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EDITORS’ MESSAGE

Introductions

Chris Pak

As I WRITE this debut editorial, it is impossible not to reflect on the superb work that has come before. I would like to take the opportunity to thank my predecessors Doug Davis and Michael J. Klein for their editorship over the years. Dominick Grace and Kevin Pinkham have also joined the team as Non-Fiction and Assistant Non-Fiction Editors; between us we aim to continue to provide a space for the latest in scholarly and pedagogical research and news in sf.

I am extremely pleased to have the opportunity to present an interview with Frederick Turner, an acclaimed poet, interdisciplinary scholar and translator who has written two science fiction epic poems and a novel. I first came across Turner’s work in 2010, and first communicated with him by email in early 2013; his patience, insight and energy led me to entertain the idea of interviewing him for a long while, and I am very happy to be able to share this interview with you in the first issue of the Review under my editorship. I’ve included a biography along with a selected bibliography of his work for those who would like to explore his ideas in more depth.

We also have two Feature 101 articles for this double issue 307-308. Michelle Yost, currently completing a PhD thesis at the University of Liverpool on the hollow earth or, as she prefers, the terra cava narrative, provides an introduction to the subject in her “Hollow Earth 101”. Mariella Scerri, staff nurse at Mater Dei Hospital, Malta, and long-time contributor Victor Grech, Associate Professor of Paediatrics at the University of Malta, explore an oft overlooked role in “The Nursing Profession in the Fictional Star Trek Future”. Thanks to Amy J. Ransom’s heroic energy, we have the regular series of fiction and media reviews, along with four non-fiction reviews.

As I look ahead to the future shape of the SFRA Review, one of my aims would be to expand the voices hosted within these pages. I would like to invite you to contribute articles, interviews, conference and event reports, reviews and announcements – or to get in touch with me if you would like to discuss ideas for other types of articles. I am very excited to begin exploring new directions for the Review, and to see how it in conjunction with the new and shortly to be expanded website can support our work as a research and teaching community, both as a resource and as a way to communicate with others.

As this issue is published, this year’s conference at Madison grows closer. It will be the first time that I have travelled to the US, and I look forward to meeting many of you at my second SFRA conference. See you at Madison!

PRESIDENT’S MESSAGE

Meanwhile, at the EC HQ . . .

Pawel Frelik

By the time you’re reading this, we’re all packing to go to Madison for the joint SFRA/WisCon conference. Or we are in Madison. Or we have just come back from Madison after a highly successful conference. In any case, things have been happening in SFRA.

First of all, but really once again, I would like to welcome the new crew of SFRA Review editors: Chris Pak, who has taken over as the main Editor; Dominick Grace, who is now Nonfiction Editor; and Kevin Pinkham, who is helping Dominick as Assistant Nonfiction Editor. After Doug and Michael, they have big shoes to fill, but I have no doubt that they will not only succeed but also take the Review in new and exciting directions.

Chris will be sending out regular calls for contributions, but allow me to take this opportunity and encourage all members to be proactive, too. If you have suggestions for new columns or sections, contact Chris. If you have a one-off text that you think would be of interest to other members, contact Chris. If you have any ideas that would fit the format (and do remember that SFRA Review is now fully electronic, so there are very few limitations on what can be done), contact Chris. And for those media reviews that haven’t always been coming, contact Ritch.

In other news, we have finally commissioned the graphic redesign of the SFRA website. Although it was long overdue, it was not easy to find someone who would understand what we are about as an organization AND would not bankrupt us. We believe the result will
be satisfying for everyone. The new look is tentatively scheduled to be unveiled by the time we meet in Madison for the joint SFRA/WisCon event in late May. We will also restructure and dramatically extend the selection of resources available on the website.

Also in the realm of the organization’s public presence, by the end of May we will have unveiled the new look of SFRA’s website, which has been completely redesigned by Lukasz Fedorowicz. The overhaul was also accompanied by some restructuring of information, including such new sections as the Conference Archive, where we want to maintain our organizational memory. Several annual meetings are already covered, but if you ever ran a conference – particularly more than a decade or so ago – and still have the program booklet, or a conference badge, poster, or any other event-related material (dare we say, also photographs?), do contact us. We will scan them and return the originals. Given that the annual conference is one event that brings so many members together, it would be difficult to overstate the importance and centrality of remembering previous meetings to the organization’s identity and mission. So rummage through your archives and get back to us. We know you have that stuff somewhere!

Last but not least, follow our Twitter feed at @sfranews and visit our Facebook page, both of which are now linked from the new website. We would really like to move some of the interactions that have been going on on the list-serv to these new media. While the traditional email format has its advantages, easier archiving among them, Twitter and Facebook offer increased immediacy and clarity that could be beneficial to some interactions or types of news. Do stop by and comment or start a discussion.

In entirely other news, the 2015 conference will be hosted by Ritch Calvin on Long Island. Originally, we wanted to go abroad, to Brazil, but the gauged interest was too low to warrant holding a conference with few members. Still, the current EC – and, hopefully, the future ones, too – is still deeply committed to the internationalization of the organization, so that plan has been put on hold, rather than cancelled. Before the decade is over, we should definitely try to go outside North America again. Over and out.

**VICE-PRESIDENT’S MESSAGE**

**Upcoming Joint WisCon/SFRA**

*Amy J. Ransom*

FIRST, I’D LIKE TO WELCOME aboard Chris Pak (Editor), Dominick Grace and Kevin Pinkham (Non-Fiction Editors) to the SFRA Review editorial staff! I look forward to working with you!

Next, one of SFRA’s goals for the current executive committee is to increase the organization’s presence on Facebook and Twitter and continue the great work done by Jason Ellis in his term as VP. Thanks to Andrew Ferguson, our Twitter point man, we have daily Tweets coming in! I encourage members who do Tweet to check us out and to Tweet back: [https://twitter.com/sfranews](https://twitter.com/sfranews). Facebook, in contrast, needs a shot in the arm; working alongside our new PR officer, Emily Connelly, I’ll be addressing that in the coming months. I encourage those of you who share ideas and opinions on the list-serv to bring some of those conversations to Facebook or Twitter. Check us out, post an event or an opinion or add your own two cents to others at: [https://www.facebook.com/pages/Science-Fiction-Research-Association-SFRA/102724198663](https://www.facebook.com/pages/Science-Fiction-Research-Association-SFRA/102724198663).

Finally, we are all gearing up for Madison in May for the joint SFRA/Wiscon event. I was thrilled to meet our guest author, Nisi Shawl, on a panel discussion of post-colonial science fiction (organized by David Higgins) at the ICFA in Orlando in March. If you have not read her collection of short fiction, *Filter House* (Aqueduct Press, 2008), you should! This collection showcases the range of her talent and her skill at switching narrative voices, as the tales set in New Orleans, Detroit, a prison ship in deep space, and an off-world colony explore various facets of migrant identities and cultural exchanges. The book’s intriguing title, rooted in the natural sciences, comes from the unique feeding mechanism of an ocean life-form called “appendicularians”. The stories blur the boundaries of a range of genres from pseudo-Arabian Nights tales to space-exploration SF, but most involve elements drawn from Nisi Shawl’s particular interest in interracial encounters and the future survival and adaptation of traditional practices from Africa and the Caribbean. In addition to writing fiction, Shawl has co-edited *Strange Matings: Science Fiction, Feminism, African American Voices, and Octavia Butler* (Aqueduct Press, 2013) with Wiscon organizer Rebecca Holden and has co-authored a writing handbook, *Writing the Other* with
Cynthia Ward, available for Kindle. She let drop that Tor has accepted her steampunk novel set in the Belgian Congo—I can't wait!

I also began to explore the imaginary universe of Wiscon GoH, Japanese-Canadian writer Hiromi Goto. At various conferences lately, I have heard intriguing papers on kaiju and yokai, Japanese megamonsters and legendary beings, including the kappa. I had read Ryunosuke Akutagawa’s classic satire, Kappa (1926), and couldn’t wait to get my hands on Goto’s The Kappa Child (Red Deer Press, 2001). The kappa is an amphibian trickster figure, one of whose most charming traits in traditional Japanese lore is its habit of assaulting people in the out-house! This Tiptree Award-winning novel stylistically marries Joy Kogawa’s realistic accounts of the Japanese-Canadian experience and Ruth Ozeki’s biofictions, The Kappa Child’s pajama-wearing misfit first-person narrator collects shopping carts professionally (echoes of Bubbles in Canadian cult television series, The Trailer Park Boys?) and begins craving cucumbers. Convinced she has somehow been impregnated by a kappa, the unnamed protagonist also struggles with family baggage, growing up in an abusive little household on the prairie, nothing like that of Laura Ingalls Wilder. The novel references alien abduction, Godzilla, and other genre tropes and icons of SF & F, but the slipstream may be where it fits generically; it definitely participates in a wave of postmodern, postcolonial, Canadian fiction that reveals how deeply elements of “our” genre have infiltrated the mainstream. For a fuller account, see Wendy Pearson’s review for Strange Horizons (6 January 2003; http://www.strangehorizons.com/2003/20030106/kappa_child.shtml) or read the book yourself!

PR. OFFICER’S MESSAGE

Making Connections

Emily Connolly

LOOKING TOWARD WARMER WEATHER here in Oregon - I hope your hibernation these cold months was as enjoyable as could be expected. With the new verdant life swelling around us the urge to do more away from the office is often hard to resist. Yet the possibilities of the technology of our age give us ever the chance to continue our work and still sneak away to enjoy the season if we so desire!

With this conference season upon us SFRA members will see an uptick in output from our core information distribution platforms – the SFRA’s mailing list, blog, Twitter and Facebook accounts. One of our PR goals for 2014 is to continue to improve the connection we maintain with members and the science fiction community at large through social media. Andrew Ferguson has been helming our Twitter account and has done a wonderful job collecting news, resources, and internet curiosities relevant to our field. We will start syndicating his work onto our Facebook feed as well as expanding our contribution to our Facebook community. With renewed interest in Facebook we will be looking to engage with resource sharing, discussion and, of course, updates from conferences both upcoming and past. If you have not yet taken the opportunity to sign on to one or both of our social media hubs, now is an excellent time! R. Nicole Smith has spent a few PR columns already extolling the virtues of these platforms so I will not waste time repeating them – however, exciting spaces for scholarly discussion are opening on both of these mediums and I am excited to continue working to use the SFRA’s social media presence to connect these groups and further discourse.

Our second big push in 2014 is to continue to seek new membership for the organization. While this is perhaps a given of any organization our goals for 2014 are to continue to challenge the slippages of our tasks in “science fiction research.” To this end we want to reassure the inclusive possibilities of science fiction media (from our good friend the written word to the realms of potential in film, television, music, theater, art, sciences – etc!) as well as our cousins in the fantastic genres. For this push we will be looking to assemble and manage better our resource lists to send out calls for papers as well as scouring listservs for new places we can invite our peers to come and collaborate. Should you be a part of a listserv, Facebook community, newsletter or group that has not received our call but who would enjoy hearing from us, feel free to send me an e-mail (emily.connolly@pdx.edu) and I will gladly add it to our resource list.

In the spirit then of the ever social lure of the season let me heartily hope our paths cross – in the flesh or on the web!
**Feature Interview**

**An Interview with Frederick Turner**

Interviewed by Chris Pak

‘We are not just symbol-makers but the symbols we have made of ourselves.’

FREDERICK TURNER is an internationally recognised poet and scholar, a former editor of the Kenyon Review (1978-1982), and Founder’s Professor of Arts and Humanities at the University of Texas, Dallas. He was born in Northamptonshire, England, and grew up in central Africa, where his parents, the anthropologists Victor W. and Edith L.B. Turner, were conducting field research with the Ndembu in Zambia. Turner studied at Oxford University from 1962-1967 and emigrated to the US shortly afterward, where he eventually naturalised as a citizen in 1977. A fellow of the Texas Institute of Letters, Turner has received numerous prizes and awards including the Milan Fust Prize (Hungary’s highest literary honour), the Levinson Poetry Prize (awarded by Poetry), the PEN Southwest USA Chapter Golden Pen Award, the Missouri Review essay prize, the David Robert Poetry prize, and the Gjenima Prize. He has also been nominated for the Nobel Prize for Literature in 2001, 2004, and each year from 2006 to 2012.

As a poet Turner is known especially for his use of the longer genres, the narrative, science fiction, and strictmetrical forms. He is a founder of and spokesman for two recent and influential movements in contemporary American poetry, the New Formalism and the New Narrative (sometimes named together as Expansive Poetry). Turner’s only science fiction novel, A Double Shadow (1978), is set on a long colonised Mars whose inhabitants’ mental and physical capacities allow them to live like gods. In a world with no physical frontiers left to conquer, these Martians explore the limits of an aesthetic code that structures every facet of their relationships with each other. Turner has also written two astonishing epic poems, The New World (1985) and Genesis: An Epic Poem (1988). The New World is set in a future America of independent county-states and explores the emergence and conflict between a Jefferssonian republic and a group of Appalachian states united by religious fundamentalism. Genesis recounts the epic tale of the struggle to colonise and terraform Mars. Earth in this narrative is united by a Gaean theocracy that has prohibited all technological development and has made it a sin to modify nature in any way. The colonists rebel against the strictures imposed by the Ecotheists and establish a rival society that explores ways in which humankind can build satisfying and harmonious relationships with their environment. In Stapledonian fashion, the narrator claims to have received the epic from a poet living in a far future where the events recounted in the epic are already history. The poem thus opens fascinating avenues for speculation on the nature of art and time.

