discussion of 'Slipstream' (though Lessing's name only appears in a list of 'crossover' authors),. De Zwaan wrestles with the problem that 'slipstream' is problematic in itself, bearing even more of an underlying 'it means what I point to when I say it' than does sf itself. Bruce Sterling's 1989 essay on the topic is, as de Zwaan emphasizes, so full of caveats and acknowledgments of its artificiality that it essentially self-destructs; and this section of the book, along with Brian Attebery's 'The Fantastic', which explores the way that the fantastic is actually *situated* in sf, and Veronica Hollinger's 'Genre vs Mode' shifts the 'what do we mean by science fiction?' argument implied by Westfahl's reductive but not entirely inaccurate broadside into the more interesting 'what do we mean by "genre"?'. This opens up the examination in Part 2 of the way 'what we call sf' spreads through different media (from film to theme parks) and cultural nexuses.

Some of these chapters touch on familiar territory. Mark Bould, discussing film, says interesting things about François Truffaut's refusal in *Fahrenheit 451* 'to merely memorize and extrude Bradbury's novel on cue' (161). J.P. Telotte's useful account of radio and television is made less useful (for a British reader) by omitting seminal broadcasts such as the BBC's *Journey into Space* and *The Hitch-Hiker's Guide to the Galaxy*. That said, his insightful hint at radio's 'original technological link to [sf] – its own science-fictional character' (171) (Hugo Gernsback's own roots, we remember, were in those 'cutting-edge' radio-hobbyist magazines), is one of so many valuable asides in the handbook. Paul Wells on 'Animation' usefully notes the international nature of this medium, with references to French, Czech, Japanese and Belgian exponents. Further chapters on 'Art and Illustration' and 'Comics'

also note this internationalism. 'SF and manga have been deeply and consistently intertwined' (217) emphasizes Corey K. Creekmur, and he further notes the legacy of Verne on French-language comics, the massive influence of Hergé's *Tintin*, the meticulous art of Frank Hampson and the work of Jodorowsy and Moebius. Creekmur begins, indeed, by drawing attention to 'the steady flow of SF comics across national borders' (212). If the impression we are given is that the US superhero comic is still where we start from it is perhaps less the fault of the particular writer and more the fact that this particular book, for this particular audience, is still going to betray the bias of its origins. While later chapters exploring 'Science Fiction as Worldview', such as John Rieder's 'Colonialism and Postcolonialism' and De Wit Douglas Kilgore's 'Astrofuturism' are among the best in the book, one wishes for a more solid celebration of the international nature of sfoutside of *reacting to* the political dominance so expertly charted in those chapters - even as one racks one's brain to think how best it could be done.

There are omissions that can be more confidently pointed to. It was a science fiction play that gave us one of our most effective icons (Čapek's 'robot'), and recent rediscoveries owe much to the dramatic form. Enrique Gaspar's El Anacronópete (1887) echoes theatrical adaptations of work by Verne, and J. Walter Waller's film A Message from Mars (1913) is based on the 1889 play by Richard Ganthony. It therefore seems odd that the long tradition of the science fiction stage drama, with all its challenges to both storytelling and spectacle, finds no place here. More recent arts do. James Tobias's 'Digital Arts and Hypertext' uses Alan Turing's 1950 essay 'Computing Machinery and Intelligence' as a touchstone, as (it seems) the idea of 'learning through machines' or 'by machines' is central to the projects described. But it is also one of the densest chapters, one which offers the greatest challenge to the ignorant reader (of which I am one). Steve Dixon suggests that the space occupied by performance art is 'precisely science fiction' in that 'it mixes a reality of the known here-and-now with a "will" to the unknown, the alien and the future' (264). Is it that performance art (and Tobias's digital art) are science-fictional in that they are new forms reliant on technologies which are still being developed (we think of the relatively rare sf which imagines new art forms, such as Ballard's sound-sculptures); or are we being encouraged to think of them as arts that question or speculate (as Landon discusses) in the way sf is supposed to do? It is not entirely clear. As with so much here, later chapters illuminate: Ross Farnell on 'Body Modification' returns to similar questions, referencing many of the same people: performance artists Orlan and Stelarc, for example.

John Cline lists and describes sf music, from the introduction of electronics into classical music (Theremin, Varese), film music, and pop music influenced by sf themes such as Billy Lee Riley's 'Flying Saucer Rock

and Roll', Joe Meek, and prog-rock such as Genesis and VDGG. It is noted that sf was as much part of the counterculture as rock music, but surprisingly this is not really explored: important figures such as Jefferson Airplane and Sun Ra are referenced, in fact, *elsewhere* and the chapter ends by inviting us to reference the chapter on Afrofuturism. Again, we have the sense of threads being picked up and discussions echoing back and forth which make this book a useful, if exhausting, read-through and a sometimes frustrating information source on the chapter level.

One finds this frustration with Nic Clear, on 'Architecture', who is useful on futurists and constructivists and speculative architects, and the art of Richard Hamilton, though the strands of visionary architecture represented by the Belgian comic-book artists François and Luc Schuiten (Luc Schuiten is a professional architect), photographer Philip Dujardin, and artist Pavel Pepperstein must be among a range of sf-like territories that could also be pointed to. Echoing this chapter is Leonie Cooper's Baudrillardian feature on the hyperrealism of theme parks in which the 'future' is given us to wander about in as we like.

This sets us up for another web of correspondences and reflections in 'Science Fiction as Culture', which Sheryl Vint's 'The Culture of Science' begins by referencing Worlds' Fairs and implicitly arguing about how science engages with futurity, and also how some 'science-fictional' sciences - nanotechnology, biotech - are themselves only provisional or speculative in terms of actual technological applications. Roger Luckhurst considers automation as one of the cultural focuses of sf. noting technocratic fantasies and fictional robot factories and early twentieth-century sf's links to Taylorism and Fordism in Zamyatin and Huxley. 'Culture' here implies 'formations that have a clear relationship with sf' (11): such formations include 'Military Culture' (Steffan Hantke), 'Atomic Culture and the Space Race' (David Seed), and 'UFO's Scientology, and Other SF Religions' (Gregory L. Reece) which rather interestingly fails to present clearly L. Ron Hubbard's position in the very heart of the sf pulp 'empire' championed by John W. Campbell. Jonathan Woodham's 'Advertising and Design' might more clearly be positioned to echo the intrusion of sf into the 'real' world which the chapters on Architecture or Theme Parks discuss (Woodham shows us how the GM-Frigidaire 'Kitchens of Tomorrow' of the mid-'50s are anticipated in Ray Bradbury's 1950 'There Will Come Soft Rains'), but Latham's own 'Countercultures' begins strongly by referencing a slightly unexpected counterculture (noting some 200 Russian Bolshevik sf titles in the 1920s) and proves to be fascinating on the Beats: its move away from the obvious makes it another of the strongest chapters. Patricia Melzer on 'Sexuality', Ross Farnell on 'Body Modification', and Thomas Foster on 'Cyberculture' take us through embodied (or disembodied) relationships

between sf and the physical world, while Elizabeth Guffey and Kate C. Lemay take the post-cyberpunk jump to 'Retrofuturism and Steampunk', seeing both as attempts to 'engage the past in order to understand the future' (442) but rather minimizing the creative tension between critical imagination and reactionary nostalgia to be found in each phenomenon.

The fourth section, 'Science Fiction as Worldview' takes up more ideological systems, returning perhaps to the debate about what sf is and where it came from, but in a wider and more informed context. Here, to my mind, we get the more satisfactorily theoretical meat of the book, with Adam Roberts discussing 'The Enlightenment', William Hughes on 'The Gothic', and Patrick B. Sharp bringing attention to the role of the 'Darwinist' narrative in understanding how sf crystallized as a way of writing about the world - a role which, of course, has importance in understanding how (as Rieder describes) 'evolutionary' or 'progressive' interpretations of colonial and postcolonial 'facts on the ground' have become central to the sf story: 'At no point in the history of SF is colonialism not yet or no longer relevant' (486), 'Pseudoscience' (Anthony Enns) echoes earlier discussions in the 'culture of science' but is here discussed in terms of three nineteenthcentury exploded theories which may be said to have developed with, or in conversation with, Darwinism and colonialism: the Hollow Earth, the Martian canals and ESP, all of which spawned fictions about invasions, racial/cultural conflict, and domination/subjugation. Andrew M. Butler on 'Futurology' considers the idea of the future (with which sf is thoroughly associated), but in the context of other ways of thinking about the future, which includes religious eschatology and the way a discipline of 'Future Studies' or 'Futurology' developed in the mid-'60s to help communities and businesses deal with change and formulate policies. Each has influenced sf: it can be argued that futurology shares many assumptions with sf, one strand of which began with 'extravagant fiction today: cold fact tomorrow', though it is more coldly and clearly about following (or avoiding) particular trends. One such trend, argued over by science fiction fans and futurologists alike is Posthumanism: Colin Milburn's chapter looks at the way sf has, for decades, speculated on the biological or cybernetic human condition, feeding off (and inspiring) scientific and technological speculations about where the human race may (be directed to) develop that are usually introduced with the phrase 'It sounds like science fiction ... but ...'. Once more there are deliberate or spontaneous links with other chapters - Milburn recalls the deliberate appeal of sf writers such as E.E. Smith and Heinlein to fans' sense of difference and the half-serious 'fans are slans' slogan that came of out A.E. Van Vogt's tale of mutant superhumans - is sf itself a 'slan-making machine'? Posthumanism is, possibly, an act of sf (as a fantasy) and a metaphor for sf's own inspiration for difference.

More directly political worldviews make up the final chapters. Lisa Yaszek's chapter on 'Feminism' is, essentially, the influence of feminism in the USA, beginning with the 1848 Seneca Falls Convention as the place where 'Feminist history officially begins'. This aside, the early US feminists' discussions about social change and the nature of 'domestic' or 'public' labour, and the utopian speculations of Mary E. Bradley Lane or Charlotte Perkins Gilman lead easily into the development of later US science fiction, and while the post-Russ authors are given their due place, Yaszek is careful to point out authors like Ryman (in the contemporary field), the authors of the 1920s and '30s encouraged by Gernsback, and the positive side of the 'domestic' women's sf which Russ was reacting against. Neil Easterbrook's 'Libertarianism and Anarchism' is equally focused on US political trends, but his exposition of tendencies which readers outside the USA may find difficult to understand in context should be welcomed by readers confused by a habit ofr qualifying subclasses and the way 'terms are sometimes used in precisely the opposite way that they are used under different moments, cultures, or conditions' (554). Easterbrook gives clear contextual readings of Heinlein and Ayn Rand, as well as explaining the ambiguous political jokes of L. Neil Smith, founder of the Libertarian Prometheus Award. His brief comparison of Rand's Atlas Shrugged and Le Guin's The Dispossessed is telling in the way it points to the difference between the two terms of his chapter heading, and the way libertarian sf often critiques authority only to re-inscribe it.

Several other chapters directly or indirectly link to De Witt Douglas Kilgore's 'Afrofuturism', which provides a useful summary of how this movement (or rather collection of variously-interpreted threads from various sources) offers 'a model for how other peoples of color might view the futuristic art they create' (569). In some ways thinking about Afrofuturism (which draws upon or reclaims media, technologies and canon not otherwise seen as 'core' sf content) is a model for the way different territories are pulled in in this handbook. Another useful model is found in Phillip E. Wegner's concluding essay, 'Utopianism', which cites, as many essays here have also done, Jameson's *Archaeologies of the Future* to argue for the centrality of the utopian impulse to sf. In quoting *The Time Machine*, Wegner superimposes Jameson's 'constitutional inability to imagine Utopia itself' (577) upon Wells' incomprehensible future to present sf and utopia as a dynamic emblem for desiring and knowing the unknown.

One starts the Oxford Handbook of Science Fiction feeling that, as a handbook, it is as problematic as any other. It is not a useful reference book, where a student or novice reader might look up an author or theme, or get a clear sense of 'that which we call sf' or revise for an essay. Its flaws are sometimes the flaws of ambition. It is not as diverse as it seems, or wants to

be; it is still more or less wedded to a dominant but limited paradigm of sf even as, at its best, it shows ways out of this paradigm. It is not probably a handbook to read, as one does many such books, a little at a time, section by section, feeling that you have to absorb that section before moving on to the next. It is, however, a book which, if you have the time, you can read and absorb slowly, feeling the conversations, arguments and contradictions between each piece, and coming to understand that a handbook is not the end of such a confrontation, it is merely the beginning.

Conference Reports

A Fantastic Legacy: Diana Wynne Jones, Seven Stories: the National Centre for Children's Books / Newcastle University, 5-7 September 2014

Reviewed by Erin Horáková (Queen Mary's College, London)

In a 2011 obituary for the writer Diana Wynne Jones, Farah Mendlesohn said that Jones 'grew' readers receptive to her work and writers to follow in her footsteps. The existence of this conference suggests that Jones also grew critics interested in interrogating her work as a corpus – readers who find in Jones' oeuvre significant approaches to sfinal and broader literary questions. The conference had a uniquely challenging (or exciting!) task before it. Jones has, as Mendlesohn indicates, a quite dedicated fandom. The author died so recently that many people who knew her personally (some of whom were involved in the creation of her remarkable and substantial body of work) could attend and have their (sometimes conflicting) say. Conversely, some academics attended the conference in the same way they might attend one on Shakespeare: as keen appreciators of the work, perhaps, but also as specialists on these texts or texts generally. The same event had to satisfy these diverse demographics.