As a literary and cultural critic Turner was first known for his Shakespeare criticism (his enduring literary obsession) and for his work on Renaissance science and art. His book, Shakespeare’s Twenty-First-Century Economics (1999), has met with critical acclaim. Another emphasis has been on the relationship between science and technology on one hand, and the arts and humanities on the other. He has thus been involved in ground-breaking studies of the neurobiology of aesthetics, the ritual and performative roots of the arts, and the humanistic implications of evolution, ecology, recombinant DNA technology, space travel, artificial intelligence, brain science, and chaos theory. He has been a leading theorist of restoration environmentalism, staking out, with William R. Jordan III, a new vision of the human place in nature, where human welfare and technological progress can work with, rather than against, natural evolution. His contributions as an interdisciplinary scholar have been recognized, cited, or published in an astounding range of fields, from planetary biology and space science to theology and art history. He is or has been a member of several research groups, on subjects including the biological foundations of aesthetics, artificial intelligence, ecological restoration, law and systems research, time, interdisciplinarity, the sociological study of emotion, chaos theory, and ecopoetics.

As a translator Turner collaborated with Zsuzsanna Ozsváth to translate the poems of Hungarian holocaust poet Miklós Radnóti. Foamy Sky: The Major Poems of Miklós Radnóti (1992) is a highly regarded work for which he was awarded the Milan Fust prize. Among other translation work Turner has collaborated with the anonymous scholar Y.D. to translate a selection of Chinese Tang poetry, which is available on his blog (http://www.frederickturnerpoet.com/). His recent monograph, Epic: Form, Content, and History (2012), draws on his wealth of knowledge of a wide range of cultures and explores the significance of epic forms from around the world.
Many of Turner's essays and poetry, including the full text of *Genesis* and an interview with Freeman Dyson, is available on his blog at [http://www.frederickturnerpoet.com/](http://www.frederickturnerpoet.com/). The following interview was conducted by email exchange in April of 2014.

**CP:** Could you tell us a little about your interest in SF literature and film? When did you first come across SF, what SF do you enjoy, and do you teach any SF?

**FT:** I first started reading SF at around 8 or 9 years old, inspired by my father the anthropologist Victor W. Turner, who told us invented SF stories and read us Edgar Rice Burroughs' *Barsoom* romances, Jules Verne, and the H.G. Wells SF classics. My younger brother and I, who shared a grass hut in our central African village, would together spin an interstellar “Moon Rockets” narrative to the sound of ritual drums in the nearby Ndembu village. My brother Bob ended up as Herr Professor Robert Turner, Director of the Max Planck Institute of Cognitive Neuroscience at the University of Leipzig. I like all kinds of SF, but apart from *The Lord of the Rings* and *Narnia* was never a fan of Fantasy (unless you include the classics—*The Odyssey*, *Paradise Lost*, etc). Specifically I liked Bester, Heinlein, Clarke, Herbert, and later Gibson, Bear, Banks, Robinson—but the list could go on for a page at least. In my SF class I teach the following:

*Genesis* and *Exodus*, from the Bible  
Homer: *The Odyssey* (Robert Fitzgerald translation)  
John Milton: *Paradise Lost*  
Jonathan Swift: *Gulliver's Travels*  
George Orwell: 1984  
Robert Heinlein: *Starship Troopers*  
Arthur C. Clarke: *Childhood's End*  
Ursula K. Le Guin: *The Left Hand of Darkness*  
Neal Stephenson: *The Diamond Age*  
William Gibson: *Neuromancer*  
Kim Stanley Robinson: *Red Mars*  
Iain M. Banks: *The Player of Games*

I also recommend these:  
Lois McMaster Bujold: *Young Miles*  
Greg Bear: *Eon*  
C. J. Cherryh: *Downbelow Station*  
Orson Scott Card: *Ender's Game*  
H.G. Wells: *The Food of the Gods*

**CP:** That's an absolutely fascinating evocation of the way SF and anthropology were passed down to you, woven together, from an early age. Your background reminds me of Ursula Le Guin's, whose parents Alfred L. and Theodore Kroeber were anthropologists. Do you see a basic relationship between anthropology and SF?

**FT:** Because anthropology is already constrained by its very nature to cross the spaces between human cultures—and therefore encounter the odd, ancient, human medium that they draw their sustenance from—anyone raised on anthropology is already prepared for science fiction. Not only have such persons become aware that “the rules” of the game might be different from the ones they were used to—and therefore ready to imagine other human worlds—but they are maybe a little acclimatized to the idea of leaving that human medium altogether for another medium and having to make sense of it.

Among the Ndembu people the term for a fundamental religious symbol (what Catholics would call a sacrament) was “chijikijilu.” This word was itself a metaphor: in its literal sense it means a blaze, the mark one would cut on a tree in order to find one's way back from unknown territory, to blaze a trail. One of the most dangerous aspects of living in a hunting/horticulture society like the Ndembu is getting lost when one is exploring or hunting. So a *chijikijilu* is a real thing, a physical mark on a tree; it reveals real territory, previously unknown; but it also changes the landscape, adding an area--whatever is within eyeshot of the blaze--to the known territory of the village. One cuts it at the exact boundary between the known and the unknown--in linguistic terms, between the expected terminological formula and the babble of gibberish. It is poetic language; but it is eminently useful, and a real feature of the world once it is made. Shakespeare makes much the same point in *A Midsummer Night's Dream*:

> The poet's eye, in a fine frenzy rolling,  
> Doth glance from heaven to earth, from earth to heaven,  
> And as imagination bodies forth  
> The forms of things unknown, the poet's pen  
> Turns them to shapes, and gives to airy nothing  
> A local habitation and a name.

Shakespeare and the Ndembu thus solve the pretty paradoxes of Ludwig Wittgenstein, in the *Tractatus Logico-Philosophicus*: “Whereof one cannot speak, thereof one
must remain silent;” and “The limits of my language are the limits of my world”. (Paradoxes, because in speaking of that whereof one cannot speak, he is not remaining silent; and to speak of limits implies that one has already been in some sense on the other side of them, to make sure they really are the limits.) The deepest religious and poetic language is a blaze that conducts us between the known and the unknown, the sayable and the not-yet-articulable, the past and the future. When Aeneas tears off the golden bough by which he can safely enter the underworld, he is literally making a chijikijilu, a blaze. Time itself is partly explained by the idea: if the known world, the speakable world we have language for, is the past, and the unknown and unspeakable is the future, the blaze is in a sense constitutive of the present moment, to the extent that the present moment is that which mediates between the past and future. Once we have a blaze, the present is no longer the dimensionless point between past and future, a point that carries us relentlessly along, but opens up to become a space, unexplored and full of possibilities, but connected by a landmark to the safety of the past, where we can make choices, play, and invent things.

Before human beings came along to use words and visual symbols and music and pretence and masks and sacraments to do it, biology was doing it through that unique moment of sexual reproduction when the two different gametes come together (in a “symbolon”--that which is “thrown together”) to make a new unique individual. On rare occasions that “symbolon” can be the start of the great grand poem of a new species. And physics was already doing it when it cooked up a new element in the collapsing core of an old star. Poetry is fast evolution: evolution is slow poetry.

CP: In Genesis, you combine the Greek Classical epic with sf, along with ideas from Renaissance philosophy. Is there something about sf that is congenial to influences from these two periods?

FT: I would add to those two periods the Uruk of the composition of Gilgamesh, the Israel of David and Solomon, the North India of the Mahabharata, the Japan of the shoguns, the high Mayan civilization, Augustan Rome, High Medieval Nordic Christendom, Elizabethan/Jacobean Britain, and Nineteenth-Twentieth Century USA. They were moments when human civilization, in its cultural, political, military and economic expansion, had the confidence to look at its own flaws and dark origins, the hope to envision both ancient and future expressions of its essence, the leisure to dream, the philosophical largeness of debate to think about the whole human race and its universe, and the exuberance to celebrate the glories of nature and culture. As my reading list implies, I see modern SF as a continuation of humanity’s epic tradition.

CP: You do make the point in Epic that ‘classical’ embraces traditions from other cultures. Your attention to epics from around the world allows you to redefine the form along the lines of Wittgensteinian family resemblances, but you develop a theory of genre based upon the idea of “strange attractors”. How is this notion important for understanding genre, and is this idea simply a metaphor for describing art, or is it something more?

FT: I have been interested for a long time in strange attractors in general, partly because they have many of the advantages of the Platonic Forms (such as the kind of final causality we see everywhere but can’t fit into traditional reductive science) but avoid the disadvantages (like the privileged place they give to geometrical simplicity as against complexity, timelessness as against time, unity as against multiplicity, essential reality as against phenomenal reality). The infinite depth of an attractor, combined with its appearance in highly dynamic processes, its beautiful scaling properties, and its elegantly nonlinear mathematics, makes it the ideal explanation for such higher-order realities as life, thought, and values. As I put it in an essay that had wide circulation in Europe about 14 years ago (“Values and Strange Attractors”—slightly edited here):

Meaning itself can be redefined in terms of the relationship of strange attractors to the physical processes that embody them. Any nonlinear dynamical system, when triggered by a stimulus, will generate a sequence of unpredictable events, but those events will nevertheless be limited to their attractor, and further iteration will fill out the attractor in more and more detail. The brain itself holds memories in the form of such attractors, the dynamical feedback system in this case being Hebbian circuits of neurons. Thus we can picture the relationship of a word to its meaning as the relationship of a given trigger to the attractor that is traced out by the feedback process it initiates. When the word “refers” to a perceived object—say, a smell or a sight—that object is one that can trigger a subset of the full attractor, as a Julia Set
is a subset of the Mandelbrot Set. Thus a single word can trigger a “meaning-attractor,” sections of whose fine detail can also be triggered by various sensory stimuli. This description rather nicely matches with our Proustian experience of connotation and poetic evocation, and with the logical form of generalization. It accords with the results of linguistic experiments concerning the relative strength by which a given example—say, a duck, an ostrich, or a sparrow—is recognized by a speaker as belonging to the meaning of a word (“bird”). It also explains the difference between ideas and impressions that exercised the philosophical imaginations of Locke and Hume: the richly-detailed subset evoked by the sight of an object would certainly make the general sketch of the whole set evoked by the word look somewhat pale by comparison.

Since the trigger—whether the word or the sensory stimulus—is itself part of the feedback system, it is encompassed by its description, which is the attractor proper to it when it is allowed to iterate its effects upon a complex neural network. Thus the represented, the representation, and the experient of the representation are all part of the same physical system. The usual critique of physical descriptions of representation—for instance, John Searle’s Chinese Room analogy for artificial intelligence—is that however a given object is represented inside the physical system, it requires a smaller system inside the system to see it and know it, or, as John Eccles believes, a detachable non-physical soul. The chaotic-attractor theory of meaning holds out the promise of an intelligible physical description of meaning that does not require an inner homunculus or the intervention of a metaphysical deus ex machina, with further attendant problems of infinite regress—how does the god in the machine perceive and know the representation?—to make it work. One way of putting this is that the issue of reflexiveness, of self-reference or self-inclusion, has been transferred from the metaphysical level where it can only be interpreted as a barren infinite regress or reductio ad absurdum, to the physical realm where it can be studied as we study turbulences of other kinds, with their own emergent properties and self-generated orderliness. The reflexiveness, we feel intuitively, should be there in any account of meaning; the trick is to keep it from messing up our own thinking about it, and place it where it belongs, in the operation of the brain itself!

So a given epic is like one of the Julia Sets that can be found when the Mandelbrot Set is inspected at a given place or scale. It implies and is implied by the set as a whole, as the Mandelbrot Set reminds us when we discover yet another miniature “radiant snowman” in its recesses. By the way, recent studies of brain activity are more and more confirming the idea that a given memory in the brain is a particular complex resonance of a system of programmable and programmed neurons.

CP: A major aspect of your interdisciplinary approach is the use of science to address issues in art and aesthetics. In Epic, you write that ‘Poetry is fast evolution. Biological evolution is slow poetry’ (192). What is the relationship between cultural and biological evolution? Why is epic so important for this, in contrast to other poetic forms?

FT: The field of epigenetics is now confirming an idea that I’ve long nurtured, that we humans bred or domesticated ourselves into our humanity by individual mating choice within an intensely ritualized, artistic (and increasingly playful and exploratory) social medium. Of course our genetic inheritance in a very general way helps to determine our capacities for complex social and cultural behavior; but our social and cultural behavior powerfully influences our mate choice and therefore the future genetic constitution of our group and our species. Cultural and biological evolution are in a dynamic feedback relation with each other, the faster cultural evolution driving the slower biological evolution.

Epigenetics now suggests that even within an individual’s lifetime that individual’s experience can alter the expression of the genes by suppressing or awakening their ability to make proteins, often guided by regulatory genes and intron configurations that can toggle on or off whole batches of genes. Our experience is partly determined by our choices and actions. The implication is that we can change our own biology—including our neurobiology—by what we do. As early humans, highly ritualized, much of what we did was cultural and symbolic already. Epigenetics demonstrates that such configurations of genes are heritable, and thus can be selected for or against within a single generation. In other words, the genome evolves according to Darwinian adaptation, but the epigenome evolves according to Lamarckian evolution. We were collectively shaping our own species. We are not just symbol-makers but the symbols we have made of ourselves.
Epic is one of the oldest forms of human ritual of which we have an exact record. Older even than such ancient verbal works of art as Gilgamesh, cave paintings all over the world evidently and universally depict actions familiar in epic—such as the battle with powerful beasts and monsters, communal celebration, the worship of deities, the formation of cosmic schemas and human communities, and the dance of the beast-headed masked shaman dancer/storyteller. Epic is thus not only a record of our evolution, but a powerful driver of it.