The resulting conference was an admirable and interesting attempt to inhabit the overlap of these Venn diagram circles. It was an intimate, fannish affair - 'Diana' this and that, part celebration, part memorial service. It startled and intrigued me as a fan not immersed in this fandom per se, and as someone more accustomed to dealing with dead and dusty Dickens. It may have also startled some of the fandom attendees - some of the con reports online do grouse about being served academia when they expected something else, in classic 'Worldcon academic stream'-fashion. The twitter handle #7sdwj hosted the conference's lively digital conversation and can still be accessed by the curious.

The first day of the conference took place in Seven Stories, the National Centre for Children's Books, a lovely and unusual museum and event-space. Following an opening speech by co-organizer Lucy Pearson, Jones' literary agent Laura Cecil discussed her friend and client's writing process as well as Jones' collaborations with various editors over the course of her career. The anecdotal details (Cecil spoke of receiving drafts that reeked of the cigarettes Jones smoked while writing, and of Jones' infamous travel jinx) were rich - Cecil has her own ability to tell a good story. Cecil found Jones a thoughtful, 'meta' writer, yet said her process was a fragile one. She couldn't

talk about a work-in-progress before embarking on her second draft without killing the idea. She was never prepared to commit to producing the same kind of story again and again, or to producing a book to time. She edited her own work intensively at the second-draft stage and so her work needed little external editing. As she matured as a writer, she increasingly resisted external interference. Yet Jones wasn't precious or unreasonable. She was open to doing further work if the editor making the point 'got her', if she thought the criticism had merit. Perhaps the most intriguing thing to come out of Cecil's talk was that Jones was a great correspondent (unsurprising, really) and that we might at some point look forward to collections of her letters.

It is impossible and silly to be overly coy about the tension surrounding the talk that followed. Diana Wynne Jones contended that she had a difficult childhood and that, in particular, her mother was neglectful, even to the point of being abusive. Her childhood friend Nicholas Tucker, now a renowned children's literature scholar, gave a talk that attempted to contextualize their overlapping childhoods in the light of circa-WWII parenting standards, the evolving emotional discourse of the family, and the 'liberal, semi-boho, impoverished fringe community' to which they belonged. Later in the day, Ursula Jones, who doesn't share her sister's assessment of their childhood and their mother, gave her own account that largely circumnavigated but couldn't help but touch upon the extent to which their perceptions differ. Their mother Marjorie Jones' own account comes to us only through these prismatic refractions and scattered snippets, such as this quote from a letter she wrote to Diana: 'Yes, you were very neglected. It's been so useful to you.' For certain kinds of author-centric scholarship and fannish experience, there are obvious benefits to knowing the author (or at least people who were major players in the author's life). Yet as we see, this knowledge also introduces its own risks, and tensions that may or may not be productive.

Archivist Hannah Izod talked about Seven Stories' Diana Wynne Jones Collection, and elaborated on the letters Cecil had mentioned. She flagged up Jones' corresponding relationships with writers such as Patricia C. Wrede. A rotating succession of small groups then enjoyed a tour of the galleries, sometime handling the actual archive materials, or some down-time (or, in the case of members of the fan listserv, a con meet-up). The day closed with Ursula Jones' speech. A professional performer, Ursula masterfully delivered anecdotes about her sister, and took us through the process of finishing Diana's incomplete final book, *The Islands of Chaldea*. She even performed a song Diana had written as a young woman, and led a singalong. This may sound excruciating, but Ursula is a skilled entertainer and in her hands the thing was joyous and natural.

The second day, hosted at Newcastle University, consisted of a total

of 19 papers from academics at various career stages as well as some independent enthusiast researchers. Two panel tracks interwove and then converged just before the keynote. The day started strongly with a notable paper from Aishwarya Subramanian (Newcastle) on 'The Colonisation of Fantasyland'. Subramanian argued that *Dark Lord of Derkholm* 'opens up consideration of all secondary worlds as colonial spaces', and drew valuable connections between fantasy and imperially inflected traditions of travel and romance writing. Given that colonial narratives reassert themselves even in consciously anti-imperialist texts, can a truly anti-imperial narrative exist within a genre so predicated on an orientalizing gaze? Subramanian was followed by Gabriela Steinke (Wolverhampton) who gave a paper on her archival research and Apolline Lucyk on heroism in Jones' work.

In the second session, I gave a paper on formative familial trauma in the Chrestomanci series, which brought Laplanche's seduction theory to bear on Jones' always-troubled parent-child relationships, whilst Laurel Richards talked about dysfunction and reconstruction in the same series. On the other track, Victoria Symons (UCL) spoke about Medievalism in *Power of Three*, Frances Foster (Cambridge) on antiquity in Jones' corpus, and Molly Brown (Pretoria) on Arthuriana in Jones followed, in the second session, by Akiko Yamazaki on laughing and power in *Witch Week*, and Kate Mitchell spoke on laughter and learning in Jones' work.

Junko Nishimura (Shirayuri College), who translated Howl's Moving Castle into Japanese, then gave a fascinating lecture on sound in the 2004 Miyazaki film version. She brought to our attention the economy of setting and sound description in Jones' text, and the way the film modernizes the story's settings and modes of transport. Nishimura lingered on the symbolic union of Sophie and silence (in contrast to Howl's, well, howls), Akie Kishino's similarly absorbing discussion covered vocals in the film Howl's Moving Castle. According to Kishino, the original Howl novel, its Japanese translation, the Japanese animated film and the film's subsequent English translations (sub and dub) are all very different entities. Kishino flagged up anime genre-norms that in part organize the film which may elude Western critics unfamiliar with the form. In the film, Howl was re-imagined as a bishonen lady-killer. Afraid that blonde, willowy Howl might come off as 'fey', the studio, aiming for an American Disney-going audience, made a conscious effort to strengthen the character by casting Christian Bale as his English voice actor. Meanwhile, on the other track, Dara Downey (University College Dublin) spoke about the Goddess in The Time of the Ghost, Meira Levinson (CUNY) about feminism, religion and the undying in the Dalemark Quartet, and Urvashi Vashist (UCL) on 'The Fantastic Autobiografictions of War'

In 'Shark-Infested Custard: On chaos as a force for good in the works

of DWJ', Gili Bar-Hillel (Tel Aviv) pointed out that while in terms of D&D alignment, traditional fantasy is generally about Lawful Good confronting Chaotic Evil, Jones is more interested in Chaotic Good confronting Lawful Evil. Jones' alignment with chaos makes her endings unusual. You have to read carefully to understand what's gone wrong in the plot, and what's been released in the resolution. In Jones' work, it's good that orders collapse. Teya Rosenberg (Texas State), speaking about love, sex and power in Jones' work, made a bevy of interesting points. Jones started out writing both male protagonists and relatively traditional narrative structures. As she grew more confident, Jones grew both more experimental and more interested in female protagonists. Jones' work focuses on issues of power yet we must admit that her stories are largely heteronormative. Caroline Webb (University of Newcastle, Australia), speaking on the way Jones uses the fantastic quest narrative, talked about The Crown of Dalemark as simultaneously Jones' most traditional guest and a denial of such guests' typical neat endings, and Hexwood as 'a metafictional commentary on the process of story-making'.

Catherine Butler (UWE) closed the conference with her paper 'Enchanting Places: Readers and Pilgrimage in the Novels of Diana Wynne Jones'. Those wishing to read this provocative tour-de-force meditation (part personal essay, part academic inquiry) on how knowledge of the real world analogues for fantastic stories and places can be simultaneously enriching and limiting, and the privileging role of such knowledge, can access it online at *Strange Horizons*. On the following day, the conference team had arranged a showing of Miyazaki's *Howl's Moving Castle* at a local cinema, preceded by a talk from Nishimura and Kishino. This showing was open to the general public, and I thought it an innovative way to open the work of the conference up to wider audiences.

I left the conference with a simultaneously frustrating and generative sense that we collectively still have so much to explore with Jones' work. Because the author passed away so recently, a lot of Jones scholarship is primarily interested in reckoning with her as a personality, rather than with the texts qua texts. At the moment we are still tied to a relatively slender collection of criticism on Jones – for example, it's worth noting how many of the papers heavily engaged with Mendlesohn. There is nothing wrong with the works in question – it would just be great to see the conversation about Jones' writing develop in terms of diversity and scope. With luck and work, the field will expand and mature in the coming years, arriving at a different (not de facto better) consideration of the author and engaging with the theoretical concerns that occupy sf/f and literary criticism more broadly. I trust that there will be more conferences in the future – it will be interesting to see where we stand then.

Strangers in Strange Lands: Mapping the Relationship between Anthropology and Science Fiction, University of Kent, 15-16 November 2014

Reviewed by Natalia Bonet, Brian Campbell, Melanie Dembinsky and María Paz Peirano (University of Kent)

Hosted by the School of Anthropology and Conservation, with sponsorship from the Science Fiction Foundation, the symposium brought together twenty-four scholars from across the disciplines of social and biological anthropology, literature, and film studies, and highlighted the myriad ways in which relationships between anthropology and science fiction can be explored. Topics ranged from the depiction of fictional anthropologists in science fiction films, and science fiction as a reflection and critique of dominant political ideologies, to the influence upon the ethnographer of reading science fiction in the field, and the question of whether or not the 'mother' alien in the *Alien* movies is really female (spoiler: he's not).

Despite the many parallels between anthropology and science fiction, there is currently no academic space in which to engage them both. The symposium sought to promote the analysis of science fiction as a valid object of anthropological inquiry, and in particular, as symptomatic traces of developing futures, thereby expanding the scope of anthropological scholarship. In both fields, authors attempt to convey to their readers a coherent impression of a cultural whole with scenarios that seem familiar, rational and plausible while maintaining the potential to challenge our ability to believe, to make us hesitate. The central theme in both science fiction and classic ethnographic texts is the notion of 'alien' cultures and of imagining the 'other'. As such, both science fiction and anthropological writings (in particular, ethnography) can challenge readers to re-examine a wide range of social and cultural problems as well as their own assumptions and beliefs.

The symposium was organized into five consecutive panels, each of which explored a different facet of the various interconnections between anthropology and science fiction. The first day opened with a panel on such themes as the transmission of tradition and cultural memory in oral societies (Jedrzej Burzsta, SWPS Warsaw), the work of science-iction writer and professional anthropologist Chad Oliver (Michael Fisher, Kent), and the representation of anthropologists in science-fiction film (Gavin Weston, Goldsmiths). The second panel explored themes of ethnicity and nationalism in non-Western science fiction, from self-marginalization and collective martyrdom in Serbian literature (Bojan Zikic and Marko Pisev,

Belgrade) to how dystopian narratives in Czechoslovakian films of the 1960s constitute a social commentary of the times (David Sorfa, Edinburgh), passing through an analysis of film-production in South Africa and how the streets of Johannesburg have become one of the preferred locations for films set in post-apocalyptic worlds (Jessica Dickson, Harvard). This panel reminded us that science fiction often reflects upon issues of identity and the construction of 'otherness', and that some productions can be read as anthropological records.

The third panel focused on the relationship between real and fictional technologies, and how sf texts mould our ideas and expectations about technological development. The panel showcased papers which explored the feasibility of bringing these technologies to life, from problematizing the possible outcomes of inserting fictional technologies into unprepared social contexts (Joseph Lindley and Dhruv Sharma, Lancaster) to actual attempts to read science fiction works as prototypes of design fiction (Sally Applin, Kent). Birgit Buergi (National University of Singapore) concluded the panel by examining how the technology presented in Thai comic books is being used as a tool to promote a modernized and technologically oriented nation-state.

The first day of the symposium culminated in an enthralling and wellreceived screening of short science fiction-related films, which led to an informal discussion among the participants. The film programme aimed to reflect some of the main topics addressed in the symposium, conveying both new and classical approaches to those issues. The selection included two contemporary films, the Spanish Helsinki (2012) and the Swedish A Living Soul (2013). The first intertwined elements of science fiction and reality in the everyday life of two bartenders, exploring their imagination of the future and the paradoxes of time travel. The second film explored the limits of the 'human' in the absence of a fully corporeal being, and guestioned the life and condition of human existence in a bodiless, although conscious, subject. The final screening of the programme was the recently restored version of A Trip to the Moon (1902). The audience had the opportunity to appreciate the charming early futuristic approach of this complete handcoloured version, and observe some of the historical anxieties towards space travel and encounters with exotic aliens.

The second day of the symposium began with 'Monsters and Portals: When Science Fiction Invades Reality'. The papers in this panel did not explore how the hyper-technological world of science fiction can be used as a prototype to build a hyper-technological reality, but how it can be used as a means of escape. From Bram Stocker's *Dracula* (Daniela Peluso, Kent) and the works of H.P. Lovecraft (Justin Woodman, Goldsmiths) to films such as *The Matrix* or the TV show *Lost* (Susannah Crockford, LSE), science

fiction and fantasy provide a loophole, an escape portal for those who share a disenchantment with modernity. The final panel explored how science fiction can be used as a tool to problematize some of our most naturalized and unquestioned concepts such as sex, gender and procreation. The papers by Jamie Lawson (Durham) and Marika Moisseeff (CNRS) examined how representations of the mating habits of aliens echo our ideas about the invasive and uncivilized nature of procreation as well as our preconceptions about the female sex. Debora Allebrandt (Rio Grande do Sul) explored how the future of procreation depicted in science fiction films relates to our fears about the use of reproductive technologies. Science fiction, in this sense, reproduces our nightmares about procreation as a chaotic force related to untamable female creatures as well as our fears of a future without it.