CP: You co-authored “The Neural Lyre” with neurobiologist Ernst Pöppel (who coined the moncausotaxophila that plagues Sax Russell in Red Mars), where you explore the universality of the three second poetic line. There, you mention that while you focus on poetry, prose has its own rhythms and its own effects. Have you explored some of these rhythms and effects in other artistic forms, whether that be prose, paintings, dance or music?

FT: In my book Beauty: The Value of Values (1991) (which the University of Virginia Press allowed to go out of print) I did indeed broaden the focus to other arts than poetry. I suggested similar “hardwired” human potentialities, such as musical tone and rhythm, detail frequency in the visual arts (that is, Ingo Rentschler’s measure of the ratios in a given visual image among fine and coarse scale detail, large masses, and general composition), color theory, narrative, dramatic mimesis, and so on. Steven Pinker claims that language itself contains such strange attractors, such as deep syntax. I have recently begun to study the ancient Trivium (Grammar, Logic, and Rhetoric) in the light of new understandings of how meaning is produced in both prose and poetry. English turns out to be a tonal language, like Chinese, but the tones do not for the most part specify lexical meaning (except in such cases as “conTENT” and “CONtent,” but instead specify grammatical and logical meaning—as in the difference in meaning among “The DOG bit the man,” “The dog BIT the man,” “The dog bit the MAN” and “The dog bit the maAN?”), where capitals denote a raised tone. It is precisely by an extremely sophisticated manipulation of such tones that such masters of prose as Antony Trollope and Henry James achieve their effects.

CP: If there was one idea that would unite your thinking on the blend between the sciences and arts, I would be tempted to say that it is your emphasis on nonlinear dynamic systems and their iterative quality.

Is this the fundamental idea underlying your notions of the relationship between the sciences and arts? Why is this so important?

FT: As in my earlier answer, the key feature of the relation between nature and culture is feedback, where the cause of the present state of the system cannot be assigned to either factor: each causes the other. (Epigenetics nicely complicates this already dizzying infinite regress of causes by adding a third variable, the activation or deactivation of genes in an individual). Iteration is all that is needed to turn a simple formula like the Mandelbrot Set generator into an infinite universe of scaled and closely-packed forms, or to turn a simple nonlinear dynamical relation into a richly diversified world of activity that combines order with chaos and is both unpredictable and retrodictable. The system itself is the major cause of itself—it is literally autonomous—and when intelligent can mold its environment so as to maintain its own dynamic but ordered process (we can create or change microclimates by clothing, housing, and transportation, generate ecosystems by game and vegetation management or farming, invent new sensory and communicative modes by acoustic devices, lenses, writing, etc, and extend our desires into the future by planning generated by storytelling). Science is the information we use to do these things, but art, at its most general, determines what they are to be. My basic argument is that our culturally universal sense of beauty is our recognition of such iteratively generative forces at work and our drive to participate in and extend them—to garden them, so to speak.

CP: “Gardening” is central to your portrayal of terraforming in Genesis, while your description of art as a way of extending our desire into the future resonates with the utopian impulse that the creation of new worlds on other planets often deals with. Time, too, is central to Genesis. How does the notion of time’s “branchiness” relate to storytelling and gardening?

FT: My best answer to this question is a passage from my epic poem The New World, describing the garden planted by James and Ruth:

And this garden is a garden of time. Over years the great flowering chestnuts grow, and the willows across the river in the water garden gather mass, and the small bonsai pines on the cliff and the rock garden, establish definitive oddities;
and every year the flower beds change their beautiful
vesture, yellow to blue to crimson to pink,
and tall madonna lilies and phloxes burst
like star-shells or rockets out of the earth; the lawns,
speckled with daisies in spring, become deeper and bluer
in fall. And often the folk of the county by invitation
wander the garden and take slips, or bring
to the gardeners cuttings or seeds of their own.
For gardens walled off entirely from time and the world
will flourish only as gloomy kingdoms of death;
and the Sun, the mine where every delicate leaf
digs its ethereal fuel, is owned in common
by any who knows how to give thanks
by turning the fire to the work of construction; from the long
death of that star, burning the first gas
of the universe, this sweet world of water, poised
between vapor and ice, performs its miraculous play
of creation and fabricates richer gardens of time.

In one of my squabbles with the environmental purists
who objected to my take on environmental restoration
(that a restored prairie or wetland was a real prairie or wetland) I was confronted by the argument that a true prairie, once destroyed and reduced to mere farmland,
could never be replaced. We could make a copy, perhaps, by importing the seeds and roots of all the species that lived there before; but what we would have would be like the copy of a Vermeer rather than the original.
The sacredness of its historic identity would be gone: it would be a fake, a mere reproduction. My rejoinder was that the original prairie itself was already a reproduction, literally; most of its species were annuals or biennials, and were only reproductions of their parents (often with new mutations), and even the perennials were temporary, having replaced defunct members of their own species, or other species whose niche they had successfully invaded. We humans in our own attempts to reproduce our species or just to pleasure ourselves were simply acting like big clumsy bees, aiding the reproduction of some and frustrating that of others.

Behind this idea was a further one, which the question hints at: that the course of time is not a straight line, a set of rails to which we are deterministically bound. Just as different strains and breeds, leading to different species, can derive from the same event of reproduction, so every moment of time has a whole fan of possible futures, each of which could, after the fact, be traced back legitimately to its cause in that moment. Every future is authentic, a faithful successor to its original; but the original is fertile of many possible outcomes, some snuffed out by the succeeding event, others coexisting as do different strains of a plant or animal species. Time is asymmetrical: constitutively unpredictable before the event, and constitutively retrodictable afterwards, like the solution of a good detective story. Time is branchy, like all the ancient symbols of it: the trees of life and knowledge, the Norse Yggdrasil, the world-tree of the Bhagavadgita, the Banyan of the Buddha, the nine-branched tree of the Kabbala. And beings like intelligent animals can by their decisions help choose which branches will become part of the canonical past, once they occur.

CP: There has been an increasing contemporary interest in terraforming Earth, or “geoengineering”, as a way to mitigate the effects of climate change. You explore the terraforming of Mars in A Double Shadow and Genesis, and in 1991 you were invited to join such scientists as Carl Sagan and Chris P. McKay at NASA’s Ames Research Centre for a workshop on terraforming. All this suggests to me very exciting relationships between art, science and technology, and society. Could you tell us a little bit about how, as a humanities scholar and poet, you were able to contribute to NASA’s terraforming workshop, and what the relationship between the humanities and science is in relation to these kinds of issues?

FT: When Genesis: An Epic Poem first came out in 1988, somebody at the Houston Space Center, presumably an SF fan, got hold of it and passed it around. For a while it was recommended reading down there. Then some of NASA’s long range futures brains trust heard about it, and they sent someone to Dallas to interview me. I think Robert Zubrin, who was working for Lockheed’s and Martin Marietta’s interplanetary scenario development teams, may have been the key. Later he, Robert Haynes, (President of the Royal Society of Canada), Martyn Fogg (President of the British Interplanetary Society) and I met at Haynes’ home in Ontario, and sketched out the ideas that led to the founding of the Mars Society. It turns out that a lot of the ideas I’d proposed, especially using tailored bacteria to start creating a thicker greenhouse atmosphere and decreasing the albedo, and importing big chunks of frozen volatiles from outer solar orbits and peppering Mars with them, had been looked at seriously by the boffins. They asked me out to a con-
ference at NASA Ames in California, and that’s where I met Chris McKay and had that wonderful long lunch with Carl Sagan.

What seemed at that time to catch people’s imagination about my work was that I had perhaps for the first time tackled the bioethics and environmental philosophy of terraforming. Not only that, but in postulating a Martian prophetess or Sybil with a new doctrine of nature as emergent beauty, I had set up a counterweight to the then ecofeminist ideal of Gaia. That debate still rages, and some of the terms that I first proposed to talk about it—including classical Natural Law, theories of property, and the matter of the rights of living organisms in general—have been used by many commentators since.

The point was that in Ames and Toronto we were not talking so much as members of particular disciplinary silos, but as people who had all done their hard-science homework while possessing that wider humanistic vision of the future. The Martians, we called ourselves. Zubrin was a genius engineer, Fogg an understated visionary with a brilliant grasp of the math of any situation, and Haynes a distinguished biologist who had turned his talents to speculative exobiology, now on the verge of becoming solid science. What I brought to it was, I think, a kind of linguistic and semantic glue that stuck other people’s ideas together, or perhaps a lingua franca based upon verbalized imagery that could make the theoretical feel real and thus become not just the result of extrapolation but the basis of further intuition.

CP: Speaking of your exploration of bioethics, the Martians of Genesis use genetic engineering to engage the ecoptive transformation of Mars. They also find a metaphorical ‘ark’, the Lima Codex, which contains the genetic blueprint of many of Earth’s extinct and extant animals, thus allowing them to populate Mars. It seems to me that discussion of the possibility of a real-world Jurassic Park scenario, the present rise of GM crops, and the associated patenting of life resonate very much with Genesis. What do you think of this notion of patents for GM crops, and the current approach to farming and bioethics?

FT: Another excellent question, Chris. Let me take two of the many exciting trains of thought that are opened up by this now ongoing discussion.

One is the possible danger of “bioengineering,” including gene design, the creation of chimeric lineages, cloning, genetic modification of humans for healing or enhancement, and so on. The dangers are great, of course, and as such practices become standard, as they inevitably will, they will require careful and active regulation. The promise is also, of course, enormous, including agricultural, technological, and medical advances, as well as exciting prospects for environmental remediation. The interesting philosophical point, though, is that we are always already in danger from entirely “natural” genetic modifications and innovations, which are plunging on at a terrifying pace over and above any human interventions. New epigenomes are emerging everywhere all the time, and as Lynn Margulis pointed out, bacteria, archaea, and viruses are busily swapping genetic material with each other and with plants and animals and ourselves as we speak. The “harmony” of nature is a constant negotiation of emergent disharmony, a continuing overbalancing and overcorrection with catastrophe always looming. We are in what Lewis Carroll called a caucus-race, where one has to run even to stand still. It is precisely this condition that makes life, and human cultures, so astoundingly resilient. It’s dangerous all the way down. Natural genetic recombination can produce an ebola virus or a great beer yeast, a Leonardo or a Hitler.

After all, we are natural animals too. We are indeed innovators, but so is the rest of nature: it’s a Heraclitean fire, says Gerard Manley Hopkins. No species ever steps into the same river twice. We can’t beat it, and so must join it. We may in fact be in slightly less danger if we can begin to take a conscious hand in the wild changing fecundity of the world we live in. I can’t wait to see the first resurrected mammoth, and I hope it gets a mate.

The other point is one that I find fascinating, but have not yet come to any conclusion about, except that the discussion itself is extremely important. It is the issue of intellectual property and patents. The courts are presently doing a heroic job with what laws we have. Property law, the marketplace and the invisible hand of pricing do very well with physical goods and real estate that can only exist in one place. But information and ideas are infinitely reproducible; an image, a poem, and a tune can be easily stolen and shared. I myself would like a pure commons, unlike former conceptions of the commons, would not be a tragedy since the resource—new ideas—is unlimited and theoretically infinite. But how would the creators keep body and soul together? How reward them? Pay them to teach us? Give them shares in a new form of stock, based on the accumulated knowledge of the human world?
Maybe 3-D printers and the internet of things will make all these issues moot, but the way the language must change to adapt to these issues is fascinating to a poet.

I would like to thank Frederick Turner for sharing his time with us to produce this exciting interview. I would also like to add a personal note of gratitude for his generous and deeply thought-provoking responses to my emails, and for writing Genesis: An Epic Poem.

Bibliography

Poetry and Novel


Monographs and Edited Collections


Essays and Interviews


Hollow Earth 101
Michelle K. Yost

ST. LOUIS, (Missouri Territory,) NORTH AMERICA, April 10, A. D. 1818.

TO ALL THE WORLD!

I declare the earth is hollow and habitable within; containing a number of solid concentrick [sic] spheres, one within the other, and that it is open at the poles 12 or 16 degrees; I pledge my life in support of this truth, and am ready to explore the hollow, if the world will support and aid me in the undertaking.

John Cleves Symmes.
Of Ohio, Late Captain of Infantry

THIS ANNOUNCEMENT, distributed as ‘Circular Number 1’ to scientists, politicians, universities and newspapers in North America and Europe, set off a century of hollow earth theories, scientific inquiry, exploration, and literature in the United States. There is a deep relationship between this nineteenth century science of hollow earth geography and the literature and ideology that it inspired. Hollow earth novels engaged in some of the first didactic speculative fiction based upon contemporary scientific theory. Though the most famous example of a hollow earth narrative is undoubtedly Jules Verne’s *Journey to the Centre of the Earth*, it was a setting dominated by American authors for a variety of reasons. However, with only a few exceptions, after 1915 the genre and its authors fell out of favour and the majority were forgotten, never to be republished, and can now be found only in university archives (if they can be found at all). These narratives offer a fascinating glimpse into the variety of American nineteenth century science, philosophy, spiritualism, politics, and social structure.

Early Hollow Worlds
THE TERM ‘HOLLOW EARTH’ is not quite sufficient to describe the genre, though it is the commonly accepted one. I prefer to use *terra cava* to denote the use of a hollow world, polar pit, or subterranean cavern in a narrative, as each has very distinctive geologic features and was championed by different authors and scientists.

Classically speaking, the earth’s underground habitability was restricted to the spirits of the dead and the various deities who watched over them. From the Greeks to Dante Alighieri, European thought about the world underfoot was restricted to visions of haunted and damned souls, terrifying gods and wicked demons. One of the first works to challenge this paradigm was Athanasius Kircher’s *Mundus Subterraneus* (1665) in which, among other things, he articulated – and lavishly illustrated – cross-sections of an earth permeated by underground networks of rivers and fires. It was not a hollow earth, but it was an attempt to scientifically explore the underground world. Edmond Halley followed in 1691, proposing to the Royal Society that the earth was a series of concentric spheres nested one within the other. His reasoning was actually very mathematical; Newton’s *Principia* calculated the moon to be denser than the earth, and the only reasonable explanation that Halley could reach was that the earth must not be a solid sphere. Into all of this Halley includes explanations for gravity, magnetism and hydrodynamics. The entire world system must be made cohesive in order to succeed as a scientific theory, and this is a practice later fiction authors would strive to emulate. American religious leader and natural philosopher Cotton Mather followed Halley with his publication of *The Christian Philosopher* in 1721, supporting Halley’s theory in terms of Divine providence (Standish, 2006).

During the eighteenth century several novels gave the *terra cava* narrative the Swiftian treatment, moving away from Dante’s vision of hell to a realm of strange adventures, creatures and societies. Among these are the French novels *Relation d’un voyage du Pôle Antarctique* (1721) and *Lamékis, ou Les voyages extraordinaires d’un Egyptien dans le terre intérieure* (1735), the Scandinavian novel by Ludvig Holberg, *The Journey of Niels Klim to the World Underground, with a New Theory of the Earth and the History of the Previously Unknown Fifth Kingdom* (1741), the British novels *The Life and Adventures of Peter Wilkins* (1750) and *A Voyage to the World in the Center of the Earth* (1755), and from the Italian Jacques Casanova, *Icosaméron* (1788). For many of these it is social commentary and satire that dominates the plot rather than actual speculation and exploration of a hollow globe.

This century also witnessed the first endeavours into the frozen reaches of the northern and southern hemispheres, expeditions that would often be referenced in subsequent American *terra cava* novels. Symmes’s theory relied upon the last two white spaces on the map remaining unfilled: the Arctic and the Antarctic, spaces...
that would remain blank throughout the nineteenth century. Robert Peary (1909) and Roald Amundsen (1911) respectively laid to rest the last doubts about the solidity of the earth’s Polar Regions, and despite a few holdouts, put an end to the Symmes theory and *terra cava* narratives.

John Cleves Symmes, Jr. and the U.S. Ex. Ex

SYMMES, A VETERAN of the War of 1812, left the Army to take up trade in the frontier post of St. Louis, where he published his announcement of a hollow, habitable earth after years of study and creative reasoning. Soon after, he moved his large family back to his home in Ohio (a state that would go on to publish more *terra cava* works than any other state), where he continued to publish small articles of supporting evidence. Joined by newspaper man Jeremiah Reynolds, Symmes went on a lecturing tour of the U.S. in order to garner support for his proposed expedition to the Arctic.

Twice, sympathetic politicians brought Symmes’s plea for funding before Congress, and both times the proposals were tabled without a vote. Almost comically it was suggested by one Representative (listed as ‘Mr. Archer’) that the motion be brought before the Committee on Foreign Relations, since the intent was establish trade with the inhabitants of the inner world. Symmes faced a country rapidly expanding into the territory gained from the Louisiana Purchase, coming out of a second war with Great Britain, and the new American policy put forth by the Monroe Doctrine. Through Reynolds, Symmes was finally able to win over President John Quincy Adams, who commissioned a naval expedition in order to test Symmes’s theory. Unfortunately, Adams lost his re-election bid, the voyage was cancelled, and Symmes returned to Cincinnati a dying man, passing away in May of 1829.

Reynolds did not give up, though, despite his falling out with Symmes over details of his theory. A friend of Edgar Allan Poe’s (who borrowed liberally from Reynolds’s work on Polar exploration and his 1836 *Address before Congress on the need for an American expedition for his only novel, The Narrative of Arthur Gordon Pym*), it is rumoured that Poe’s last words, “Reynolds… Reynolds”, were in reference to Jeremiah. Convinced of the necessity to expand U.S. trade into the Pacific, Reynolds was able to find passage on a privately funded enterprise, the South Sea Fur Company and Exploring Expedition, whose main purpose was sealing, but who would take on scientific specialists as well. Unfortunately, the crew was not nearly as anxious to explore, especially as the sealing was not going well. Many deserted, and in the midst of a mutiny, Reynolds was set ashore in Chile, where he spent the next two years exploring on his own before finally making his way back to the U.S. His experiences, however, would inspire the writing of *Moby-Dick, the White Whale of the Pacific* (1839), which would be rewritten by Herman Melville into *Moby-Dick* (1851). Reynolds’s lasting legacy seems to be not in his own work, but in those writers that he inspired (Stanton, 1975).

Symmes’s dream of a U.S. expedition was finally realised in 1838 when new President Martin van Buren (undoubtedly advised by his Vice President, Richard Mentor Johnson, who had previously supported Symmes in Congress) resurrected the cancelled naval voyage. The United States Exploring Expedition (U.S. Ex. Ex.) spent four years exploring the globe, though Symmes and his theory were never mentioned in the mission parameters. Under the command of Lt. Charles Wilkes, a large portion of the Antarctic coast was mapped and named Wilkes Land, though the existence of an actual continent – and not a hole in the world – was still not verified when the surviving ships returned to America in 1842.

The Early Novels

THE FIRST AMERICAN utopia (according to J.O. Bailey in 1965), *Symzonia, a Voyage of Discovery* (1820) was published under the nom de plume of ‘Captain Adam Seaborn’, and is hypothesised to be the work of either John Cleves Symmes himself, Nathaniel Ames, or someone whose identity will never be known. Though occasionally categorised as a ‘burlesque’ for its commentary on American culture and use of charactonyms, *Symzonia* is serious in its treatment of the Symmes Theory of Concentric Spheres and the prospect of a hollow, habitable world.

Seaborn commissions a ship to sail to the Antarctic, where he expects to find a Symmes Hole opening to the interior world; there are even frequent references to Symmes and his theory. The narrative is a conglomeration of Symmes’s scientific ideas (in the loosest possible definition of ‘scientific’), anti-British sentiment, and socio-political commentary on the new nation of America. Finding a technologically advanced race of pure-white utopianists, Adam Seaborn, in scenes reminiscent of *Gulliver’s Travels*, finds himself and his country wanting in the face of such perfection. Returning to the US without proof and thrown into debtor’s prison, Seaborn published his travelogue in hopes of earning his free-
Fig. 1 – “Sectional View of the Earth” from Symzonia; Voyage of Discovery (New York: J. Seymour, 1820). Photographed by Michelle Yost at Ohio State University.
dom and encouraging others to follow in his footsteps, to establish trade with the Symzonians before another country – i.e., Britain – gets there first. America’s future in global trade and expansion rests on getting to the interior of the world.

The concept of ‘Manifest Destiny’ – that the American flag would rule over the entirety of the continent, from the Atlantic to the Pacific – was still decades away from its full enunciation. The Monroe Doctrine, which would press for American isolationism, would not be put into effect until 1823. Nevertheless, here we see Seaborn laying the foundation of an American desire to stretch the Stars and Stripes further into the world, lest the Union Jack get there first.

At the point that the narrative leaves the known map, venturing into the imaginative, the transition is subtle, leaving readers to wonder exactly when it was they left the surface of the earth. On the ‘discovery’ of ‘Seaborn’s Land’ a ceremony of deeply national, imperialistic, and legal significance is performed: “Aware that there was a possibility that I might miscarry, and never get back to this place, I devoted a day to the performance of a necessary duty to my country, namely, taking possession of the country I had discovered, in the name and on behalf of the people of the United States of America.” He plants a flag and a plaque attesting to the claim, and then ceremonially fires the ship’s canons. Without a globally recognised body to settle land disputes, employing ceremonial formalities that should be recognised by other European bodies (no one else’s opinion counting) is the best any explorer can do. Seaborn, though naming the island for himself, does not claim it for himself, but for his country. Just like Columbus, he did not set out to claim half of the people of the United States of America. “He the country I had discovered, in the name and on behalf of the United States of America”.

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The concept granted him, Poe borrowed liberally from Reynolds to construct The Narrative of Arthur Gordon Pym of Nantucket (1838), and possibly used Symzonia as well to describe the geography of the unfortunate Pym’s surroundings in the South Pole (especially the heat). Instead of an advanced society, though, they are met by cannibals and blackness, and then a whiteness that engulfs the narrative, which ends abruptly. An afterword claims that the events in Pym may be verified by the ‘government expedition now preparing for the Southern Ocean’, which can only be a reference to the U.S. Exploring Expedition.

The European Cavern Tales

WHILE AMERICA WAS tied up in the Civil War and Reconstruction, European authors made use not of Symmes’s theory per se, but a porous, habitable subterranean setting.

Jules Verne was a known fan of Poe’s work; one of his last (and lesser) novels was a continuation of Arthur Gordon Pym; titled The Sphinx of the Ice Field. Verne kills Pym, eliminates any reference to a hollow world, and generally ignores the plot set out by Poe. Only once did Verne ever mention Symmes in a novel, in The Adventures of Captain Hattaras, and it is only to dismiss Symmes’s theory. Nonetheless, Journey to the Centre of the Earth is one of Verne’s most popular stories, and the first to spring to mind when anyone brings up ‘the hollow earth’, though Verne’s earth is neither hollow, nor do his characters come close to reaching the centre.

Edward Bulwer-Lytton’s most enduring work, The Coming Race, is unique in its use of an American narrator, and is set beneath the American continent. To some critics, this was meant to represent the perceived threat of Americans (the ‘coming race’) overshadowing the British Empire politically and economically. Unlike other European adventure narratives into speculative realms, Bulwer-Lytton’s lost race is superior rather than inferior, yet they are still a threat (unlike the superior civilisations in American terra cavas that have no interest in conquering the surface world).

A mixture of lost world and hollow earth, Rider Haggard’s She (1887) involves a lost race in an ancient subterranean city, built under a volcano. The presence of a female ruler with mystical abilities exceeding those of the rest of the populace is copied liberally by American imitators, as is the underground river motif.

In the few literary reviews that can be found for the American terra cava narrative published between 1880 and 1915, there is a striking consistency: nearly all make
reference to one of the three preceding examples of a hollow earth novel. European novels from this genre were more widely known, and seen as a better mark of comparison than another American narrative.

The American Utopia Inside the Earth

WHETHER OR NOT an author genuinely believed Symmes’s or Verne’s vision of the earth’s structure, the conceit of a hollowed-out world provided a literary laboratory for social gedankenexperiments. Where most British lost race narratives revolved around the discovery of primitives in a hitherto surface terra incognita, American lost races tended towards advanced civilisations in the terra cava.

The first American terra cava narrative to set off the new age of publishing about the hollow earth was Mary Bradley-Lane’s Mizora (1880), which first appeared in the Cincinnati Commercial (lending further evidence to the geographically-based spread of the genre). Published initially under the nom de plume ‘Vera Zarovich’ – a disinherited Russian aristocrat who found herself shipwrecked in the hollow world – the story won enough acclaim to warrant republishing as a novel ten years later. Decades before Charlotte Perkins Gilman’s all-female paradise, Mizora established a monosexual utopia of blond scientists and engineers. Eugenics removes not just the male of the species, but anyone not pale and blond, as the propensity for violence is found only in the brunette set. Chemistry and mechanical engineering has freed the women of Mizora from the drudgery of domesticated work, be it for preparation or house cleaning. They are now able to pursue other sciences, arts, and architecture at their leisure, while informing Zarovich of all the ways in which their society is superior to the external world, especially in terms of child-rearing and education. Among the Mizorans there is no alcohol, and no consumption of meat, just as it was among the Symzonians, and just as it will be with nearly every other society placed inside the Earth; teetotaling and vegetarianism are literarily synonymous with utopic ex-
istence. Eugenics also plays a strong part in the social engineering of George W. Bell's 1904 novel Mr. Oseba's Last Discovery and Will N. Harben's The Land of the Changing Sun (1894).

Mizora was quickly followed by a satiric rebuttal from an unknown man (the author being given only as a 'Mrs. J. Wood') in the form of Pantaletta: A Romance of She-heland (1882), a feminist antiutopia where women rule while men wear dresses and perform domestic labours. Pantaletta is the 'High-She-Dragon of the Imperial Order of Crowing Hens' in Petticota, and the attempted seducer of the Outer world male protagonist Icarus Byron Gullible. The entire novel reads as a caution against women suffrage and employment outside the home, and 'Mrs. J. Wood' is suspected of being a male journalist (Bleiler, 828). For the most part, though, terra cava novels do not engage in this sort of overt satire and cynicism, focusing more on science and social commentary; Archibald Marshall's Upsilonia (1915) is the only work in this period that would fit the category of satire.