The symposium boasted three keynote addresses, the first of which, by Dolores Martinez (SOAS/Oxford University) and entitled 'Science Fiction and an Anthropology of the Imagination', drew on her experiences of teaching about mass-media to understand why anthropologists have refused to engage with science fiction as the 'mythology of modernity'. Anthropologists, Martinez observed, have avoided studying modernity, firstly because they saw themselves as solely preoccupied with non-Western society, and secondly because 'modernity' was already an 'overcrowded field' studied by historians, sociologists, philosophers and artists. Do we 'need anthropologists on top?' she asked. Since modernity was constructed as the domain of science, history and prediction, hopes for a serious engagement with science fiction seemed bleak: imagination and fantasy had no place in modernity, and science fiction was trivialized as mindless entertainment with no impact on social life. The problem, Martinez argued, lies not with science fiction but with our view of modernity. She exposed how science fiction is not a trivial money-making tool but a politically charged medium often produced by individuals who, like anthropologists, tend to be 'cognitively estranged', and whose work criticizes nationstates and the processes of citizen formation. Science fiction, moreover, has the power to transform society: it dreams up 'unknown possibilities of existence', turning 'yesterday's imagination' into 'today's technology'. Martinez's 'anthropological eye' revealed how imagination and wonder are central not only to social change but also the modern condition. This begs the Latourian question: "have we ever been modern?"

Paul March-Russell (Kent) further expanded upon these themes. His paper explored the work of J.G. Ballard whose inspirational roots lie in his 'cognitive estrangement' from British society. Ballard's work can be compared with that of Mass Observation and the Independent Group, two intellectual movements pursuing an 'anthropology of ourselves' through an intensive multidisciplinary study of British society. Ballard's visions of

drowned worlds, doomed outsiders and symphorophiliacs indicate that science fiction constitutes a 'rogue anthropology' bridging literature and critical reflection.

Writer Gwyneth Jones opened her paper by proclaiming a connection between colonialism, gender and science fiction, provocatively adding that 'aliens' might well be the product of these links. She noted that just as *The War of the Worlds* was written as a critique of the Tasmanian Genocide of the 1830s, her own Aleutian Trilogy, which narrates Earth's invasion, colonization and decolonization by a race of immortal aliens, reflected the optimism of the 1990s, marked by the collapse of empires. However, as the utopian dreams of the 1990s soured into mass displacements, war and corruption, Jones' aliens became gendered, their invasions slow and tragic. Jones came to understand that the inhuman alien has always featured in the history of humanity: an antagonistic other that can displace and, through the rape of women, gradually colonize new lands. The 'alien' has always coexisted, oftentimes intimately, with us. 'We are all aliens', Jones concluded, offering a fresh insight into the identity politics of our contemporary world.

The final day of the symposium concluded with a round-table discussion led by Bruce Kapferer (Bergen), who summed up the key points raised over the course of the symposium. In his thought-provoking talk, he explored the possibilities for anthropology to discover new horizons through an engagement with other modes of cultural practice, expanding our knowledge beyond the limitations of Western-centred, metropolitan thought. Kapferer called attention to the relationship between anthropology and the construction of worlds of possibility, that is, the challenges of thinking about the future by attending to alternative forms of living in the present and their projections for the future. He proposed rethinking anthropology through science fiction, asking us to consider the value of Fredric Jameson's concept of utopia for the discipline. Kapferer argued in favour of breaking some prevailing disciplinary boundaries and reclaiming the roots of anthropological thinking as a critical discipline, and suggested that new ways of looking at science fiction are a suitable locus for broadening this gaze. His talk provoked an intense and engaged discussion on the part both of the roundtable panelists and the audience. The panelists debated enthusiastically the challenges of interdisciplinary research, and highlighted avenues for further exploration in the discipline. This discussion closed by addressing the possibilities of constructing an 'Anthropology of Science Fiction' as a necessary and valid intellectual project that could be fostered through more, and more diverse, anthropological research.

Helen Oyeyemi Symposium, Teesside University, 18 February 2015

Reviewed by Aishwarya Subramanian (Newcastle University)

Helen Oyeyemi is the author of five novels, each of which contains fantastic or supernatural elements. She has been claimed at various points for fantasy, horror, Gothic, literary fiction, postcolonial fiction, and magical realism. What has been less understandable is the lack of critical material that her work has so far produced.

Which is why this symposium was so very welcome. Organizers Sarah llott (Teesside) and Chloe Buckley (Lancaster) are the editors of a forthcoming collection of essays on Oyeyemi's work. Most of the presenters were working on chapters for this collection; as a result the symposium became in part a space where people could test out ideas. There were fewer conclusions than papers, yet this added to a general sense of the symposium as a single conversation, the subject of which was something like: what, exactly, is Oyeyemi doing? During the welcome address Dr llott insisted that she did not wish to impose a master narrative upon Oyeyemi's work; that reluctance was to become something of a theme as the day progressed.

The symposium opened with a panel on 'Race, Racism and Postcolonialism'. Dave Gunning (Birmingham) argued that Oyeyemi has responded to discomfort over being always read through a framework of postcolonialism, or as a Black British author, by consistently nuancing and problematizing race. An ongoing tension he located within her work is that between individual identity, 'the urge to autonomy that can characterise adolescence' (Oyeyemi's protagonists are usually young people), and its uneasy relationship with history.

David Punter (Bristol) too was concerned with the notion of identity when in so much of Oyeyemi's work the self is rendered violent and strange, twins and doubles and other iterations of the self are menacing, and subjectivity is displaced. Punter, however, was interested in the effects upon narrative. Selfhood is so fraught in these fictions that at times it appears to be no more than a concatenation of foreign bodies; scraps of other myths, other narratives, sutured together. Punter and Gunning, then, both worked around questions of agency and narrative authority, of the personal versus the self, and how these come together in Oyeyemi's work.

Buckley opened the next set of papers on the Gothic. She argued that in Gothic fiction the child figure often functions as a repository for adult desires, particularly for stability and futurity. Buckley read Oyeyemi's child protagonists in this context, as burdened by identities and expectations placed upon them, but also irreducible to empty vessels. Ilott's paper brought together acts of physical consumption and racial and national

identity construction, demonstrating the ways in which the protagonists' become sites of domination, conflict and control. Anita Harris (Universiti Kebangsaan, Malaysia) tied together the previous papers on the panel, in addressing parenting, gender, consumption and monstrousness, and making a useful comparison with Alfred Hitchcock's *Vertigo* (1958) which is signalled as an intertext in Oyeyemi's *The Opposite House* (2007).

The final session, on 'Revision, Rewriting and Metafiction', focused on Oyeyemi's use of fairy tale. Jo Ormond (Lancaster) read Oyeyemi's work in the context of other recent fairy tale adaptations, which humanize their villains and present them as sympathetic subjects of trauma. Yet, as Oyeyemi reminds her readers in *Mr Fox* (2011), the author must negotiate the space between humanizing and excusing while, like Angela Carter before her, challenging narratives of how victims should behave. Helen Cousins (Newman University) discussed beauty as a shaping force in female identity, linking *Boy, Snow, Bird* (2014) to Barbara Comyns' *The Juniper Tree* (1985). But while these were both interesting papers, they lacked some of what had made the earlier sessions so exhilarating. Perhaps it was that they seemed more closed-down; we have frameworks in place (haunted eternally by Carter's spectre) for talking about fairy tales, and so there was less space for the open-endedness and uncertainty that made the earlier discussions so full of possibility. (Or perhaps it was because we had all just had lunch.)

It is not always clear where this uncertainty comes from. In a *Strange Horizons* interview with Niall Harrison in 2013, Oyeyemi explains that she wants to 'make room within the gothic genre for stories that make some of its themes explicit', and if these books are difficult (and they often are), they are rarely obscure about what it is that they are doing. And yet. To be 'got' in *The Icarus Girl* (2005) is to be attacked, and possibly possessed. Through the symposium the larger narrative of these books that emerged was that of a body of work deeply uncomfortable with the *idea* of a larger narrative.

Stage the Future 2, Arizona State University, 6-7 March 2015

Reviewed by Susan Gray (Royal Holloway College, London)

Over the two days, the conference followed on from some discussions that took place in the first iteration of Stage the Future in London (that Christos Callow and myself had organized in April 2014); namely the benefits of staging sf compared to film, TV and the novel, but also generated new threads of thought. The topics discussed felt very much like a continuation in time – now science fiction theatre seems to have become more established, how do we promote or market it in spite of a seemingly ingrained stigma?

Unfortunately, the first keynote speaker, Howard Sherman, was unable

to attend because of a flight cancellation. We were fortunate to receive Tom Seager (Arizona State University) with an insightful talk about the benefits of interdisciplinary practice, combining empathy and ethics in science with the exploration of ideas through art. The first panel focused on the role of the actor, rather than more visual detail, in embodying the speculative nature of the sf medium. Carrie J. Cole (Indiana University of Pennsylvania) discussed the concepts of robot thespians, robo-ethics and automation, providing us with a Thespis (rather than Turing) Test. Carol Stewart (Bellarmine University) presented a fitting tribute to Leonard Nimoy's Spock in her paper on method acting and Melissa Thompson (Michigan State University) gave us a mixed media presentation and talk to show us her performances of the 'Ambient Cassandra'.

The second panel featured a multilayered discussion on fandom, the canon and immersive theatre. Jeff Sachs (ASU) discussed the work of theatre company Punchdrunk and *Doctor Who's* 'The Crash of the Elysium', explaining the concepts of control and involvement of the audience in immersive theatre. We also had a Skype presentation from Robert Kroll, discussing reality versus continuity in the *Doctor Who* Proms, and were treated to a presentation from Corporal Outis in full *Star Wars* stormtrooper uniform on 'The Sci-fi Fan as Performance Artist.'

The last panel of the day discussed diversity of forms, audience and representation. A. Vincent Ularich, artistic director of the Science Fiction Theatre of Boston, gave a great talk on the need for diverse casting and writing within the genre, promoting stories from all backgrounds and genders. Kelley Holley, literary manager of the same company, gave a paper on nomadism, the voyage and home in sf theatre. Paco Madden (ASU) examined the increasing popularity of 'Geek Theater' in which the passion within sf fandom can be harnessed for the stage. Artist and writer Catherine Sarah Young, presenting from Skype, talked about her fascinating post-apocalyptic project 'Climate Change Couture: Haute Fashion for a Hotter Planet.'

The second day opened with a panel on imaginary landscapes. The first speaker was the Artistic Director of Orange Theatre, Matthew Watkins, on his adaptation of *Solaris* and the staging challenges involved (as hard as staging a sentient ocean can be, I guess!) Yeliz Biber Vangolu (Ataturk University, Turkey) spoke about dystopian visions in the plays of Caryl Churchill, including the surreal *Skriker* (1994) and *Not Not Not Not Not Enough Oxygen* (1971). Artist Miwa Matreyek wowed the audience with her stunning animation and artwork in her presentation 'The World Made Itself'. This panel was followed by the second keynote speaker, Jay Scheib (MIT) with his presentation that involved video clips, testimonials and a fascinating talk around his productions of *World of Wires*, *Untitled Mars* and *Bellona*,

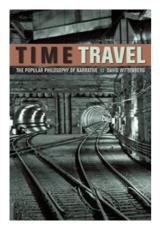
Destroyer of Cities.

During the final panel of the day we were treated to a live music performance in 'Musical Manifesto', a presentation by Little Brother Mojo. Chris Callow Jr. (Birkbeck College, London) presented his entertaining and thought-provoking paper, 'First as Tragedy, Then as Sci-Fi: Sci-Fi Drama as a Return to Theatre's Roots'. Robin Abrahams, journalist and researcher at Harvard Business School, presented her findings on marketing and the theatrical staging of science in her paper 'Mental Models of Science (Fiction) Theater.' Finally, I gave my talk, 'To see a World in a Grain of Sand: Metaplastic Membranes for Staging Science Fiction', which outlined the basis of my research by using an onto-cartographic model. I used examples of my practice as illustration, including my recent play SUM.

Lastly, the plenary talk was given by the artists from ASU's Emerge festival (Lance Gharavi, Dan Fine, Camilla Jensen and Matthew Ragan) who discussed their various projects including Baxter, a robot that mimics movement through the Kinect engine of the Xbox models, The Future Fairytales with Lego amongst many others. We explored how the general public responded and how they see the future as either utopic or dystopic.

In our concluding remarks, the location for the next Stage the Future conference was announced as Kentucky, to take place in spring 2016. We also announced Parallax, the first science fiction theatre festival, to be held in Louisville later in 2015. I would like to thank here the co-organizing team, Arizona State University, the Center for Science and the Imagination, Herberger School of Film, Dance and Theatre and the Marston Center for all their support and for providing us with a great space to congregate, present and discuss. I would also like to thank the delegates for the wonderful array of papers and ideas and in a lot of cases, for travelling such a long way.

Book Reviews



David Wittenberg, *Time Travel: The Popular Philosophy of Narrative* (Fordham University Press, 2013, 306pp, £18.99)

Reviewed by Grace Halden (Birkbeck College, London)

Stephen Hawking once remarked that 'Time travel used to be thought of as just science fiction.' However, since the development of the General Theory of Relativity, the concept of time travel has more scientific credibility than it did at the time of the early publications of time travel fiction, such as Edward Mitchell's 'The Clock That Went Backwards' (1881) and Mark Twain's A Connecticut

Yankee in King Arthur's Court (1887). Nevertheless, David Wittenberg's lively text argues that time-travel fiction is less about hard scientific fact and more about exploring how the literary form is itself an exercise of temporality. Wittenberg offers a stimulating and diverse treatment of theory and time-travel fiction through a well-considered exposition on the philosophy of narrative. Through such an analysis, Wittenberg also explores the ways in which scientific advancements and the popularity of certain scientific theories have informed and shaped time-travel fiction.

Unlike many critics, Wittenberg does not locate the origins of time travel literature in popular texts such as H.G. Wells' *The Time Machine* (1895) but rather finds its primordial beginnings in 'the partial failures of several other literary types'. Wittenberg argues:

The time-travel story is what lingers on after a fortuitous malfunction or mutation, a kind of fallout from the implosion of utopian fiction under the weight of its own aesthetic and political contradictions. And it is only as such – which is to say, not as an idea but rather as a formal and structural precipitation or coagulation – that time travel is nascent narrative theory. (48)

Often, serious discussions on time travel theory and fiction run the risk of being too convoluted and dense for comfortable reading. Despite these potential pitfalls, Wittenberg successfully presents a diverse range of theories, touching on physics, philosophy, and literature in an extremely accessible way.

There is no doubt that Wittenberg is an expert on the subject, with a

truly impressive range of literature and theory to draw upon. He covers an astonishing range of time-travel literature, Wittenberg explores everything from early novels from Wells o films like Back to the Future (1985) and television, including Star Trek: The Next Generation (1987-94). He even includes very brief yet fascinating references to surprising material such as The Simpsons (1989--), Harry Potter (1997-2007), Lost (2004-10), Hot Tub Time Machine (2010), and My Little Pony (2012). For Wittenberg, time-travel fiction acts as a 'narratological laboratory' (2) through which the reader can address intriguing philosophical questions pertaining to both the process of storytelling and the issue of time. In fact, it is suggested that readers and audiences of popular fiction containing time-travel themes engage with the same issues that theorists contend with when exploring matters of temporality. This is poignantly illustrated as Wittenberg analyses time-travel and alternate-universe fiction alongside the key scientific work of Niels Bohr, Albert Einstein, Kurt Gödel, Hugo Everett III, and Stephen Hawking as well as the work of Arthur Danto, Donald Davidson, Daniel Dennett, Michael Dummett, Nelson Goodman, David Lewis, Hilary Putnam, and W.V.O. Quine, on the subjects of philosophy, metaphysics, identity, realism, and counterfactuals (to name just a few!).

The text opens with an introduction on time travel and the mechanics of narrative, Wittenberg initially noting that the process of storytelling is in fact an act of time travelling purely through the mechanics of creating and working within the duration, history, development, and events of a story. Thus, as Wittenberg observes, 'one could arguably call narrative itself a "time machine," which is to say, a mechanism for revising the arrangements of stories and histories' (1). To orient readers, Wittenberg presents three readings of landmark time-travel stories which reflect different aspects of time-travel theory. The subsequent chapters explore Wittenberg's three phases of time-travel fiction, which are, in part, shaped by the contextual framing of scientific advancements. The first phase is the 'evolutionary utopian model', the second is 'paradox story', and the third is 'multiverse/ filmic' (31). Each phase can be linked to certain periods of time and is evidenced by specific representative texts. Phase one is defined by the late nineteenth century and very early twentieth century, as typified by the rise of utopian romances and the recurring time-travel theme. In exploring fiction during this time, Wittenberg draws heavily on the evolutionary work of Charles Darwin. Phase two can be linked to the early to mid-twentieth century and involves stories featuring time loops, as well as the impact of World War I, and the advances made by Einstein. Finally, phase three takes us beyond the mid-twentieth century into the present and considers the popularization of the time-travel theme in television, cinema and media. Key to Wittenberg's analysis are two Formalist terms, which he defines

at length in Chapter Four: *fabula*, meaning the essential linear sequence of events in a story, and *sjuzhet*, a reconstruction by the author of these events in a plot – such as shifting forward in time for story progression, or using flashbacks, and so on. The intriguing part of time-travel texts is that the act of travelling complicates and challenges *fabula* and *sjuzhet* and the relationship between the two.

Time Travel is extremely well researched and has a lively style, which is a pleasure to read. Academically, this book is a vital source for anyone researching or studying time-travel literature; for those with a general interest in the theme will enjoy learning about how time travel literature has evolved and how, most importantly, it has engaged us as readers. Although in Back to the Future III (1990) Doc Brown tells Marty McFly, 'You're just not thinking fourth-dimensionally', this is not necessarily true for the rest of us. Wittenberg argues that by reading time-travel fiction we not only think fourth-dimensionally, but we become time travellers ourselves.

Lewis Call, BDSM in American Science Fiction and Fantasy (Palgrave Macmillan, 2013, 225pp, £50.00)



Reviewed by Anna McFarlane (University of St Andrews)

Lewis Call's BDSM in American Science Fiction and Fantasy is a pleasurable and sparky investigation, the kind of criticism that urges one to seek out the lesser-known texts he introduces, and to revisit the others with his readings still echoing in your mind. Call explains that BDSM is an umbrella term covering bondage and discipline (BD), domination and submission (DS), and sadism and masochism (SM). His book charts the love affair between BDSM and science fiction and fantasy from William Moulton Marston's Wonder Woman

comics, through the writing of Samuel Delany and James Tiptree Jr., to the televisual science fiction and fantasy of *Battlestar Galactica* (2003–9), *Buffy the Vampire Slayer* (1997–2003) and its spin-off series *Angel* (1999–2004), and *Dollhouse* (2009–10). Call argues that science fiction and fantasy offer a way for BDSM to be represented in mainstream culture without falling into either the trap of pathologization or of normalization as sf and fantasy allow, in their very structure, a positive estrangement. He points out that sf and fantasy have always situated themselves as marginal, on the blurred boundaries between high-brow literature and low-brow genre, inner space

and outer space, a position that renders science fiction and fantasy as 'alternative', just as BDSM is considered an 'alternative' lifestyle. Call does not seek to define science fiction and fantasy against one another, but blithely writes that it is 'reasonable to treat them [...] as a single genre' (17), a move he justifies through the overlap in marketing and fan response that the genres share. This swift consideration of the genre issue may be read as either incomplete or refreshingly cavalier, depending on one's feelings.

Writing on Wonder Woman, Call gives an insightful history of the author's colourful, polyamorous personal life and its connections with his work, arguing that Marston saw the utopian possibilities of female dominance as a means of defeating fascism and achieving world peace. Call's reading of Wonder Woman's lasso of truth and bracelets of submission is convincing and forwards his argument as Wonder Woman 'expands the category of the normal' (31) in order to make space for marginalized practices that were considered perverse in 1940s America. In this way Marston began the introduction of BDSM practices in mainstream American culture, smuggling the utopian dominance/submission message into his comics under the cover of the more titillating bondage and discipline imagery.

Call goes on to read the role of BDSM in Delany's fiction, focusing on the short story 'Aye, and Gomorrah' (1966), the pornographic novel Equinox (1968) and later work such as Stars in My Pockets Like Grains of Sand (1984) and the Nevèrÿon novels (1983-7). Call traces the changing representation of BDSM in the texts as Delany begins by considering the practice an extreme form of behaviour but evolves to recognize BDSM power games as intrinsic to the structuring of all relationships. Call argues for the centrality of BDSM practices and ethics to Delany's work as the radical confrontation with power relations in which Delany engages through his depictions of BDSM puts him at odds with liberalism and makes his work an expression of a 'radical posthuman ethics' (61). Call also describes Delany's work as 'postanarchist', a position he defines as anarchist but with an awareness of poststructuralist understandings of power and identity, such as Foucauldian power dynamics and a Lacanian emphasis on the importance of desire in constructing the subject. Call even finds a reimagining of Hegelian teleology in Equinox as the desire of a community moves collectively towards the realization of awareness in pleasure: Hegelian teleology reworked as a 'radical sexual philosophy' (70). The treatment of the duality of slavery in Delany's work is particularly interesting as Call highlights the juxtaposition of consensual, erotic slavery with non-consensual, socio-economic slavery. In short, this chapter is an important addition to scholarship on Delany's contribution to science fiction and the ways in which he pushes the boundaries of acceptability.

At times Call's belligerence towards critics who came before helps him

to crystallize his arguments - for example, as he rejects earlier readings of Delany's work as liberal, resituating his politics as radical and post-anarchist. However, when he turns to the work of Tiptree this strategy does not serve him well. In the introductory chapter Call claims that 'women can clearly find empowerment' (9) in BDSM, but he fails to expand on this claim and in the chapter on Tiptree this failure catches up with him. The lack of a solid confrontation between Call's project and feminist approaches to BDSM weakens his approach. In justifying his reading of Tiptree he takes aim at Joanna Russ and a political stance that he refers to, without a clear definition, as 'sex wars feminism', but which would perhaps more commonly be known as 'second-wave feminism'. Second wave feminism is critical, or at least wary, of the reproduction of patriarchal norms in sexual practice. By swiftly labelling this kind of feminism as 'sex wars feminism', with no recognition of the wider social context in which such critiques were formed, Call risks appearing dismissive of such critiques and of the women who make them, particularly Russ.

Despite claiming in some places that the sex-wars reading of Tiptree is simply incomplete, Call seems to define his argument as antagonistic to second-wave feminism throughout the chapter. In doing so, he misses an opportunity to bridge the ostensible differences between second-wave feminism and BDSM culture. It would have been more effective to show the affinities between the two through the focus on consent, the rejection of biological essentialism, and the exposure of the damage caused by nonconsensual male domination of women. Call takes on board all of these themes, but they lose their power somewhat when set in unnecessary opposition to feminists like Russ. It reads as a defensive strategy, one that could be based in Call's earlier failure to clearly draw the connections between BDSM and the critique of patriarchy. This engagement would be particularly welcome in a book that focuses, with the exception of Tiptree, on male writers and creators. Even the inclusion of Tiptree does not bring a focus to women's creativity as Call treats the authorial identity of Tiptree as being separate from the woman, Alice Sheldon, and uses the male pronoun to refer to Tiptree throughout. Although women were heavily involved in the television shows analyzed later in the book, whether as writers, directors or actors, the creative credits are exclusively male and a kinder engagement with feminist critique would have enriched an already accomplished study, perhaps urging Call to examine why the texts that represent BDSM as liberating, from his own sample, tend to be created by men.

These issues render his reading of Tiptree's work less convincing than the analysis found in other chapters of the book. His reading of 'The Screwfly Solution', published under Sheldon's other nom de plume, Raccoona Sheldon, dismisses the gendered element of a 'femicide', a sexual killing of

all women, because the murdering men turn their rage onto fellow men too, 'as violence is a part of sexuality at the deepest structural level, regardless of the gender configurations involved' (108). While power and violence are doubtless structurally intertwined with sexuality, the violence in the story is largely carried out by men and this should not be elided. Naming the problem as male violence (regardless of the gender of the victim) is an important aspect of the story that Call argues against, seemingly in the interests of distancing himself from 'sex war' feminists. Despite this frustrating limitation of the argument through a false contrast with a certain kind of feminism, Call's reading still has some insightful elements here, particularly his reading of Alice Sheldon/James Tiptree Jr./Raccoona Sheldon as distinct personae, a claim that is well evidenced through quotes from Sheldon's diary and comparative readings of the differing literary outputs.

In the second half of the book Battlestar Galactica is read through Martin Heidegger's concept of being-towards-death and Jacques Derrida's deconstruction of that process through his concept of keeping vigil over death. Call concentrates on the story arc of the Cylons as a race, tracing the journey they undergo as immortal posthumans who cannot die but are merely downloaded into a new body. Call does not provide a synopsis of the show (or of any of the television shows he analyzes) so those unfamiliar with it may struggle to keep track of the complicated storyline, but regular viewers will feel well-oriented and will enjoy Call's reading. His use of the vigil and of being-towards-death in reading the show is convincing, but his attempts to continue the connections with BDSM are less so: his argument that a scene in which Helo 'kills' his Cylon wife Athena in order to save their child can be read as snuff play may raise an eyebrow for viewers of the show as the scene was emotional, never erotic. However, the Heidegger and Derrida frameworks create a powerful interpretation of the Cylons' journey towards an authentic existence.

Call is definitely at his best when the texts he studies directly incorporate BDSM into the logic of their narratives. When he turns to *Buffy* and *Angel* his reading returns to the punchiness of the earlier chapters. While the kinky subtext of *Buffy* and *Angel* has been successfully shown in previous studies – not to mention expanded upon with glee in slash fiction – Call reads kink and BDSM at the level of the text and argues that these representations become more explicit as the two shows progress. He clearly takes great pleasure in the humour of his subject and that warmth, coupled with his myriad examples, makes this an excellent reading of kink in the Buffyverse.