Under the Auroras, a Marvellous Tale of the Interior World (1888, later republished as Crestin; Queen of the Tolius) by William Jenkins Shaw, The Goddess of Atvatabar (1892) by William R Bradshaw, and Under Pike's Peak (1898) by Charles McKesson all feature interior countries with strong female leadership; all of these women, however, fall in love with the white male protagonist from the world above, to the great benefit of the latter. The only terra cava narrative to feature a woman as the primary narrator is Nequa; or, The Problem of the Ages (1900) published by 'Jack Adams' (the likely pseudonym of the copyright holders Alcanaroan O. Grigsby and Mary P. Lowe). 'Jack' is actually a woman, Cassie Van Ness, in disguise sailing under the command of her ex-fiancé through an Arctic Symmes Hole and into an egalitarian paradise, Altruria, ruled by Christian Science principles. Altruria is projected as an improved version of the United States with a similar history, but socially and technologically more advanced. The same can be said of Byron S. Welcome's From Earth's Center: A Polar Gateway Message (1894) in which explorers of the northern Symmes Hole find themselves in Centralia, a land ruled by the economic and political philosophies of Henry George: a single tax based upon land use, laissez faire markets, a mixture of public ownership and private operations, and no central government.

The American Empire Inside the Earth

WITH DESTINY MANIFESTED and the American frontier closed, novelists turned inward – literally – to find new lands for American conquest. Glory, God, and gold, the old imperialist motivators, are still alive in each of these, offering up historic immortality to the white man who first reaches the interior of the world, gold and jewels so abundant they can be picked up like pebbles, and the chance to either spread the word of Christianity, or appropriate improvements upon it (but more of that in the next section).

Interior World; A Romance Illustrating a New Hypothesis of Terrestrial Organization (1885) by Washington Tower, stands apart from other hollow earth narratives for two reason: it is written in third rather than first person, and there is no lost race. The most perfect of imperial acquisitions, the interior world is rich with wild orchards, fertile soil, abundant minerals, exotic pelts, and no living soul to contest the American claim to it. It is a wonder that others did not emulate this part of Tower's world building (or lack thereof), but Tower's primary concern was not just with a relatively unthreatening adventure story: there is a 33-page appendix of 'scientific' evidence for his theories on Symmes's geography. The discovery of the historical Tichborne heir – and his two daughters – provides the key to permanent colonisation of the hollow earth: wives. A pair of Adams and Evs remain in the otherwise uninhabited land to both enrich themselves and hold the new country in trust for future American colonists.

William Bradshaw's 1892 entry The Goddess of Atvatabar is a logical inclusion in this subject just given its subtitle: 'Being the history of the discovery of the interior world, and the conquest of Atvatabar'. As Standish states in his study, there is no subtle imperialism, 'it is blazing right in the title' (Standish, 204). The protagonist is called Lexington White, a wonderfully American and imperial name if there ever was one: the first battle of the American Revolution, and the symbolic colour of purity. He is a wealthy, private entrepreneur – like Adam Seaborn – who sails through the Arctic Symmes Hole and encounters a lost race of universal attractiveness and unparalleled technological advancement. White's conquest is not just of the country of Atvatabar, but the heart of its resident goddess, Lyone, both seemingly by force. Initially he sets out 'for the sake of science and fortune and the glory of the United States' (p. 9) with the intention of standing on top of the world, a 'monarch of an empire of ice' (p. 10). White has gone so far as to provide his crew with 'a special triumphal outfit... a Viking helmet of polished brass surmounted by the figure of a silver-plated polar bear' (p. 12). Image and pagentry, invoking the northern warriors of old and the
ancient Roman practice of a triumphal march. This was never just an exploring expedition; it is a new century of conquistadors. White, his crew, and the United States now have access to all of Atvatabar’s $8 trillion in annual revenue (p. 167) and advanced technology, which will put America ahead of its global competition. Where Symzonia sought only to obtain trading preference for America, Atvatabar seized the land itself.

Henry Clay Fairman’s *The Third World* (1895) is an Arctic subterranean adventure story unusual for its advocacy of female suffrage. *The Third World* is typical in its portrayal of a male protagonist who falls in love with the leader of an advanced civilisation, helping to overthrow a conniving dictator (see *Goddess of Atvatabar* and *Strange Manuscript Found in a Copper Cylinder* for similar plot devices). Where it differs from others is its use of a British – rather than American – protagonist, the last survivor of the failed Franklin expedition (1845) to the North Pole. Historical events provide fictional plot devices in this narrative and others, especially with regard to Polar exploration during the nineteenth century. The Symmes Hole mode of entry and geology is substituted with the equally popular Vernian cavern structure, employing a modified internal geography meant to explain aspects of the natural world. Like Atvatabar, there is fabulous wealth waiting to be plucked up by the protagonist and his allies, along with the hand of a beautiful maiden powerfully connected. Establishing a dynasty with a beautiful woman with a gold-laden country at one’s disposal is as much about extending Western influence as it is utopic in its appeal.

Second only to Symzonia in its failed imperialism is Charles W. Beale’s *The Secret of the Earth* (1899) in which twin brothers build an airship and fly through an arctic Symmes Hole. Though they observe several civilisations, they do not interact with them, choosing only to take notes while collecting the wealth of nations in gold and diamonds. Though they emerge from the Antarctic Symmes Hole, mechanical difficulties force them to throw their treasure overboard and strand the pair on an uninhabited island, where this account is written. The brothers’s desire for fame and wealth ends with a
The American Heaven Inside the Earth
TO THIS DAY, Spiritualism (now perhaps best referenced as ‘New Age’ thought) is still connected with the interior of the earth, but not as it was envisioned at the end of the nineteenth century. In some instances, Hell is moved off world, and Eden is relocated from the surface to the interior. As far back as Casanova’s Icosaméron there are literary allusions to Eden being an interior rather than exterior locale, and several novelists – as well as theorists – take up similar terra cava positions. The president of Boston College, William F. Warren, authored Paradise Found, placing the Garden of Eden (and thus human origins and evolution) in a northern polar pit. A unifying theme in the explicitly religious terra cava narrative is not the use of Christianity, but the authorial perception of a weak, defective Christianity on the surface world, deeply in want of the perfected Christianity found inside the world. These Edens are synonymous with utopias, but that utopic existence stems from Christian living.

Al-modad: Life scenes beyond the polar circumflex; a religio-scientific solution of the problems of present and future life (1892) has a subtitle that would not necessarily attract today’s readers to a work of fiction. Structurally, nothing about the work (except for its implausibility) would even lead a reader to recognize it as fiction, and it is never mentioned as such. The author is not identified; the text claims only that it was written by ‘An Untrammelled Free-Thinker’, and history has been left to assume that the publishers, M. Louise Moore and M. Beauchamp (of whom no information exists) were the true authors; every library catalogue references Moore as the author. Symmsian in its geography, and liberally Christian in its use of biblical quotations in ecumenical discussions, Al-modad (the narrator, a name taken from Genesis as a descendant of Noah) is a lost sailor who has little enough to explore inside the world but a society of perfect Christians better at interpreting the Bible and incorporating its uses into modern science. Everything from land ownership to nudity and vegetarianism is covered.

Forty Years with the Damned, or, Life Inside the Earth (1895) by Charles Aikin is a title that combines the traditional impression of the interior of the earth as the setting for hell for the deceased. Yet in the novel they are given a second, semi-spiritual/semi-corporeal life, not necessarily in hell, but in a sort of cheerful purgatory in the divine city of Surey. Christian theology and imagery is radically mixed with not just hollow earth theory, but the likes of Gratacap’s The Promise of Future Life on Mars when the inhabitants are suddenly transported to the neighbouring planet. The novel is actually three narratives; the first comes from the narrator, escaped slave Joe (who is granted Caucasian features after his ascension to Surey; one of many uncomfortable racial overtones found throughout); the life of a Toltec warrior among the Aztec just before the arrival of the Spanish; and an exploration of Mars and its politics. For Aikin, the use of a terra cava setting is a convenience to the plot, without any scientific motives such as in Interior World. The Sovereign Guide; A Tale of Eden (1898) by William Amos Miller places the Garden of Eden inside the earth, and hell on another planet, where Satan communicates with his minions via telegram. Miller’s character is unnamed (but presumed to bear some resemblance to himself) and it is led by a Virgil-esque divine guide into the Symmsian earth to explore Eden and perfect his Christianity, while lamenting the state of the American press and followers of Darwin.

Among the Spiritualist visions of terra cava, none is more influential than John Uri Lloyd’s Etidorpha (1895), a complicated novel involving three levels of narration, scientific experiments – complete with illustrated diagrams – and a blind cave-fish Virgil leading I-Am-The-Man-Who-Did-It (the name of the primary narrator) on a trippy tour of the hollow earth which includes mushroom forests, the suffering souls of drunks, a loss of gravity, and quaffs of hallucinatory liquids offered by Etidorpha (‘Aphrodite’ spelt backwards; a mystical being of some sort who is never fully explained). Lloyd’s narrative explores evolution, telepathy, geology, hydrodynamics, psychology, neurology, Masonic allusion, and more; initially published for a few subscribers, the novel underwent over a dozen more editions and translations into seven other languages (Harris, 151). Lloyd, a renowned pharmacist by trade, has been accused of sampling his own stock in the composition of his narrative, but Verne beat him by decades in the imagining of giant fungi.

And Others...
THERE ARE SOME works that do not fit the mould at all, among them Canadian author James De Mille’s most enduring work, A Strange Manuscript Found in a Copper Cylinder. Part of the conundrum is that it was not published until 1888, years after the author’s death. It is also widely believed to be an unfinished tale, composed in the 1860s and shoved into a drawer as De Mille could
“A Forest of Colossal Fungi” from Etidorhpa, or, The End of the Earth (Cincinnati: The Robert Clarke Company, 1900, 10th ed.) Photographed by Michelle Yost.
not think of a way to finish the narrative. De Mille’s use of a primitive rather than advanced lost race is reflective of the European tradition, but the lost manuscript motif echoes Poe’s short tale, “MS Found in a Bottle”. The most logical explanation is that De Mille’s found manuscript – first serialised in the U.S. – was cashing in on the wave of popular terra cava narratives.


Russian geologist Vladimir Afanasevich Obruchev arrived a little later on the scene in 1924 with *Плутония* (*Plutonia*). His introduction acknowledges that the hollow earth is a fantasy – removing Obruchev from the list of Symmes supporters – but the setting is ideal for delivering a story about geology. Inspired by Verne, but utilising Symmesian geography, Obruchev’s explorers descend through an Arctic opening into a hollow earth with a central sun, illuminating prehistoric flora and fauna. It is interesting that Obruchev acknowledges Symmes, as a century before, Symmes was asked to accompany a Russian expedition to the Arctic sponsored by the Czar, but could not raise the funds he needed.

There are those works which are not easily classifiable, occupying the liminalities of fiction and nonfiction: William F. Lyon’s *The Hollow Globe* (1871), *The Symmes Theory of Concentric Spheres* (1878) by American Symmes, Alexandre Saint-Yves D’Alveydre’s *The Kingdom of Agartha* (1886), *The Phantom of the Poles* (1906) by William R. Teed, and Marshall Gardner’s *A Journey to the Earth’s Interior* (1913) were all ostensively published as nonfictions. Yet their hypotheses and speculations are mostly imaginative and formed around inaccurate evidence, misunderstood natural phenomenon, and creative deduction.

**Afterword**

EDGAR RICE BURROUGHS marks the end of the terra cava publishing phenomenon with his Pellucidar stories, which did away with Symmsian geography and advanced races inside the earth. With explorers having attained both the North and South Poles by 1915, there were no Symmes Holes, no new continents, no lost civilisations, and no more blank spaces on the map. But the idea of a hollow or semiporous inhabitable world is not entirely extinct; recent years have even seen an upswing in use of this motif: *The Descent* (1999) by Jeff Long, *Subterranean* (1999) by James Rollins, John and Carol Barrowman’s *Hollow Earth* (2012), film adaptations of both *The Descent* (2005) and *Journey to the Center of the Earth* (2008), and even a role playing game, *Hollow Earth Expedition* (2006). These are just some examples of popular consumer items, not to mention the various New Age works and theories like Raymond Bernard’s, about UFOs coming from inside the earth. Richard Shaver’s 1940s work for *Amazing Stories* is still well remembered, and there was a 1990s anthropomorphic comic series titled *Hollow Earth*. James Cameron’s *Sanctum* (2011) is not a memorable film, but makes a point of calling the deep caves in Papua New Guinea one of “the last places on earth to explore”, which is why the terra cava narrative is still to be found in popular entertainment today. Even if the earth is not hollow as Halley or Symmes envisioned, there are still parts unknown beneath the surface.

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The Nursing Profession in the Fictional Star Trek Future.

Mariella Scerri and Victor Grech

Introduction

Since time immemorial, nurses worldwide have striven to establish nursing as a profession, autonomous but complementary with the medical profession. Although major strides have been achieved in the last three decades, fiction continues to show that the nurse is still a fiddle in the middle, subsumed by the doctor, blindly obeying orders and serving as liaison between medic and patient.

A brief overview of literature across periods as far back as the Renaissance demonstrates an overall derogatory attitude toward the nurse’s role. While the extremist position of the nurse as witch, sorcerer and evil has been abandoned, it has been replaced by the Florence Nightingale image, a primary caregiver to the sick with a predominantly subservient role. The modern notion of the nurse working side by side with the medical practitioner in highly stressful and technical environments, with the ultimate goal to save lives, continues to be overshadowed by the heroic medical doctor. Even in science fiction (SF) literature, a genre considered avant-garde in its line of thought, the role of the nurse has never been given its proper place. Indeed, several SF book series concentrate exclusively on doctors, with the medical practitioner in question carrying out multiple roles of doctor, nurse researcher, engineer and even technician. For example, Murray Leinster’s Med Ship series features ‘Med Ship Man’ (Leinster), volunteer doctors similar to Medicins Sans Frontieres International who travel from world to world with no actual enforcement powers but who are so respected that their advice is never questioned (Grech).