For his final chapter, Call leaves the Buffyverse but stays in the Whedonverse for a reading of Joss Whedon's series *Dollhouse*. The 'dolls' are volunteers who have had their minds wiped and can be imprinted with a wide range of personalities at the whim of wealthy clients: roles

we see these 'actives' fulfil include hostage negotiators, nursing mothers and (most relevant to Call's reading) a dominatrix dressed in leather. Call's reading of the dolls is tantalizing as he suggests they represent cyborgs – the associations of Donna Haraway's work intentional– and can represent a posthuman critique of liberal humanist values through privileging embodiment as key in shaping forms of thought. Call argues contentiously that the narrative reserves space for the exploration of kinky, consensual play – despite the lack of agency experienced by the dolls once their minds have been wiped. It is a bold move, and one that will certainly be developed and challenged in future studies of the show. The chapter on *Dollhouse* is like most of the chapters in this exciting book: it offers up a host of knotty problems into which future researchers – of science fiction studies, gender and BDSM – can sink their teeth.



Keith Brooke, ed. Strange Divisions & Alien Territories: The Sub-Genres of Science Fiction (Palgrave Macmillan, 2012, 222pp, £18.99)

Reviewed by Paul March-Russell (University of Kent)

If, as Gary Wolfe has argued, science fiction is an evaporated genre, then one way to retrieve a semblance of its original coherence might be to explore the sub-genres that constituted its historical development. Except, as these essays examining twelve such sub-genres reveal, there is no such thing as a representative selection whilst sub-genres repeatedly overlap with one another;

creating not only the generic mega-text that critics such as Damien Broderick and Samuel R. Delany have proposed but also the cross-pollination that has hindered simple definitions of the genre.

It is a measure of this volume's success that this complexity is indicated whilst the book itself remains an accessible read. The emphasis is very much upon reading and writing with an underlying imperative to create, as Brooke's postscript suggests, 'a series of dialogues' (191) between writers, readers and the written text. As Michael Swanwick's preface and the successive interplay of sub-genres suggest, science fiction is here to be understood dialogically – as the effect, rather than the premise, of what the Russian critic, Mikhail Bakhtin, would term the heteroglossia (or 'many-voicedness') that constitutes the making of sf. Such a method works well with the discursive approach that Brooke and his contributors take to their

analysis of sf sub-genres.

At times, however, it is a little unclear for whom the book is intended. Partially, it would seem to be for readers relatively new to science fiction; more likely, for readers who are looking to write sf, or for creative writing students hoping to try their hand at the genre. More knowledgeable readers may still find discussion of an unexpected gem – Justina Robson on James White's *Hospital Station* (1962), for instance – but the book does not pretend to anything like the level of information already available in *The Encyclopedia of Science Fiction*. Instead, much of the interest stems from the chapters having been penned by practitioners rather than critics of the genre; almost inevitably, the reader will turn to this book hoping to glimpse some insight into the authors' own methods.

As a consequence, the chapters vary not only in quality but also in approach to the intended brief: some function as self-reflexive exercises dwelling upon literary technique, others tend to be more like academic essays, a few tend to be no more than historical overviews. Despite acknowledging the balancing act between idea and character, Gary Gibson begins the opening chapter in somewhat hyperbolic fashion by 'cut[ting] open hard sf's body and tear[ing] out its beating heart' (1) as incorporated by Tom Godwin's story, 'The Cold Equations' (1954). Although glossing over the controversial ethics of Godwin's tale, Gibson's analysis allows him to move into an engaging overview of hard sf, the tensions with a softer, more sociologically-oriented sf, and (most importantly) what the would-be writer of hard sf must bring to the sub-genre: not necessarily a science degree but an imagination geared both to scientific plausibility and the reader's suspension of disbelief. Gibson gets the balance just right between history, analysis and self-reflection.

Alastair Reynolds' chapter on space opera reiterates Gibson's emphasis upon 'scientific verisimilitude' (24) but tends towards a historical overview of the sub-genre from E.E. 'Doc' Smith to Paul McAuley. (Each chapter comes with a useful list of suggested reading.) The fourth chapter, on planetary romance, tends to overlap quite closely with the first two chapters and lacks both the historical approach of Reynolds and Gibson's self-reflection. Writing with Kate Dolan, Catherine Asaro refers to her work in the third person and offers little personal insight. In between, however, Justina Robson reflects critically on the literary and visual representation of aliens, arguing that nearly all such portrayals tend towards one of two categories: Predators or Interesting Others. She does claim that occasionally there are what she calls Real aliens but, sadly, doesn't give us any examples - which seems to render them an illusory category to which the writer can only aspire.

In Chapter Five, John Grant enumerates various versions of the timetravel story with a concluding - if somewhat belated - hope that 'all the notions touched on here have kindled story ideas in your mind' (81). More effective in this respect is Kristine Rusch's chapter on alternate history which, in drawing upon concepts from Robert Cowley's *The Collected What If* (2001), first of all makes a case for the sub-genre to be considered as part of sf, offers a thoughtful overview of representative examples, and concludes with advice for the would-be writer, with Rusch examining her own novel, *Hitler's Angel* (1998). James Lovegrove also presents some insights into his novel, *Untied Kingdom* (2003), but otherwise tends to supply a historical overview in his chapter on post-apocalyptic fiction.

Adam Roberts' chapter on religion and sf is primarily an academic essay and, in that sense, follows on from his argument in *The History of Science Fiction* (2005). Nevertheless, he does offer an interesting reading of Philip K. Dick's *VALIS* (1981) despite also finding it 'massively boring' (120). Brooke's own chapter on utopian and dystopian fiction also tends towards an academic reading in that his historical overview of the twinned sub-genres is refracted through an engagement with the secondary criticism on the topic. In his chapter on cyberpunk, James Patrick Kelly also concentrates on the reception of the sub-genre, and the changing critical responses, rather than the texts themselves (with the exceptions of William Gibson's *Neuromancer* (1984) and Neal Stephenson's *Snow Crash* (1992)). His purpose, though, is to show that cyberpunk 'not only lives' (154), it thrives by having become part of common property.

In the final two chapters, Paul Di Filippo and Tony Ballantyne offer contrasting takes on the notion of the posthuman. The former concentrates upon the role of superhuman powers, in particular the extension of the body, mind and senses, whilst the latter focuses more upon the ethical implications of posthumanism, especially in terms of personal identity and the relationship between the writer, the text and the world. In posing the question 'Why write SF?' (187), Ballantyne not only returns the reader to Gibson's starting-point but also re-casts that premise as a never-ending engagement between actual and virtual (textual) worlds. In that sense, the conversations that these chapters have recorded as being integral to science fiction's development have also entered into the world(s) beyond sf.

Although varying in quality and effect from chapter to chapter, this collection nevertheless makes a useful addition to the understanding of sf as a literary and critical practice. If it helps to inspire more than a few novice writers, then it will have served its purpose.



Giulia Iannuzzi, Fantascienza Italiana: riviste, autori, dibattiti dagli anni Cinquanta agli anni Settanta (Mimesis Edizioni, 2014, 359pp, Euro 30.00)

Reviewed by Fernando Porta (University of Western Australia)

Giulia lannuzzi's Fantascienza Italiana has been long awaited. The study of science fiction in Italy has been dominated by the Anglo-American models in literature and film. What has been absent is a critical and historical account of the sf magazines that have been published in Italy since

the 1950s - the editors, writers and readers for whom they catered. Iannuzzi has attempted to cover all these aspects and the result is a precise, well documented, socio-biographical study.

The first section of the book bears evidence of the author's skills in determining and explaining the complex system existing in the Italian sf world, namely the responsibilities of the editors, translators, critics and writers toward their readership. The case-study is that of Urania, the only surviving Italian sf magazine (and also historically worthy of note because its first editor, Giorgio Manganelli, coined the term 'fantascienza', and the chapter devoted to it covers three decades of uninterrupted publication. This monthly paperback publication has always enjoyed stable financial backing (the Mondadori publishing group, based in Milan), but has also had a complicated editorial life because of the many professional names that have controlled it. Manganelli was aware of the initial sf reading public: a young readership which was eager for suspenseful, thrilling and adventurous epics set in space. The Mondadori group also published another, older magazine of fiction devoted to mystery and detective stories, Il Giallo Mondadori (known by the cover design of a circular image on a yellow background, which easily distinguished it from the similar cover design but on white background of Urania); these two series in fact also explain the thematic affinities which sometimes led to sf narratives in which mystery and a certain logical deductive explanation were present. Science fiction, detective fiction, suspense and thriller were the ingredients of the popular fiction published in Italy in the Sixties. Italian names were few in this context and successive editors of *Urania* did not risk a possible decrease in the number of copies sold; Italian authors were only called in for short stories, which were also paid at much lower rate by the magazine, compared to the contracts for material acquired from the big names in the U.S. The financial strength of

the publishing group accounts for the fortunate choices that the editors could make in publishing the best sf of the time; but that same economic power also explains the lack of incentives for potential Italian writers of the period, who knew that their literary careers were difficult or even hindered because of the dominance of American sf. *Urania* would not publish Italian authors for almost thirty-five years, until in 1989 the Premio Urania would be awarded to the best unpublished sf novel by an Italian author.

The following chapters are devoted to other sf magazines which were not blessed with the same numbers of readers and sales as *Urania* but were nevertheless able to publish Italian writers. *I Romanzi del Cosmo* (1957-67) was clearly focused on space-operatic narratives, but it had the merit of effectively promoting and publishing many Italian authors. Many of them chose an 'English' pseudonym (like Robert Rainbell, alias Roberta Rambelli; or Louis Navire, alias Luigi Naviglio). In the third chapter we are presented with the interesting and original case of *Oltre il Cielo* (1957-70), a belated Gernsback-like publication which combined science-fictional narratives with astronautical and aeronautical articles. After the initial blending of scientific and narrative writing, the publication promoted the growth of sf thanks to the editor Cesare Falessi and then introduced a critical debate on the authors of the time. In this way *Oltre il Cielo* assembled for the first time a group of Italian sf specialists.

In the fourth chapter we learn that a long-standing magazine like *Galassia* (1961-79) was responsible for the qualitative growth of sf published in Italy. It not only published the kind of socially engaged sf appearing in its American counterpart, *Galaxy* but also experimented with form and content in the work of writers such as Lino Aldani, Riccardo Valla, Ugo Malaguti and Sandro Sandrelli. All these authors seemed to share a literary quality that was due to their past experiences as translators of Anglo-American sf.

The study concludes with titles such as *Futuro* (1963-5) and *Robot* (1976-9). The first is remembered for its short-lived but ambitious publishing life: *Futuro* was a project ahead of its time, aiming at a kind of speculative-dystopic-sociological sf which could encourage a school of good-quality writers; but it was also doomed to economic failure due to its sophisticated selection of titles and stories. By contrast, following the position of its first editor Vittorio Curtoni, *Robot* attempted a critical dialogue with the whole sf community as fandom. Italian sf fans were increasingly mature, educated and open-minded despite the often irreconcilable political ideologies that permeated every aspect of Italian culture. When in the Eighties the new editor of *Robot*, Giuseppe Lippi, took control of the magazine, the sf appearing at the time was capable not only of defending its genre identity but also of experimenting with other kinds of serious and popular literature. This level of maturity was confirmed by the very high quality of Italian sf

fiction and criticism published in Robot.

lannuzzi is aware of the many contradictions of the Italian sf market, notably a lack of professionalism by the editors involved when they had to make objective judgements. Despite this cultural provincialism, the sf phenomenon described in this lengthy study reaches its final maturity after the first two decades: at the end of the Sixties the reader has become aware of the central work achieved by some of the editors. At the same time, despite the many problems that have bedevilled the Italian sf market, the host of authors and experts quoted by lannuzzi seems to corroborate a final coming of age of Italian sf. It is precisely this evidence that might serve to inspire future explorations of the Italian context.



Sherryl Vint, Science Fiction: A Guide for the Perplexed (Bloomsbury, 2014, 210pp, £14.99)

Reviewed by David Seed (University of Liverpool)

Scarcely a month seems to go by without yet another handbook or guide to science fiction being published. Sherryl Vint's new volume, however, works on a strikingly different level from most of these publications. It appears within Bloomsbury's Guides for the Perplexed series, similar in style and intent to the Oxford Very Short Introductions. The format style is explicitly didactic and each chapter concludes with questions for debate. Although Vint briefly comments on the origins of sf, she wisely

avoids giving us a potted history and also sidesteps another potential trap in her topic - attempting a definition. Instead, her examination is pluralistic and all the more accessible as a result. She takes as a self-evident fact that there are works, primarily fiction and film, which we (or publishers) designate as sf and then proceeds to ask a series of questions about these designations. As a general line, she declares that sf is a 'genre that is always in process' (8), a position which helps to explain the sustained debate by writers of the very genre they are working within. Throughout her discussion Vint demonstrates a reluctance to accept any hint of a grand narrative by turning her propositions round. She thus disposes of the persistent assertion that sf centres on the hope of technological mastery by stressing the recurrence of fears of losing control. She shows that narratives like John W. Campbell's 'Who Goes There?' (1937) set up an interplay between different attitudes to science rather than simply confirming a single position. Thus for her the typical sf narrative opens up a dialogic field where rival perspectives play

against each other.

It should already be evident that this study does not follow a chronological sequence. Instead, Vint raises series of issues or rather of angles from which sf can be viewed, and gradually assembles a kaleidoscopic commentary where no single critical approach is given priority. Cognitive estrangement is one such case in point. Examining films like District 9 and Avatar (both 2009) as well as fiction, Vint argues that estrangement is a complex affect, not least how it operates within individual works. Darko Suvin's original model of narrative method defamiliarizing the world of fact proves to be too simple, although it does helpfully alert us to the ways in which sf can interrogate the ways in which we perceive material reality. Vint applies the notion of sf intertextuality in proposing a 'megatext', an expanding corpus of motifs, neologisms and images from which individual works take their bearings. Partly this involves sf's constant revision of itself and Vint rightly stresses the importance of the New Worlds group in helping to broaden sf's cultural reference. In the field of publishing, this change had already been taking place during the 1950s with mainstream publishers like Doubleday and magazines like Collier's bringing out sf.

Although she does not have the space to develop this point far, Vint emphasizes the interactive nature of sf, particularly the role of fandom in its evolution. She then moves on to consider a series of thematic groupings: cyberpunk, feminist sf and queer sf. These topics all exemplify Vint's general assertion that sf is engaged in debating the nature of gender and the body, connecting here with her earlier important monograph *Animal Alterity* (2010). In a sense her whole discussion has developed the position that sf offers a literature of ideas and concerns itself with change. Rather than coming to a concluding definition, Vint winds up with reflections on 'science fictionality', by which she means a way of seeing the world. She



would certainly go along with Thomas M. Disch's assertion that sf has become culturally central and her own volume offers consistently interesting insights into the nature of this vision.

Will Brooker, Hunting the Dark Knight: Twenty-First Century Batman (I.B. Tauris, 2012, 272pp, £12.99)

Reviewed by Douglas W. Texter (Full Sail University)

In one of the videos I watched in preparation for writing this review, I heard a female voice-over ask viewers: 'Why would a billionaire put on a costume

and fight crime?' Seriously? In an age in which billionaires shape our lives and even our imaginations through the creation of product lines and derivative markets, being Batman makes perfect sense. Donning the cowl represents only the final step in creating a life realizing the fantasy of unlimited power and the unlimited ability to destroy those who have hurt you.

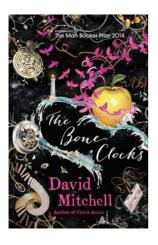
My reading of Batman runs counter to Will Brooker's new study, a follow-up to his previous *Batman Unmasked* (2000). Brooker makes several major interventions in his book which reads as a 'greatest hits' of cultural studies. In other words, Brooker uses the first two of Christopher Nolan's Batman movies as an occasion to practise Cultural Studies rather than make a unified and really transgressive argument about the films. In the first rather Foucauldian intervention, Brooker deals with how Nolan's author function differentiates the first two Dark Knight films from earlier incarnations of Batman. Secondly, Brooker discusses the concept of adaptation of the Batman mythos, and thirdly, he examines the way in which Nolan's Batman could be seen as more realistic than previous versions.

In the fourth chapter, Brooker uses Mikhail Bakhtin to explore the way in which Batman's antagonists 'invert and caricature aspects of his persona in diverse and inventive ways, reflecting them in distorting mirrors and showing them as grotesque or ridiculous' (137). In his final intervention, Brooker employs Derridean deconstruction to understand the 'processes that structure the texts of Batman' and to engage in a 'reading of Nolan's Dark Knight (2008) in the context of the post 9/11 "war" on terror' (178). While many of Brooker's interventions engage Batman fandom and the writers of Batman comic texts, this last chapter stands alone in Brooker's work in terms of situating Batman in any sustained fashion in the wider American culture, including politics and economics. Brooker writes, 'Aside from the explicit description of the Joker as a terrorist, and visual motifs such as the poster's image of a burning skyscraper and the slow camera glide into the side of a building, punctuated by an explosion that opens the film, the journalistic discussion of the Dark Knight as an expression of post 9/11 concerns centred around a handful of key scenes' (200). While Brooker is correct that the Dark Knight deals with the American response to 9/11, interestingly, his discussion of terrorism does not employ any sources from history, political philosophy or political economy. Even here, Brooker does not move beyond either the Nolan franchise or contemporary discourse of cultural studies.

To his credit, in his chapter on adaptation, Brooker discusses Batman as a brand: 'The Bat-symbol functions so flexibly yet potently across diverse titles because it plays the same role inside and outside the fiction: the logo, whether it appears on an armoured chest, a book cover, a rooftop or black vehicle, clearly identifies and fixes character, genre location and props, and

carries an unchanging set of meanings across a range of diverse creative interpretations' (89). But by using the term 'adaptation', even in the context of the complicated adaptive matrix that Brooker utilizes, he gives the Batman franchise more gravitas than it possesses. While he does mention the Batman promotions launched by fast-food chains and briefly nods to Donald Trump and Richard Branson, Brooker throughout discusses Batman as a mythos, as something approaching a folk hero. But if Batman possesses a mythos, he does so in the same way as, say, Ford automobiles do. Batman can't be at all seriously viewed as a folk hero because he doesn't come from the folk or even understand the people for whom he ostensibly fights.

In Hunting the Dark Knight, Brooker displays his genuine fondness for Batman. Ultimately, though, as a scholar and critic and perhaps as an American, I recognize Batman for what he is: a politically regressive fantasy and intellectual property. The refusal of Brooker's scholarship to truly engage the wider American culture - especially the economy dominating many people - makes me sceptical of the current state of cultural studies.



David Mitchell, *The Bone Clocks* (Sceptre, 2014, 595pp, £9.99)

Reviewed by Rose Harris-Birtill (University of St Andrews)

Like David Mitchell's phenomenally popular Cloud Atlas (2004), The Bone Clocks is divided into six narratives that take place in different locations across the globe. However, rather than travelling to the future and back, as in Cloud Atlas, each section of The Bone Clocks jumps forward in time, taking the reader on a journey from Gravesend in 1984 to Ireland in 2043, via the Alps, Iraq, Iceland, New York and Australia. As one character puts it,

'Rootlessness [...] is the twenty-first century norm' (297). The Bone Clocks explores and inhabits this rootlessness, both on the macrocosmic level of place and setting, but also in the microcosmic, with its depiction of a bodily rootlessness in which soul and corpus can become detached. In Mitchell's latest science fiction world, individuals are able to shed their bodies and live on in others, allowing a select few to extend their lifespans indefinitely. While Cloud Atlas merely hinted at the presence of a transmigrated soul through six contrasting personalities, The Bone Clocks follows the life of a single character, Holly, through this hidden network of body-jumping souls. Mitchell names the phenomenon 'psychosoterica': a hybrid term whose

Greek roots suggest the otherworldly mental discipline of the few specialist individuals who practise it.

The theme of predacity, another Mitchellian mainstay, resurfaces here in a war between the two different types of psychosoteric introduced in the novel - the Carnivores, who artificially halt their aging process by killing children and drinking their souls, and the Horologists who fight to stop them, a group of ethically-minded individuals born with the ability to travel between bodies. While the theme of hunter and hunted runs throughout Mitchell's fantasy sub-plot, it also appears in the novel's engagement with contemporary British politics as seen through the eyes of a self-confessed 'war-junkie' (199), journalist Ed Brubeck. Set in 2004, Ed's flashbacks to wartorn Baghdad interweave with scenes of an English wedding in the novel's third section, exploring the reasons behind failed attempts at political union in post-Saddam Iraq. The plot's depiction of carnivorous child-grooming is perhaps reminiscent of the high-profile child abuse cases documented in recent years, with fewer than ten remaining Horologists struggling against hundreds of Carnivorous 'serial killers' (467). Unusually for Mitchell's writing, there's also an affectionate dig at the established literati, with wry caricatures of Martin Amis and Germaine Greer in the characters of the aging writer Crispin Hershey and feminist academic Aphra Booth.

As a counterpoint to this engagement with the real, followers of Mitchell's earlier fictional universe are also richly rewarded. While the six sections of The Bone Clocks contain hidden textual echoes to each other, creating an uncanny sense of readerly déjà vu, there are also direct interconnections with all five of Mitchell's previous novels, his libretti, and even a handful of his short stories. For example, although his previous novel The Thousand Autumns of Jacob De Zoet (2010) reads as tightly-woven historical realism set in the last days of the eighteenth century, in The Bone Clocks, psychiatrist Dr Iris Marinus-Fenby reveals she previously inhabited the body of one of *The* Thousand Autumns' characters, Dr Lucas Marinus, revealing he was actually on his thirty-sixth lifetime in the earlier novel - and thereby implicating The Thousand Autumns in The Bone Clocks' supernatural plot. Marinus has also appeared in Mitchell's libretti for the operas Wake (2010) and Sunken Garden (2013), while the soul-stealing Hugo Lamb is the protagonist's cousin from Mitchell's earlier - otherwise realist - coming-of-age novel Black Swan Green (2006). Again, these unexpected reappearances change how we receive the author's earlier works, adding a further narrative dimension.

Mitchell is renowned for embedding structural mini-metaphors into each of his works. *The Bone Clocks* offers the circular labyrinth, concentric circles and the spiral, reflecting a narrative fascination with uncanny revisitings, rebirths and textual echoes. This apt motif runs throughout, beginning with the circular labyrinth given to Holly, and continued in textual echoes as the

book progresses. As Crispin becomes drawn into the supernatural plot, he hears a bird 'luring me in, ever deeper ever tighter circles' (350) and in his final moments remarks, 'Spirals. All these weeks. Treading on spirals' (382), while his last words funnel down to a visual spiral embedded in the text. In a plot that shares the gravity-defying and even cinematic qualities of the science fiction films *Inception* (2010) and *The Matrix* (1999), this image of the spiral or circular labyrinth reflects a tale in which the past haunts the future, and veiled messages return to become clear only in later sections of the book, on a second reading, or even more broadly, in context of Mitchell's previous works.

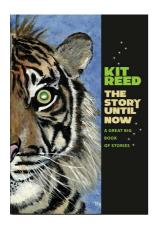
In the author's most heavily interconnected novel since *Ghostwritten* (1999), these embedded ties to his other works create a huge textual shift in Mitchell's narrative universe, encouraging fresh re-readings of his previous works in light of *The Bone Clocks'* larger fantasy world. *The Bone Clocks* stitches together these discrete fragments into a labyrinthine whole as Mitchell's entire body of work becomes a metadiegetic banquet, with seemingly disconnected tales from different times, settings, genres and even artforms picking up the larger science fiction trope of a single shared universe.

Perhaps the most vertiginous resurfacing is that of *The Voorman Problem*, a fictional film from the protagonist's daydream in Mitchell's second novel, *number9dream* (2001). In it, a prisoner who believes he is God is visited by a doctor to assess his sanity – only to prove his case, swapping bodies with the doctor. Made into a real-life short film in 2012, *The Voorman Problem* is also woven into *The Bone Clocks'* fictional universe as a novella by Crispin, before being mirrored in the novel's own plot when a psychiatric patient develops bizarrely God-like intuition. These Borgesian layers of metafiction provide a complex tale whose ending merely hints at the beginning of another era, in which the Horologists are revealed to have a crucial role in safeguarding civilization in the far-future science fiction world of *Cloud Atlas*.

With such a varied mix of literary genres running throughout his previous works, Mitchell to date has not been renowned for being primarily a science fiction writer, but *The Bone Clocks'* fusion of the everyday and the supernatural may well mark a new direction for an author fascinated by the boundaries between the real, the fantastic, and the rich vein of speculative fiction that runs between them. The final section, set in 2043, imagines a dystopian near-future within the reader's lifetime as we revisit Holly aged 74 - the same age Mitchell will be in 2043. The race for survival is reminiscent of Margaret Atwood's *MaddAddam* trilogy; fuel is scarce and the internet all but wiped out, leading to an 'Endarkenment' (533). After the previous chapter's psychosoteric pyrotechnics, magical solutions are painfully absent in the starkly dystopic final section as the mortals left behind are reduced to

the 'bone clocks' of the book's title, ticking towards death from starvation, Ebola, widespread violence, ecological catastrophe or suicide pills. As Holly warns, 'Civilisation's like the economy, or Tinkerbell: if people stop believing it's real, it dies' (572).

Though Holly describes the decade leading up to the novel's final section as 'a plotless never-ending disaster movie', as in *Cloud Atlas*, the author's apocalyptic vision ultimately avoids the bleakness of Russell Hoban's *Riddley Walker* (1980) by providing the seeds of hope. In a novel where time is malleable and memory re-writable, this sense of hope lies not in the ability to freeze time or change history, but the ability to adapt and survive. Holly may not have the powers of the psychosoterics, but her characteristic strength and resilience ultimately make her the book's most remarkable creation. Part fantasy, part speculative fiction, part realist critique and part thriller, Holly's tale provides the human warmth that binds this ambitious tale into an intricately satisfying maze of a novel.