In the televisions series, Star Trek (ST), the recurrently submissive role of the nurse is also very palpable. An American SF entertainment franchise created by Gene Roddenberry that first debuted in 1966, ST has become a “cult phenomenon” (Italie). ST has been acclaimed for prefiguring numerous innovative technological inventions, such as the cell phone. It has also been praised for progressive civil rights attitudes. The original series included a multi-racial cast and was hailed for pioneering and defending feminist rights while promoting equality amongst the mixed gender cast (Italie). However, the sad truth is otherwise for the nursing roles enacted.
For example, most of the nursing cast are only mentioned as missing in the Dominion War in _Deep Space 9_. Others, such as Bandee (Posey), Jabara (Badiyi) and Hortak (Brooks) make fleeting appearances showing in just one episode. These three nurses appeared in _Deep Space Nine_ and served as medical assistants under Dr Julian Bashir (Berman and Piller).

Only Christine Chapel and Alyssa Ogawa were given prominence as nurses on board the _Enterprise_ and their role will be examined in more detail.

**Christine Chapel**

Christine Chapel was a nurse aboard the _USS Enterprise_ under the command of Captain James T. Kirk in 2266. Chapel’s personal career was doomed from its initial stages. She abandoned a career in bioresearch for a position in Starfleet in the hope that she would one day reunite with her fiancé, Dr Roger Korby. It is depicted as if she made do with a nursing role in order to find her lost fiancé (Goldstone).

Serving as head nurse on the _Enterprise_ under Chief Medical Officer Dr Leonard McCoy, Chapel is given a prominent position. Her capabilities and renowned expertise are acknowledged many times by Dr McCoy. On one particular occasion Dr McCoy complained to Kirk that “he had watched four of his best doctors and nurses, including Chapel” be imprisoned (Daniels). While enjoying a professional friendship with him, Chapel supports him in his decisions, even when others questioned his reliability. A case in point occurred when Kirk, Spock, McCoy, Scotty and Lieutenant Arlen Galway contracted a mysterious rapid aging syndrome. Chapel almost instinctively knew that McCoy would be able to figure out an antidote for the rapid aging syndrome. Her absolute faith in him was unshaken even while his wisdom was questioned by another doctor and a visiting Commodore (Pevney). She thus helped Dr McCoy in developing a medicine to cure mental degradation effects. In another episode, she also assisted Dr McCoy and Spock in the production and synthesis of an agent to counteract hyper-acceleration effects of Scolian water (Taylor). Both episodes portray her excellent skills as a lab assistant.

Regardless of her expertise and excellent skills, nurse Chapel has been overshadowed all along by the heroic Dr McCoy. Even when she was recognised by Dr McCoy for a great idea to use the microscope laser in order to reset and heal a crewman’s broken leg, her triumph was dampened. Chapel would be proven correct, but unfortunately she nearly drowned when she fell into the sickbay’s aquarium (Sutherland).

It is also worth noting that even among fans of ST’s original series, Christine Chapel proved to be unpopular. Her professed love for Mr Spock did not go down well with both female and male fans: “I’m in love with you, Mr Spock. You, the human Mr Spock... the Vulcan Mr Spock...I see things... how honest you are...” (Pevney). Indeed, “[f]emale fans saw her as a threat to their own fantasies and male fans saw her as a threat to Spock’s Vulcan Stoicism” (Gerrold 28).

At some point during her five year mission, Chapel returned to medical school in order to complete her medical degree. Chapel returned to the _Enterprise_ as Chief Medical Officer. Dr McCoy’s comment to Kirk that he was “going to need a top nurse, not a doctor who will argue every little diagnosis with me” (Sutherland) effectively depicts doctor-nurse tension. McCoy did not want an equal who might have threatened his position. He wanted a highly skilled nurse with expertise who was not at par with his status and who did not have a say in his decision making. Even when she was a practising doctor, he still saw her as his inferior “passing on to her every duty he finds too boring, irritating or annoying to himself” (Sackett and Roddenberry 119). Whatever her cast role, Christine Chapel was doomed to subservience under Dr McCoy.

**Alyssa Ogawa**

Alyssa Ogawa was a Starfleet officer aboard the _USS Enterprise – D_ and later, the _USS Enterprise – E_. She was one of the head nurses in the ship’s sickbay, assigned there in 2367 as an ensign. In 2370, upon recommendation by Dr Beverly Crusher, she was promoted to lieutenant junior grade. She became a senior staff member and would make reports to the senior staff in Crusher’s absence. This further perpetuates the subservient role of the nurse to the doctor and also reveals the inherent power of the medical doctor and the influence on decisions which were not related to her medical position _per se_.

Ogawa co-assisted Dr Crusher in several surgeries and medical situations. In “Identity Crisis” (Kolbe), she helped Crusher develop a way to stop the metamorphosis of aliens. In the same episode, Ogawa also assisted Dr Crusher in performing an autopsy.

Most of Ogawa’s interventions were more medically oriented than her nursing profession would usually allow. In the “Inner Light” (Lauretson), she brought medical equipment to the _Enterprise_ bridge in order to monitor Picard’s condition while he was knocked un-
conscious, while in “Suspicions,” she helped investigate the mysterious deaths of two doctors (Bole). In an alternate reality, Ogawa was a doctor and chief medical officer (Weimer).

Ogawa’s loyalty and friendship toward Dr Crusher were highlighted in the episode “Suspicions” (Bole). Ogawa risked her own career when Dr Crusher was relieved of duty for performing an autopsy on Dr. Reyga, violating the Ferengi death ritual and the Prime Directive. When Crusher was unable to continue investigating because she was unable to access the needed autopsy files, Ogawa used her authorization to help Crusher access the files, realizing how important this was for Crusher.

Overall, the doctor-nurse relationship between Dr Crusher and Ogawa appears to shift toward a more multi-disciplinarian approach. There seems to be a marked improved difference from the explicitly subservient role evident in the McCoy-Chapel work relationship. A major influence could be Crusher and Ogawa’s personal friendship, shifting the balance in their place of work by making them more or less equal stakeholders in decision making and responsibilities.

Discussion
While nurses’ appearances in ST do not portray a role of servitude per se as was depicted in earlier literature periods, it still exposes an overall subservient attitude to the medical practitioner. This is most felt in McCoy-Chapel work relationship, with various derogatory comments issuing from Dr McCoy himself.

Chapel’s role was also fraught with difficulties. An issue which frustrated the show’s producers, notably Robert Justman, was that the character of Chapel was not “fleshed out” (Simpson 14). Justman also felt that “nurse Chapel was a wimpy badly written and ill-conceived character” (Solow and Justman 224-225). Even Majel Barrett, reprising the role of Chapel, expressed similar sentiments. She claimed, “I didn’t care that much for nurse Chapel, to tell you the truth. She really wasn’t that exciting a person or that exciting a character for an actress to play” (Curtis 39).

The glamorous, heroic and exciting life that is often associated with medical doctors is not seen in both Chapel’s and Ogawa’s roles in ST. This lacuna is also revealed in other literature and television series. The caring, compassionate, loyal female persona also emerges. The romantic involvement with other personnel on board the Enterprise other than the doctor is a displacement of a popular theme, a love relationship with the heroic doctor. Christine Chapel admits her love to Dr Spock (Pevney), while Ogawa ultimately married Lieutenant Andrew Powell (Beaumont), and later conceived a child (Carson).

While boasting of mixed gender and equality, ST remains conventional in its approach in portraying male doctors and female nurses. This parallels the predominant trend in real life, where nursing is viewed as a female based profession. The stereotypic nurse image – blonde attractive female, is also highlighted. Majel Barrett claims that she was delighted that in the Motion Picture (Wise), she was promoted to doctor. The role did not require of her to bleach her hair, as was requested of Nurse Chapel in The Original Series (Sackett and Roddenberry, 119).

The shift toward a more multi-disciplinary approach represented by Crusher and Ogawa also reflects the changing attitude of the general public toward nursing in today’s society. A century later in the ST timeline, Ogawa is given more autonomy and responsibility than her colleague.

All in all, ST remains avant-garde in its approach towards disease management, treatment and care. However the general concept of the nursing role remains – a role subsumed by and subservient to the medical doctor. Arguably, more could be done to enhance the role of the nurse as befits modern times.

Works Cited


IN THIS EXCELLENT collection of critical essays, Attebery and Hollinger have recruited a talented stable of known and emerging scholars to pursue implications of the parabola as a metaphor for science fiction. Attebery first suggested the term in his article “Science Fiction, Parables, and Parabolas” in the Autumn 2005 issue of Foundation, not only as a description of the narrative structure of SF, but also as a potential explanation of why SF, unlike other genres, has not developed a single formula in the same way as Westerns or detective fiction. Taking the metaphor of the parabola from astronomy, Attebery and Hollinger note, “A parabolic orbit is one that, though it may at its sunward end be mistaken for an ellipse, opens out at the other end to infinity.” Likewise, “whereas fictional formulas govern a story from beginning to end, science fictional parabolas take us from the known to the unknown” (viii). In addition to its visualization of narrative structure, the editors also argue that the image of the parabola helps articulate and clarify the role of collaboration and exchange at the heart of the genre, exploring “the relationship between tradition and individual creativity” (viii) found in “not the individual text but the shared idea/narrative structure: the parabola” (ix). Extending the implications of this image, they invited contributors to begin with the shared known of this concept of the science fiction parabola and take it into the unknown through individual critical essays. The resulting collection justly deserves the editors’ claim that the volume provides “a significant addition to science fiction scholarship with implications that go well beyond the single genre” through “a detailed study of what is generally considered to be a key defining characteristic of the [SF] genre” (xi). Parabolas of Science Fiction rewards not only scholars of science fiction, but any scholar who is concerned with genre theory. The collection divides into four sections. The first, “Introducing Parabolas,” begins with an essay by Attebery elaborating on his original concept of the parabola. Terry Dowling then applies the parabola to his own work, demonstrating how the concept provides a richer, more complex approach to understanding an author’s relationship to genre than the more conventional approach of influence or motif. Graham Sleight than takes it further, examining how certain texts—such as Joanna Russ’s “The Zanzibar Cat”—break open the SF parabola, first playing with the known and understood parabolic trajectories and then escaping in completely new and unexpected directions. Sleight—and the authors he discusses—invert or subvert the parabola in order to further critique SF as a genre and the idea of genre itself. The second part, “Parables of Politics and Power,” turns the focus to the dialogue of SF communities in essays by Jane Donawerth (Katherine MacLean’s connection to and critique of biological science), Rachel Heywood Ferreira (the first contact story as developed in Central and South America), Amy Ransom (French-Canadian SF as a minority literature), and Lisa Yaszek (SF variations on mainstream domestic fiction). Section three, “Parables of Remediation,” looks at hybridity and the (re)definition of the human (L. Timmel Duchamp), the constraints at work in authorized and fan spinoffs from The Matrix despite the potential of the shared universe (David Higgins), and two essays on parabolas based on Frankenstein—first on Olaf Stapledon’s parabolic reworking of the tale in Sirius (John Rieder) and then on the megatext that is the Frankenstein myth (Nicholas Ruddick). The final group of articles, “Parabolic Futures,” examines the parabolic nature of retrofuturism (Paweł Frelik), and the transformation of one parabola to another (Gary K. Wolfe). Hollinger closes the volume with an essay on the two arms of the future archive parabola—simultaneously demonstrating the always already outdatedness of SF and enabling the control of past and future. One might question whether scholars need yet another metaphor to explain the unique characteristics of science fiction as a genre. Indeed, Hollinger and Attebery provide a succinct summary of some of the more prevalent approaches: “Cawelti’s work on popular formulas, Samuel R. Delany’s descriptions of science fiction’s reading protocols, Gary K. Wolfe’s study of sf icons, Joanna Russ’s ideas about sf subjunctivity, Hamon’s theory of the megatext, and William Tenn’s description of sf writers as jazz musicians riffing on one another’s work” (ix), to which one might add the critical paradigms forwarded by Darko Suvin, James Gunn, Carl Freedman, and Frederic Jameson, to name only a few more. However,
one need not accept the parabola as the definitive characterization in order to recognize its power as a critical tool, as evidenced by the essays in this collection.

William Gibson
Jerome Winter


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IF READERS CAN make it past the odd opening gambit of a wilfully perverse comparison between William Gibson and Robert Heinlein, Gary Westfahl’s William Gibson offers a well-researched and productive single-author study. The revolutionary rhetoric that ushered the dark prince of cyberpunk to pre-eminence has long since grown stale, but squaring the circle of Heinlein and Gibson obscures as much as it illuminates. In a new interview Westfahl conducted and included as an appendix to the book, Gibson himself says as much in response to this comparison and a question about Gibson’s impact on science fiction: “I don’t seem to have done damage to the central shaft. It remains its adamantine self” (171). It would be easy to mistake this slim volume, as an aghast Benjamin Gabriel at Strange Horizons has done, as a misguided effort in genre consolidation gone terribly awry. Reading Gibson’s “The Gernsback Continuum” as a “fond tribute” (37) to Golden Age science fiction, for instance, blatantly ignores the undercurrent of the story’s scathing indictment of the racially inflected technocratic fantasies and commodity fetishes of the pulp era.

Westfahl divided the book into an introduction, seven chapters, as well as a conclusion, an interview, and a comprehensive, chronological bibliography of both authorial and secondary materials. The chapters chart a trajectory of Gibson’s career from the embarrassing juvenilia of his teenage contribution to science-fiction fanzines, to his path-breaking short-fiction work, to his primary legacy of ten novels and assorted non-fiction, with unexpected stops at his film-and-television scripts and poetry. These chapters maintain a consistent focus on the waning arc of Gibson’s interest in genre science-fiction or what Westfahl, cherry-picking interview statements, dubiously considers the writer coming into his own as “an essentially conservative and traditional writer” (7). Westfahl judiciously devotes only one chapter to direct biographical criticism that expands on Gibson’s autobiographical essay “Since 1948”, republished in Distrust that Particular Flavor, to give a hazy glimpse of a 1950s boyhood weaned on Twilight Zone and Tom Corbett, Space Cadet only to be subsumed into a youthful obsession with Alfred Bester, Theodore Sturgeon, Kingsley Amis, Fritz Leiber, and Philip K. Dick. Unearthing archival material from the Eaton Collection at the University of California, Riverside, the second chapter conducts some original research into the fanzines Vor-tishal, Wormfan, and Srith that Gibson edited and self-published in his teens, in addition to Gibson’s numerous contributions of reviews, fiction, poetry, and cartoons to other fanzines at the time. Despite Westfahl’s thesis that Gibson is at heart an “old-fashioned” (163) writer, these contributions often reveal the young Gibson to have nurtured from a young age an abiding interest in the avant-garde, postmodern, and New-Wave experimentation of Samuel Delany, William Burroughs, Jorge Luis Borges, and Thomas Pynchon.

In the third chapter, Westfahl tracks the fraught cyborgian relationships with technology that increasingly saturates our collective science-fictional lives through Gibson’s body of short fiction, noting the author’s recurring treatments of the the survival instincts of the disaffected hacker; the hybrid machinations of globalized transnational corporations; the pleasures and delusions of virtual reality; the decline of human aspirations for radiant future cities or valiantly exploring outer space or alien life, in favor of a thorough grounding in quotidian consumer media, a mushrooming post-industrial underclass, and an entropic trash culture. Westfahl also generalizes about Gibson’s authorial tendencies: his pyrotechnic, techno-surrealist prose style, the artistic tensions evident in his oft-overlooked short-story collaborations with John Shirley and Michael Swanwick, his repeated use of detective-thriller plot formula. In a discussion of the short-story “Doing Television” (1990), Westfahl oddly declares “Gibson is not interested in playing [video] games” (51) and seeks to tuck all post-Neuromancer work into the revisionist supposition — assumed, that is, because Gibson’s novelistic career arc toward the Bridge and Blue Ant Trilogies eventually leave behind the cyberspace of the Sprawl trilogy perse — about what truly fascinates Gibson has never been his most famous coinage, viz., cyberspace.

If anything, in the era of Big Data, omnipresent sur-
veillance, and invasive advertising, the tropes of cyber-
space, virtual reality, and artificial intelligence are more
resonant than ever, yet in the fourth chapter Westfahl
concludes that Gibson includes these McGuffins in the
Sprawl trilogy because at this point in his career he is
an insecure author panicked about his writerly chops
and desperate to please the science-fictional appetites of
his editor Terry Carr and his science-fiction publisher
Ace. However, a surprising payoff of this analysis occurs
when Westfahl shows that Gibson’s cognitively unmapp-
able cyberspace is often represented through science-
fictional, cosmological imagery of stars going nova,
black holes, and the immensity of outer space. West-
fahl concludes Gibson “reinforc[es] his theme…that his
characters prefer their own version of space” (63). In
chapter five, Westfahl dismisses the collaboration with
Bruce Sterling on The Difference Engine and recuperates
the critically panned Johnny Mnemonic, his unproduced
Alien 3 script, and his two X-Files teleplays.

In the sixth and seventh chapters, Westfahl explains
Gibson’s gradual transition from the near-future science
fiction of the Sprawl trilogy to the mundane realism
and near-present alternate history of the Blue Ant tril-
ogy according to this blanket rejection of cyberspace:
“far from being fixated on computers and computer-
constructed worlds, Gibson is most intrigued by the real
world in all its variegated phenomena” (120). This con-
tention assumes, of course, that ubiquitous information
and network technology do not affect or determine “the
real world”, presumably, a non-virtual sensorium. For a
book that convincingly explicates the science-fictionali-
"ty of one of the Modern Masters of Science Fiction, as its
University of Illinois Press series designates its subjects,
this assumption is key to interpreting how the latter-day
Technological interests of Gibson distort as much as they
limn.

**Here Be Dragons: Exploring Fantasy Maps and Settings**

Jason M. Calabrese Baidenmann

Stefan Ekman. *Here Be Dragons: Exploring Fantasy Maps
and Settings*. Middletown, CT: Wesleyan University
0-8195-7323-0.

Order option(s): Paper | Kindle

Fantastic and surreal landscapes are one of the unique
charms of the fantasy genre. Yet, scholarship on fantasy
has tended to focus on character and plot over setting.
In *Here Be Dragons*, Stefan Ekman aims to fill this lacuna
in fantasy scholarship by providing a critical vocabulary
that explores the unique role maps and settings play. The
majority of the book demonstrates this topofocal read-
ing of fantasy—that is, a reading that focuses on setting
and place over character or plot—to complement other
forms of scholarship.

Ekman begins with an overview of the small body
of scholarship that focuses on fantasy settings, then
extrapolates key concepts that he uses throughout the
book. Most notably, he borrows the concept of a para-
text from Gerard Genette to understand maps as devices
that complement the narrative, though they are not a
part of the text itself. Likewise, borrowing from docu-
ment studies, he treats the maps as docemes—as parts
of the document that make up the narrative as a whole.
The first chapter—and arguably the strongest—is a
quantitative and qualitative survey of maps. The quanti-
tative analysis looks at maps taken from a random sam-
ple of 200 fantasy novels. Interestingly, Ekman found he
overestimated the importance maps would play. This
overestimation is telling. The assumption with which he
began the quantitative study, that roughly half of fan-
tasy novels include a map (he found that actually be-

 tween 19 to 30 percent include maps), is likely due to
the fact that maps play an important role in fantasy gen-
erally, across media. To name a few notable examples,
nearly every pen-and-paper role-playing game features
a map of some kind, while, in terms of film and televi-
sion, the DVD box releases of *The Lord of The Rings*
film adaptations came with maps, and the HBO adaptation
of George R. R. Martin’s wildly popular *A Song of Ice
and Fire* opens with a flyby over the map of Westeros.
Nonetheless, Ekman’s discussion of how conventions of
cartography are used to capture and enliven a fantasy
setting is fascinating. Close readings of the maps in *The
Lord of The Rings* follow the quantitative study, and dem-
strate that a topofocal analysis has something new to
contribute to even the oldest and most scrutinized text
in the genre.

The chapter on maps is followed by a discussion on
polders—bounded regions which often have unique
properties—and how the borders between polders tend
to be significant in fantasy. The last two chapters discuss
how certain prominent themes are conveyed through
the setting, namely conflicts between nature and cul-
ture, and the often magical relationship between rulers
My main complaint about Here Be Dragons lies in its limitation to novels. While there is nothing inherently wrong with a study focused on novels, it seems like an arbitrary limitation due to the subject matter at hand. Ultimately, Ekman undermines his own argument by sticking to a traditional literary analysis; at its very heart, his topofocal method is already trans-medial, but it fails to acknowledge itself as such. The book treats fantasy settings and narratives as the abstract product of a paratextual relationship between maps, texts, and other docemes, sometimes spanning across multiple books. Why then are maps that physically accompany the text privileged over other sources? Oddly enough, Ekman self-identifies in the back of the book as a scholar of role-playing games and manga, so it is baffling why other fantasies besides novels are not included in his study when he clearly has the expertise. This criticism should be understood as a compliment to the quality of Ekman's work: it needs to be wider in scope because it is useful to a larger audience than the text itself acknowledges.

When the text does mention other fantasy media it does so parenthetically and, one senses, with a tone of shame. The few spots where other media are mentioned do not make it into the index, which suggests that this book was not written for film, TV, or game scholars. That is unfortunate because Ekman's work would be useful for those scholars.

On the one hand, Ekman's close reading of Tolkien's maps (Middle-Earth being his primary example throughout the book) illustrates his precision and attention to detail, and is a useful example of how a topofocal reading might work. On the other, the study feels strangely limited when it does not take into account the plethora of means by which today's readers explore the geography of Middle Earth. For better or worse, fantasy exists within a constellation of media representation where fantasy authors are just as likely to cite The Dungeon Master's Guide or Ridley Scott's Legend as they are Tolkien as prime influences. Younger readers, after all, will probably see or play The Lord of The Rings before they read it, Middle-Earth being the setting for various video, board, card, tabletop, and role-playing games. The fact that one can virtually walk across the map of Middle-Earth in any of its various incarnations seems relevant enough to warrant at least a passing comment.

By limiting the analysis to written novels, the wider implication here is that the genre's multi-media element is not to be taken seriously amongst literary circles—even those circles whose scholarly focus is the fantastic itself. This is unfortunate when fantasy and science fiction have already been ghettoized in literature departments for far too long. A work about fantasy maps and settings that fails to mention its own trans-medial nature unfortunately comes off as ashamed of its own object of study. While Ekman's close reading of Tolkien and other fantasy novels is convincing and interesting, it leaves the rest of the genre behind in the ghetto. Despite this, Here Be Dragons is a valuable contribution to fantasy studies. Ekman concludes with a call for further topofocal analyses. Ideally, that call should be for an interdisciplinary, trans-medial, collaborative study of fantasy maps and settings.

Orbiting Ray Bradbury’s Mars: Biographical, Anthropological, Literary, Scientific and Other Perspectives
Rafeeq O. McGiveron


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Gloria McMillan’s Orbiting Ray Bradbury’s Mars, the 41st in McFarland’s Critical Explorations in Science Fiction and Fantasy series, is a fresh, wide-ranging investigation that will be of use both to academics and to students. The book's subtitle is quite a mouthful—25 syllables, or three times the spoken length of the primary title—and this appropriately reflects the purposeful breadth of the work. Anyone can swing a dead bluebook and recruit for a scholarly volume enough English professors to re-stock a tweed shop, but McMillan has instead drawn together not only traditional textual and biographical essays but also essays that investigate Bradbury’s writings from less familiar perspectives, including even those of scientists actually involved in planetary exploration. This interdisciplinary approach is brilliant.

The resulting seventeen chapters then are organized into six broad categories: biographical, anthropological, literary, scientific, media, and educational. Naturally, various tales of The Martian Chronicles—along with the
1980 television miniseries—are either the foci or the jumping-off points of many essays, and yet the contributors here also explore other Bradbury works relating to the desert or the Southwest such as “I See You Never,” “The Highway,” “And the Rock Cried Out,” and “The Fox and the Forest,” along with the film versions of The Illustrated Man and even Fahrenheit 451. The collection thus not only rounds up the usual suspects—all of which, of course, are still old friends worthy of rereading and study—but also brings in other works to which the word Mars might not necessarily have led the reader.

Bradbury's nostalgia for a 1920s Midwest that perhaps never quite was has been discussed at length, but Jonathan R. Eller begins the volume proper by sketching out the influence of the move of Bradbury’s family to Tucson in 1926 and again in 1932—the wild beauty of the Southwestern desert, the sense of being in a place not yet fully settled and grown, the nearby junkyard seemingly ready-made for an imaginative boy’s scrounging. Other scholars examine topics such as Bradbury’s treatment of literal and metaphorical border crossings; Otherness, including an essay by Marleen S. Barr on the science-fictional aspects of America’s checkered history and an intriguing investigation by Francisco Laguna-Correa on Bradbury’s occasional shortcomings in his attempt to transcend Otherness; the desert as a place of Bachelardian reverie; the interplay of science fiction and science on the path to our Mars missions; and the adaptation of Bradbury’s work to both the large and the small screen. Seventeen is too large a number of chapters for me to discuss each individually here, but Gloria McMillan is able to do so, whetting the appetite appropriately, in her introduction, which is viewable with the “Look Inside” function on Amazon’s webpage. McMillan herself ends the essays with an exploration of the teaching of The Martian Chronicles, both book and television mini-series; this practical discussion of the workings of the classroom will be a welcome homecoming to many of us, and an apt place to conclude.

Despite the great worth of this book, though, stray problematic issues still occur here and there. While I know we all have our own particular verbal mannerisms and tics, and while I certainly am not immune to the self-indulgent joy of the playful, possibly high-handed aside, some contributors seem to have enjoyed such things a tad over-much. Marlene S. Barr, for example, has an occasional tendency to veer into off-putting self-righteous indignation or condescension, as seen, among other places, when she sniffs that a vociferous critic of Derrick’s Bell’s “The Space Traders” “would not think twice about selling minorities to extraterrestrials” (54). Grace L. Dillon, on the other hand, has a quirk of the good-natured kind: a sprinkling many non-English, apparently Ojibwe, terms that I confess perplexed a nyet-cultururtni such as myself. Although I think I was able to edge toward understanding in certain appositive constructions, in some stand-alone lines I was completely flummoxed, and I wish I had not been.