Kit Reed, The Story Until Now: A Great Big Book of Stories (Wesleyan University Press, 2014, 464pp, £22.25)

Reviewed by Andrew Hedgecock

The fiction of Kit Reed is forever associated in my mind with the music of the Clash: I came across both strands of work in my late teens, and both led to a reassessment of my interests and tastes. While the songs of Joe Strummer et al. were iconoclastic and influential, and while I will always cherish my vinyl copy of *London Calling*, my encounter with Reed's collection *The Killer Mice* (1976) proved to

have more disconcerting and enduring significance.

This is not because Reed's collection was the first I had read by a woman writing sf/fantasy, leading to an interest in Angela Carter, Joanna Russ and Lisa Tuttle. And it is not because, at the time, Reed's sf was all but unique in its melding of excoriating satire and character-driven reimagining of our quotidian world. Nor was it because Reed showed the same blithe disregard for the barriers between genre and literary fiction as her New Wave contemporaries. For me, the killer quality of *The Killer Mice* lay in the mass of excrement clinging to the big toe of Leonard, aged 14 months, in 'The Attack of the Giant Baby'; an image so unsettling, and so symbolically charged, it has haunted me to this day.

This Freudian nightmare of care and control is one of the author's own

selections for *The Story Until Now*, her 'great big book of stories'. It is not the most complex piece in the collection but it elicits by turns feelings of amusement, sadness, revulsion and compassion, and it highlights several facets of Reed's writing. There are some of her obsessive concerns: the dark side of nurturing, failures of communication, the link between social dysfunction and dysfunctional parenting, the risks of technology and the fragile relationship between the individual and society. The story also illustrates key elements of Reed's style: there's a bouncy sort of clarity about her prose, an insouciant, almost ebullient, take on the sinister; there's an amused sense of outrage underpinning the razor sharp satire; and a terse but expressive precision that may well have been developed in her years in the newsrooms of the *St Petersburg Times* and *New Haven Register*.

Several stories in the collection analyze absurd and corrosive aspects of contemporary life and make it apparent that Reed has retained the news reporter's sceptical outlook, eye for telling detail and instinctual grasp of the way individual experience reflects broader social developments. In 'High Rise High' (2005), one of her most multilayered tales, desperate and emotionally incontinent students take over a school, lay siege to staff and kidnap the pregnant wife of a teacher. Meanwhile, a politician considers massaging his public image by blowing up the multi-storey educational institution of the title, and an undercover cop infiltrates the disaffected mob in the guise of a rebellious teen in chunky alligator boots. On one level the story is a kaleidoscopic pastiche of an array of cinematic categories: spy story, terrorist siege thriller, high school coming of age story and teen romance. But as the story flits from subgenre to subgenre, our understanding of its underpinning reality becomes highly provisional and, with an authorial nod and wink, Reed invites us to collude in her enjoyably playful approach to storytelling. There is, however, an undertow of serious reflection beneath the surface of ludic charm. Reed explores issues of intergenerational conflict, the toxicity of families, the coercive nature of institutions and the way an individual's self-image can influence their behaviour. Funny, tragic, insightful and provocative, 'High Rise High' demonstrates the power and possibility of the sf short-form.

Another of the longer and more overtly satirical tales is 'Wherein We Enter the Museum' (2011), a blistering commentary on the collision of creativity, criticism, competition and commercialism in the arts. Like 'High Rise High' the narrative unfolds from the competing perspectives of an ensemble of characters. The high-energy dialogue is crisp, credible and compelling. The military metaphors with which it is loaded serve not merely to lampoon the corrosive hunger for power and money that disfigures the arts, but also explore the possibility that there is a hidden but inevitable nexus between imagination and aggression. As in many of Reed's tales, excavating beneath

the layers of social satire reveals a deep-rooted psychological conundrum.

While musing on the theme of excavation, we should consider 'Journey to the Center of the Earth' (1991), a tale that illustrates the more intensely focused and personal side of Reed's work. More sedately paced, more nuanced in terms of character and more reflective in tone, this is a tale of obsession, loss and failed communication between parents and children.

Reed seems almost fixated on these themes: they occur with conspicuous regularity throughout her work, from tales written in the late 1950s to more recent work collected for the first time. In 'Family Bed' (2004), parents and children share a large bed and are publicly feted as 'the perfect family'. As the story unfolds, the family's oldest daughter uncovers the appalling truth beneath the media myth. Reed poses difficult questions about the thin line between caring for others and exerting a damaging degree of control over them. The family in 'Precautions' (2000) try to come to terms with life in a society collapsing beneath a wave of epidemics and struggle to cope with the physical, technological and psychological constraints imposed by a sedulously well-meaning mother on the verge of insanity. 'The Weremother' (1979), one of the shortest prices to be included, is a reflection on the transformational and potentially deleterious qualities of love.

It could be suggested Reed has ploughed the same furrows for too long, but her work continues to offer rich, specific and controversial insights into the themes that fascinate her. She is a writer who asks difficult questions about the human condition, and never dodges the implications of answers that are ambivalent or ambiguous. Ambiguity is the sea in which Kit Reed swims.

The story used to illustrate the dust jacket of the beautifully produced hardback edition of the collection is 'Automatic Tiger' (1964), a piece that fits neatly into Reed's oeuvre in terms of theme but which is atypical in tone. A vision in long-shot, based on the experience of an 'everyman' figure rather than detailed character sketches, it is a fairy tale for the post-industrial age, a powerful parable about hubris and the relationship between human beings and their tools. The portrait of an economy based on relentless competition and the adoption of a skewed sense of self-identity, and the toxic relationships this fosters, is as relevant today as it was fifty years ago.

There are thirty-five stories in *The Story Until Now*. The earliest is 'The Wait' (1958) a tale based around a mother and daughter becoming marooned in a small rural settlement and being drawn in to a bizarre and disturbing ritual. The neurotically subversive tone is reminiscent of Shirley Jackson at the height of her powers. The most recent is 'The Legend of Troop 13' (2013), the vividly disturbing story of a Girl Scout Troop that disappeared some years ago, told from the competing viewpoints of a voyeuristic tourist, the bus driver transporting him on a doomed quest and several of the

missing girls who have formed a functional alternative society. The stories are arranged not in chronological order, but in a series of fuzzily defined and unlabelled clusters. The occasional socio-cultural detail places a story in a particular decade but, on the whole, the stories from fifty years ago are as resonant as those from the present decade. The collection also includes a well-informed and informative introduction by Gary K. Wolfe, which deftly places Reed's work in a clear historical, literary and biographical context.

Reed's writing is darkly ludic: it could be argued she is a precursor of writers such as George Saunders, who have revivified the visionary short story. She certainly exhibits the same fascination with human folly and a similar propensity for hatching a simple motif and taking it on a leisurely stroll into the realms of absurdity. If there is a universal theme in her work it is the strange and turbid waters below the placid surface of ordinary lives. The Story Until Now is an impressive collection, essential reading for anyone whose imagination has been captured by Kit Reed's writing and, indeed, anyone interested in the transformative potential of the short of story.



Tony Ballantyne, *Dream London* (Solaris, 2013, 347pp, £7.99)

Reviewed by Alejandra Ortega (Wake Forest University)

Cross-genre fiction has the potential to create captivating settings for its stories, while offering the writer the freedom to interweave a profound thematic statement. Tony Ballantyne's novel is one such work. It contains all the characteristic elements of genre fiction while examining the societal problems of today's world. However, simply possessing the fascinating setting is not enough to carry a story of *Dream London*'s calibre

through to its conclusion. At times it seems *Dream London* has difficulty focusing on its direction. This is further exacerbated when the novel itself insists on being strictly science fiction although there are clear elements of fantasy and crime drama at play as well. As a single character on multiple occasions insists, 'Dream London isn't a fantasy [...] it's science fiction.' As the novel at times becomes as derailed as the ever-changing tube lines of Dream London, the general arguments concerning the mentality of our society becomes lost in the end.

At the start of the novel we are introduced to James Wedderburn, a military captain turned pimp, who is aware of how the city toys with reality

by structurally changing every night but does not know how the city undergoes these seismic transformations. While this happens, the people of Dream London choose to accept their situation and continue with their lives as if nothing has changed. However, it is not only the city that changes every night; the people psychologically change a little every day as well. Wedderburn awakes one morning to find himself becoming a different man; a man who cares. As Jim, he is contacted by both the Cartel and their rival mob boss, Daddio Clarke. The former wants to collaborate with foreign governments to save the world, while the latter seeks to profit from it by utilizing Wedderburn's skills. Jim must work to discover the truth to the changes of the city, finding himself at the cusp of Dream London's fate.

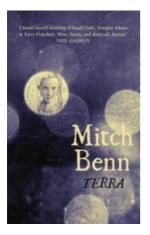
In *Dream London*, Ballantyne moves away from the technological setting of the *Recursion* series to explore a world where virtually anything is possible if someone in the right position writes it into existence. While this has the potential to be light-hearted, *Dream London*, at times, is both horrifying and appalling. This notably includes a scene at Dream London Zoo that I could have done without, despite the comedic build-up, where Jim is forced to have sexual relations with mandrills. Yet, these darker elements enable Ballantyne to critique the obsession with self and the fascination with surface: 'They don't realize that in Dream London, the surface is all that there is!' (150).

The concept of Dream London's changing city is a compelling premise that entices the reader to progress through the story in a constant pursuit to find out what happens. There is a clear sense of time and thought behind the details of the city, and numerous layers for the reader to work through to find meaning. However, the strength of the premise and setting are not enough to carry the novel. Dream London often drops, and attempts to reclaim, the argument throughout the course of the story. While the drive is there, the execution is disappointing. In an effort to focus on the framework of society, Ballantyne's characters only function on a superficial level. None of the characters are truly fleshed-out and there are instances where they contradict pre-ascribed character traits. While this is somewhat understandable given that Dream London changes the people a little every day, it is difficult to overlook the disjointed feeling one gets when reading these sections with no real explanation. Ultimately, there is a fine difference between a statement on the basic narcissism of the characters and a lack of development.

Ballantyne's characterization of Jim is the strongest feature of *Dream London*. A classic Byronic hero, despite the changes the city is imposing on him, Jim desperately tries to cling to his womanizing, alcoholic, brooding persona of Wedderburn. The combination of the anti-hero within a heroic journey further accentuates the key theme of the novel itself. There is a tension

between Jim and Wedderburn, just as there is between the community and the individual. Unfortunately, even Jim falls prey to the complicated structure of Dream London. Although he is the most interesting character in the novel, it is impossible to follow him through the labyrinthine story. At the start of the novel, Jim's ex-girlfriend gives him a tiny roll of parchment that has his fortune written on it. The parchment becomes his guide throughout the novel. However, it is unclear as to why a character like Jim would be willing to follow it. His inability to not fall prey to its predictions results in a story that drags the reader along rather than inspiring questions about personal autonomy.

Although the reader's expectation is of how the city will eventually awaken from its dream-life, so many different elements are in play at the end that it is difficult to discern Ballantyne's final position. However, *Dream London* is only the first part of a planned series so that if the second novel (*Dream Paris*) spends more time fleshing-out its theme and structure, and less time on gratuitous shocks and throwaway characters, it will be able to present readers with not just a focused theme but also a better understanding of human interaction in a self-obsessed society.



Mitch Benn, Terra (Gollancz, 2013, 255pp, £8.99)

Reviewed by Chris Pak (University of Birmingham)

Mitch Benn's debut novel has been compared by Neil Gaiman to the work of Roald Dahl, Douglas Adams and Terry Pratchett. Readers familiar with Benn's career as a comedian may expect a foray into the comic side of sf, but this young adult novel also explores the dark side of individual action, from the ethics of intervention and reflection on Earth's record of ecological abuses to the exclusion of others that occurs both between people and at the national level. It does all this without compromising

the humour that offers us the space to reflect on the absurdity of some of the conventions and misunderstandings that plague the attitudes of the characters in the novel.

While Terra does bear some resemblance to Dahl, Adams and Pratchett, the similarity is less overt than such a comparison would suggest. Dahl and Pratchett's approach to questioning exclusion and otherness is evident in Benn's approach to sf, as perhaps Adams' comic style is, but Benn takes less advantage of opportunities to poke fun at his characters and situations than

do Adams or Pratchett, and he certainly does not capitalize on absurdity to the degree that they do. These comparisons show how Benn shares some aspects of these writers' comic sensibilities to expose preconceptions and to help the reader think about the moral implications of the beliefs and attitudes raised throughout the narrative.

The story begins with Terra's argumentative parents, who encounter an alien spacecraft when it suddenly materializes on the motorway in front of their car. Panicked, they abandon their car and the alien, Lbbp, takes Terra back to his home planet, Fnrr. Lbbp is a high ranking ecologist who has long studied the flora and fauna of Earth, and has become angry at the observable loss of species diversity. The Fnrrs view this lack of care for the planet as an indicator of savagery, an index of a less capable civilization, and so Lbbp believes himself to both be saving Terra from death by exposure and – as the reader might infer – from being raised as a savage on Earth.

The rest of the story follows Terra's exploits in the nation of Mlml. It is a *bildungsroman* that is part of a forthcoming trilogy that looks set to explore Terra's peculiar perspective as an outsider maturing in cultures that she is alien to, although just how this might develop throughout the series is only hinted at in this novel. This gives the narrator ample room to cast a sometimes light-hearted, sometimes penetrating gaze at aspects of Fnrr and human society without losing the sense of ambivalence that accompanies the Fnrrs' cultural achievements, or the humanity of their terrestrial counterparts. Terra's difference exposes the prejudices of Fnrrn society but also the courage of many of the individuals who attempt to combat these attitudes in the name of their civilized status. As the narrative develops, Lbbp and Terra's apparent antagonist Vstj displays unmatched courage when confronted with the choice to protect others in his charge. Yet the story does not leave such courage unexamined: Vstj asks himself, 'So, is this what bravery feels like? [...] Bravery hurts' (214).

In another narrative thread, Terra's friend Pktk, whose love of military history makes him unusual in a society that has proudly left its militarism behind, does not rise eagerly to the challenge of combatting the invading G'grk as might have been expected. Instead of a campaign of guerrilla warfare, the narrative develops a diplomatic solution to the problem of total war. The reader's view of the invading G'grk, initially represented much like humankind as barbaric and savage, is unravelled too, an example of which is Lbbp's reflection on the Mlml invention of the anti-matter grenade used by the G'grk: 'Invented right here in Mlml a few orbits ago. Outlawed immediately. Some fool obviously went ahead and made some anyway and somehow the G'grk got hold of them. Maybe we deserve this' (218). This related set of reflections exemplifies the overall strategy with which Benn undermines the Fnrrns' easy assurance in their own technological and

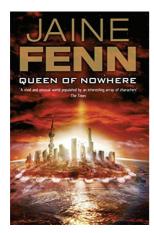
ethical superiority over the throwback G'grk and humankind.

Misunderstandings are one of the major themes at the crux of the novel, and these misunderstandings determine the relationships between individuals and societies in basic ways. The barbarity of the G'grk is misunderstood, which leads the Fnrrns to fail to recognize that the G'grk might, in fact, have a capacity for exercising those traits that the Fnrrns value as civilized. Terra is consistently misunderstood by many Fnrrns, including her own classmates, and she later becomes the target for some of the Mlml-G'grk hatred that blossoms after the outbreak of hostilities. Perhaps the most devastating misunderstanding in the novel is Lbbp's notion that the sf films from Earth that he has seen are in fact historical accounts of prior human-alien relations. This assumption is made because the Fnrrns do not understand the capacity for fiction or, more specifically, do not entertain the ability to imagine events that have not occurred. This mistaken assumption leads the Fnrrns to forbid any human-Fnrrn contact at all cost, a prohibition that makes Lbbp's adoption of Terra extremely problematic. It is only through the intervention of the Extrapolator, a vast computer able to predict the outcome of the future, that Lbbp is given the opportunity to raise Terra as his own. While these misconceptions are tied up with the humour of the novel, which often trades on misconceptions of conventional, preconceived notions for its effect, they are used to pose questions about our relationship to immigration, nationalism and the values ensconced in notions of civilization.

Terra is certainly a confident and insightful debut novel, and its engagement with issues related to immigration, global (and extraterrestrial!) politics, othering and the difficulty of establishing a sense of belonging within an alien culture are questions that are especially pertinent to contemporary British culture, and indeed to global cultures in general. The novel is not without its flaws, however; for example its pacing especially with regard to Benn's representation of the Mlml-G'grk conflict. While the news of G'grk victories over other nations successfully establishes a degree of suspense over the outcome of the war, the actual resolution of hostilities is rushed and dissatisfying. It feels as if Benn crams a lot of action into a small space, with the result that the arc for this climactic event is not fully developed. Terra's struggle to establish a place for herself on Mlml, and her troubled relationship with her guardian Lbbp and her home planet Earth, is a much more compelling narrative thread, and perhaps this aspect could have been further developed at the expense of depicting the war.

I also found one notion that recurs somewhat infrequently throughout the novel to be problematic, although perhaps less so in the context of the novel's attempts to emphasize the similarities between individuals over and above their differences. At one point the narrator asserts that heterosexual couplings are 'quite a common way of doing things in the universe' (19), and elsewhere the narrator notes that smiles seem to be almost universal. What are we to make of these statements? They emphasize the similarity between life-forms throughout the universe, and this would seem to imply that such similarities provide a basis for productive, non-violent relationships between individuals and cultures, extra-terrestrial or otherwise. What this actually does, however, is to affirm that similarity is a basis - the only basis - for such relationships. This notion clearly applies only to sentient and intelligent aliens that have reached a level of civilization comparable to or greater than contemporary humankind's. What would be the consequence of encountering a civilization that did not share these almost-constants? If such similarity is the basis for solidarity between civilizations, it cannot provide a foundation for relationships with civilizations that do not share basic human qualities. The notion that heterosexual couplings are 'quite common' and implicitly natural seems to be mistaken, considering the range of strategies undertaken by one of the largest groups of beings on Earth, the micro-organisms, not to mention many other creatures. Because of the lack of representation of other sexualities, this biological statement threatens to become extended into the realm of sexual orientation. This is not a theme that is developed throughout the novel and so I can only speculate as to the rationale behind this assertion, but some exploration of this issue in later instalments of the trilogy would certainly be welcome.

These issues aside, *Terra* is a strong work for its well-articulated examination of contemporary issues related to global politics. As a young adult novel it does not shirk from the problematic orientation of wealthy, scientifically literate and hence civilized cultures toward those that lack these traits and are deemed barbaric. It is a compelling work that succeeds in raising questions that bear upon issues of terrorism, global politics and the role of education. *Terra* is an extremely well written book with a humour that is charming rather than outrageous. This works to disarm its readers and to allow them to approach its troubling questions with a degree of openness that might otherwise have been curtailed.



Jaine Fenn, Queen of Nowhere (Gollancz, 2013, 340pp, £8.99)

Reviewed by Sue Thomason

Queen of Nowhere is one of five novels set in the universe of the Hidden Empire, where an interstellar network of human civilizations is heavily influenced - guided, maybe - by the hidden manipulations of the few remaining Sidhe. Each Hidden Empire book is both a complete story in itself (which would read perfectly well as a standalone novel) and part of a larger story arc. Fenn is to be congratulated on putting story integrity,

and reader satisfaction, ahead of commercial gain. You *could* start here. You *don't* have to have read the other four (though your pleasure in the depth and intricacy of the Big Picture will certainly be enhanced by reading them).

Bez is a hacker, a very good one, whose personal mission is to bring down the Sidhe by outing them, in a human-space where most people believe Sidhe no longer exist. Bez must remain hidden while preparing to destroy the Sidhe's capacity to manufacture false identities for themselves; this necessitates frequent changes of persona. She flips between posing as a super-rich tourist (interstellar travel isn't cheap, and writing herself a credit-heavy persona isn't too hard), and taking easy-come easy-go, don'tnotice-me, low-paid jobs - cleaning, shelf stacking, traditional women's part-time work. Like a lot of contemporary thoughtful sf, this isn't just a book about them, out there, behaving in entertainingly weird and unfamiliar ways, it's a book about us, here; tapping into a powerful and familiar set of fantasies - the shelf stacker daydreaming that she's really a super-smart, super-powerful hacker who is pretending to be a shelf stacker in order to keep her head down and not attract the Boss/Enemy's attention... the shelf stacker who could choose wealth, but who values the dangerous, important work of saving humanity over the empty amusements of the rich. The Sidhe are hidden; Bez is hidden. The Sidhe operate under false identities; so does Bez. We're in Cold War spy story territory, where the only way to understand and take down the enemy is to become her - almost - while trying to hang on to one's own real integrity and identity - whoever that is.

Some readers may not have noticed an important little word here - her. When Bez meets a renegade Sidhe, who is in some ways her mirrorimage, Nual is female. And this is so de-emphasized that it passes almost unnoticed. Sf is full of stories about exceptional people - an easy way to make a character interesting is to make them exceptional - but whatever is

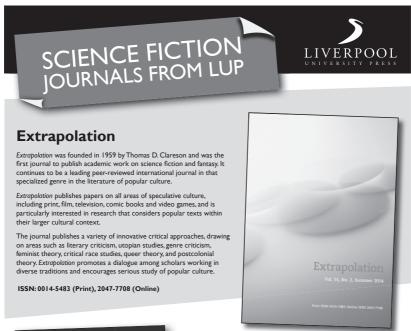
exceptional about Bez, it isn't her gender.

Much of the story's setting is an entertaining game of reversi: the religion where sexual activity is compulsory not forbidden, the exoticism of being on a planetary surface rather than in space habitats, the conversation in which a man's comment to a woman, 'Has anyone ever told you you're beautiful?' is met by 'What? Of course not! I would appreciate it if you refrained from these ridiculous courtship games'. Bez's cover story on the planet of Gracen is that she's an anthropologist, and there's a good deal of imaginary travel writing-cum-anthropology to enjoy. The language-setting of the book is also perfectly pitched: headware, dataspikes, beevee, trickle-down, transit-kernels, shiftspace; all these coinages feel, in context, perfectly unremarkable. Fenn has moved beyond the innocent gosh-wow approach to the language of the future and created a narrative voice which is comfortable with the terminology. This is a skilful exercise in craft, making it look easy, smoothing the way into the unfamiliar.

Apart from the 'action thread' of the storyline, the book's main themes are identity/personhood, boundaries, and the role of religion in society. Bez is living through multiple personae whose only continuity is her own internal narrative. She thinks that settling down after destroying the Sidhe (and, incidentally, interstellar human society, as shiftspace travel is Sidhedependant) to live the rest of her life through a single identity will feel really strange. She initially draws an absolute distinction between Us (humans) and Them (the Sidhe), but by the end of the story the boundaries between human, Al, and Sidhe have become blurred. In particular when, if ever, is it right to tell lies in the service of a 'higher truth'?

This question also informs *Queen of Nowhere's* treatment of religions, which are seen both as a major means of identifying (and dividing) Us and Them, and as a means of social and psychological manipulation and control. Remilla (a supporting character with a secondary, but crucial, role in the plot) exchanges the physical and emotional abuse of a crudely patriarchal religion for the subtler, but even more comprehensively controlling, manipulation of Sidhe influence posing as religion. In a multicultural universe, orthopraxis tells us who we can trust - and it is people who behave like us, who wear the right clothes, who use the right god-name. And the Other, for most of the believers in this book, is not an object of curiosity, but a suitable target for exclusion, hatred and fear. We draw the line *here*, and *you* are on the other side of it - the wrong side. *Queen of Nowhere* does not, on the whole, see religion as a good thing.

Finally, Queen of Nowhere has a very interesting take on divisions/ boundaries, relentlessly eschewing a clear division of personnel into Goodies and Baddies. What we get are the intersections of a bunch of people with very different understandings of How Things Are, all trying to live as best they can. It is much more like real life than a standard space opera, and it is what I think Fenn means when she talks of writing 'character-driven sf'. Long may it thrive.





Science Fiction Film and Television

Science Fiction Film and Television is an triannual peer-reviewed journal edited by Mark Bould (UWE) and Sherryl Vint (Brock University). It serves to encourage international dialogues among the scholarly and intellectual communities of film studies, of studies and television studies.

The journal publishes papers on all areas of sf film and television, from Hollywood productions to Korean or Turkish sf film, from Sci-Fi Channel productions to the origins of sf v in Rod Brown of the Rocket Rangers or The Quatermass Experiment. SFFTV is particularly interested in research that considers neglected texts, proposes innovative ways of looking at canonical texts, or explores the tensions and synergies that emerge from the interaction of genre and medium.

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Liverpool University Press
Tel: +44 (0) 151 794 2233 Email: lup@liv.ac.uk
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The Foundation Essay Prize 2016

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

The prize is guaranteed publication in the next summer issue of *Foundation* (August 2016).

To be considered for the competition, please submit a 6000 word article on any topic, period, theme, author, film or other media within the field of science fiction and its academic study. All submitted articles should comply with the guidelines to contributors as set out on the SF Foundation website. Only one article per contributor is allowed to be submitted.

The deadline for submission is 2nd November 2015. All competition entries, with a short (50 word) biography, should be sent to the regular email address:

journaleditor@sf-foundation.org

The entries will be judged by the editorial team and the winner will be announced in the spring 2016 issue of *Foundation*.

Call for Papers In More's Footsteps: Utopia and Science Fiction Foundation #124 (summer 2016)

Next year marks the 500th anniversary of Sir Thomas More's seminal work, Utopia. Although the text has been of importance within Renaissance Studies and political philosophy, it has also occupied a special place within science fiction for helping to popularize the notion of 'the Great Good Place' to which society should strive to perfect. Whether directly or indirectly, More's text has been of huge significance for the utopian strand that runs through much science fiction.

We invite contributors to submit 6000-word articles on any aspect of More's text and its relationship to modern and contemporary science fiction. Topics might include (but are not limited to):

- The political organisation of utopias
- Utopia and language
- Travel and exploration
- Economics and social organisation
- Utopia and religion
- Utopia and sexuality
- War
- The private versus the public

All submissions should meet the guidelines to contributors as laid out on the SF Foundation website. The deadline for submissions is 4th December 2015 and should be sent (with a note on university affiliation if applicable) to the regular email address:

journaleditor@sf-foundation.org

We will confirm our choice of articles by March 2016.

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The International Review of Science Fiction

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Rjurik Davidson begins our new feature series with Robert Silverberg

Andy Sawyer weighs up the merits of science fiction handbooks

Conference reports by, amongst others, Natalia Bonet, Susan Gray, Erin Horakova and Aishwarya Subramanian

In addition, there are reviews by:

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