Such matters of personal taste aside, I am on more clearly objective ground in wishing that final copyediting had been done with a firmer and more painstaking hand. The overwhelming majority of this book is mechanically sound, yet still a noticeable number of errors exist: parenthetical phrases that open but do not close, occasional extra and downright ungrammatical commas between subject and predicate, and commas missing from appositives. Every now and then style and usage could be tighter as well. Marleen S. Barr’s egregious misuse of the word “literally”—as in “Obama has literally laid out a partial welcome mat to young illegal immigrants” (47)—is a whopper that was hard to miss, for example. Kimberly Fain’s essay, which appears to have as many mechanical problems as all other chapters combined, particularly could have benefited from a stronger edit. The style is not particularly felicitous, and a more ruthless edit would have spared us the notion of early English colonists coming to America “seeking land and reprisal [sic] from religious oppression and economic disparity” (123-24); the misuse of intransitive verbs as transitive, as in the thought that people like Sam Parkhill permit “ignorance, prejudice, and nostalgia to succumb [sic] their better nature” (124); or the doubly mixed metaphor of Jim Crow laws “empower[ing] Samuel Teece… with fertile ground to reign terror in the South” (126). Finally, despite the fact that Fain’s chapter properly discusses the relation of text to our own world, the final sentence falls with an unfortunate clunk: “The primary message of The Martian Chronicles is that humans who integrate into Martian society may achieve transformation if they respect, settle, and preserve ancient Mars for future generations” (131). This too-particular focus on the unreal world of fiction—as if there really were a Martian society which we could join—is precisely the thing about which many of us have warned countless undergrads, and I cringe to think of some student emulating such a conclusion.

Nevertheless, none of these quibbles and carps should be taken to suggest that Gloria McMillan’s Orbiting Ray Bradbury’s Mars is anything less than a most worthy addition to the library of any reader or institution. It may
have a few flaws—as do we all—but overall the book is engaging and interesting. McMillan has collected a refreshingly wide variety of essays addressing previously unexplored topics of Bradbury, place, race, and even the actual Mars itself from disparate and enlightening perspectives. These seventeen chapters all provoke reflection and reexamination, with ‘Works Cited’ lists able likewise to lead student and scholar alike into many new areas of study.
Fiction Reviews

Urban Green Man: An Archetypal Renewal
Amy J. Ransom


Order option(s): Paper | Kindle

IS THE GREEN MAN ready for his own dedicated fiction anthology? Editors Adria Laycraft and Janice Blaine believe so; their collection Urban Green Man updates this environmental resurrection figure, transporting him into contemporary North American backyards and even into the future in thirty-two stories and poems, beautifully illustrated by Blaine. Labelled “Urban Fantasy” by its publisher, Calgary’s Edge SF & F, the volume includes a number of science-fictional tales apt for a course in eco-criticism. As the title suggests, the tension between the modern and urban and the traditional and “natural” governs the majority of the book’s tales.

In his introduction, Canada’s best-known writer of urban fantasy, Charles de Lint, offers a brief account of the Green Man’s ubiquity in medieval architecture and his occasional modern resurrection, for example in DC Comics’ Swamp Thing. We owe twentieth-century interest in the related Green Man and Jack-in-the-Green (hence many of the characters in these stories being named Jack) figures to Lady Raglan who first explained in the 1930s the recurrence of the decorative motif of a leaf-headed male figure in church carvings (Basford 237-38). Folklorists have interpreted the figure as both one of seasonal renewal and as an image of death and destruction (Basford 239). Phyllis Araneo, referring to the Green Man as a Jungian archtype, argues that he has undergone a renaissance in the twenty-first century, citing examples from scholarly literature, the visual arts, and film.1

1 My thanks to Rob Faleer for these sources; he recommends on-line articles by Eric Edwards and H. Talat Halman and the web site, The Green Man Enigma, for those wanting to know more about this fascinating figure (see the list of references at the end of the review).

This story collection offers an urban renewal of this transformative figure, most frequently depicting him as a geo-avenger who punishes an irresponsibly un-green humanity for its neglect, even abuse of the Earth. Evil corporate scientists and developers are punished by the Green Man’s various avatars in “Sap and Blood” by New Jersey’s Martin Rose, “The Green Square” by British Columbian writer dvsduncan. Randy McCharles, from Calgary, offers a gender reversal in “The Grey Man;” here the Earth Mother wreaks her revenge on a male figure of urban concrete. South African writer Eileen Donaldson’s “Waking the Holly Kin,” inspired by Robert Graves’s “The Battle of the Trees,” envisions an entire army of Holly men and women lying dormant in human form until they are tapped for the resistance by the Green Man. Similarly “Buried in the Green” by Heather M. O’Connor depicts an organized resistance movement against a corporation which masquerades as a “farm,” but once open, it reveals plans to farm gravel. A more personal sort of revenge occurs in Goldeen Ogawa’s “Abandon All...” in which a young man suffering from borderline social dysfunction and the social ostracism that comes with it wreaks vengeance on his so-called “friends” with the help of a Green Man. Another Green Man punishes the mayor of a city on Lake Ontario by eroding away the earth beneath his white cottage on the shores of the lake in Michael Hardy’s “Cottage on the Bluff.”

In some cases, however, this trickster figure becomes fuel for female sexual fantasies, as is the case with “Evergreen” by Susan J. MacGregor. Set in the Pacific Northwest, the female protagonist’s grandmother warns her away from an attractive drifter; unable to resist this Green Man’s charms the young woman finds herself transformed into a tree and about to face the loggers’ saws. Fortunately, her grandmother’s boyfriend, a First Nations elder and a shape-shifter saves her from this fate worse than death. In a collection almost smothered by its political correctness, Sarina Dorie’s “The Forest Lord” stands out for its ideological wrong-headedness, offering a regressive “feminist” politics, since its first-person narrator feels that she is no longer feminine after cancer has left her barren; her womanhood is restored by the Green Man when he agrees to train her as a wise woman. While I normally don’t care for ad hominem critiques, the author’s admission in her bio-blurb that her dreams will come true if Jack Sparrow asks her to marry him blatantly undermines readings that might salvage this tale as validating the role of the crone.

Representing the trickster Green Man as an aveng-
A teenage girl messing around in the woods with her boyfriend gets pregnant; the Green Man kills the boy, but offers to "fix" the problem for the girl. This entails killing her, taking the baby, finally to succeed in his quest for a successor. In another tale linking the Green Man motif to sexuality, "Without Blemish," Celeste A. Peters imagines the human male as the monster. A female Green Man, "Nature's Guardian," has taken a human form and lover, but when he serves her non-vegan food she loses her powers; she manages only to save her tree-bound trainee Skaha from a raging forest fire before dying herself.

Other fantasy tales are more benign, like Rhiannon Held's "Green Apples," in which even apple dryads are tempted by the lure of the big city and changing gender roles, as Gala wants to break the traditional mould for her kind, which dictates that females stay home to reproduce while males are allowed to wander. Sandra Wickham's "Purple Vine Flowers" offers another feminist take on the Green Man, as the first-person narrator wants to take over her father's role and become a Green Woman. She must overcome the sexist forces which attempt to block her candidacy. Dryads also appear in "Cui Bono?"

Eric James Stone's paranormal detective tale, and Karlene Tura Clark invokes brownies in "Whithergreen." In "Mr. Green," a rare tale from a UK writer, Gary Budgeon describes the Green Man taking over the British capital as humans throw out their technology to follow him. While the Green Man motif appears inescapably linked to fantasy via its own Anglo-Celtic source and figures from Classical myth, a number of contributors ensure that science fictional tropes are also exploited here. Billie Mulholland's "Green Man She Restless" extrapolates a future dystopia in which a single corporation has copyrighted genetically engineered agricultural plants and "outlawed the cultivation of ancient grains" and "even the possession of heritage seed became illegal" (103). Her colleague has managed to redevelop Einkorn wheat, but when he lets her fall into a cellar filled with mycelium, fantasy takes over; in spite of the "plausible" explanation that she, too, has been genetically modified to carry microorganisms that can replenish the earth's depleted soils, her ensuing union with nature takes an all too mystical, New Age tone, as her self-sacrifice saves the world. In "Deer Feet," Michael J. DeLuca extrapolates a near future Boston, in which 3-D printers have become commonplace in high school shop classes and Spanglish is freely spoken (at least in Jamaica Plain). Its teenage protagonist refuses to give up the search for her friend Mimi who has been taken by a serial child predator with ties to a Green Man in the urban park. Alyxandra Harvey's "Green Jack" is set in 2086, a dystopian future in which authoritarian rules have been established to protect the environmentally threatened agricultural industry. Cerberus canine hybrids police the walls encircling the poor, while Green Jacks—mutants with "green thumbs"—are captured and forced to wander the fields to help germination occur in this police state.

The healing powers of the Green Man occur in a surprising few stories, like Miriah Hetherington's "Green Salvage," another of the more science-fictional tales. Its first person narrator tells how the Green Man and various woodland creatures heal her grandmother through the grieving process for her daughter's death related to early onset Alzheimer's. A unique queer take on the Green Man appears in Satyros Phil Brucato's "Johnny Serious," in which becoming the lover of a Green Man figure heals the title character. Perhaps the most original twist on the legendary figure appears in Michael Martineck's "Green Pastures," in which a mother earth figure, Esther, visits "Jack" in a high rise. This Green Man, having seen the writing on the wall, has come to adopt the ideology of the "new green": capitalism. Kim Goldberg offers another noteworthy spin, blending the Golem legend, the contemporary cryptozoological craze, and Green Man lore in "Neither Slumber nor Sleep."

The collection is somewhat artificially divided into sections titled "Earth," "Air," "Fire," "Water," and "Wood," each of which (except the last) features one poem thematizing the Green Man. In my view, the most attractive aspect of the collection are Janice Blaine's arts and crafts inspired illustrations, a large stylized figure of each of the section's elemental figure and a small vignette marking each story's opening. While the concept is promising, by the end of the collection I felt like the Green Man is not yet ready for his own collection; in spite of a number of original conceptions, the overriding homogeneity of the stories reveal that the Green Man lacks the heterogeneity and polyvalence that we find in more "popular" literary monsters like vampires and werewolves. Given the inevitable linkage of the Green Man to the environment, the pervasive moralizing tone of these stories becomes a bit preachy by the volume's end as well. Until further notice, the Green Man remains a creature best taken in small doses.
Works Cited


Tesseract Sixteen: Parnassus Unbound and Tesseract Seventeen: Speculating Canada from Coast to Coast

Amy J. Ransom


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SINCE TAKING OVER publication of the series in 2000 with Tesseract Nine: New Canadian Speculative Fiction, Calgary’s Edge SF & F has exceeded the original goal to produce a volume per year. Volume seventeen released in the US in 2014 demonstrates the health of speculative fiction in Canada, its editors having to select from a wealth of some 450 submissions. This growing abundance has allowed Edge to move from the more general concept of “Canadian speculative fiction” to thematically organized volumes, as seen in Tesseract Sixteen: Parnassus Unbound. For any reader interested in Canadian science fiction, fantasy, horror, the weird, and so on, the Tesseract anthologies are the place to start, as earlier volumes offer a historical retrospective and current collections sample the nation’s up-and-coming writers. Unfortunately, however, for those interested in French-Canadian SF (or SFQ) this holds true only until about Tesseract Eleven. Even the most recent installment, with its nationally oriented theme of Speculating Canada from Coast to Coast to Coast, gives short (indeed, no) shrift to the second of Canada’s official languages. It unfortunately recognizes the “other solitude” only when French-Canadians choose to “speak white,” including contributions in English by a Franco-Ontarian and the self-confessed “lapsed francophone” Montreal native, Claude Lalumière. Given the competitive nature of the publication (authors submit in the hope that their texts will be selected), coupled with the commercial and technical difficulties of recruiting translations for texts without a prior commitment to publish, perhaps this comment is not fair. Still, I have to make it (and will keep making it until someone out there listens).

That said, Tesseract Seventeen’s journey from the Pacific Northwest Coast across the prairies through the Great Lakes region and on to the Maritimes holds a number of pleasant surprises, not the least of which is co-editor Colleen Anderson’s introduction which addresses both the series’ title and the problem of defining a “Canadian” speculative fiction. Her expansion on the literal definition of the sixteen-cornered, four-dimensional “cube” first chosen by Judith Merril who initiated the series in 1985, brilliantly sums up the anthology: “A tesseract was more than what it seemed, had more surfaces than you first thought, and had a depth that changed depending on how you looked at it” (n.p.). Furthermore, she and co-editor Steve Vernon have made great efforts to be sure that all of English-speaking Canada was represented here. The twenty-five stories and four poems contained inside this particular tesseract hail from all ten provinces and two of the territories; we can hardly blame the editors if a science-fiction community has not been established in Nunavut, a sparsely populated Arctic territory only fifteen years old. Furthermore, the editors have not simply accepted a token text from each peripheral region, leaving—as is often the case in Canadian anthologies—the bulk of the volume for writers from the urban publishing cen-
ters of Toronto and Vancouver. What a delight to read stories by speculative writers from two of my personal favorite Canadian towns: White Horse, YT and St. John, NB (not to be confused with St. John's, Newfoundland, also represented here). The editors have even included a handy map of Canada inside, which also helps explain the three coasts mentioned in their subtitle as the volume swings north to the Arctic for its final tales.

Several fantasy texts also explicitly engage Canadian forms of the Gothic. The whimsical “Hereinafter Referred to as the Ghost” by Mark Leslie (editor of T16, reviewed below) imagines the development of a mutually satisfactory business arrangement between ghosts and organizations involved in the paranormal tourism industry. His once powerful narrator-ghost Patrick Collins must face the fact that with age, his powers are diminishing, so he accepts a contract to play the less-demanding role of “a man whose silhouette was supposedly captured in the glass of the window during the Halifax explosion of 1917” (91). If you don’t know about the largest pre-nuclear era explosion ever to have occurred, I suggest Hugh MacLennan’s brilliant first novel Barometer Rising (1941). Set in 1906, also on a coast—this time the Great Lakes—Dave Beynon’s “Lighthouse Keeper’s Wife” tells of the magical transformation of the title figure into a gruesome revenant. Canada’s urban centers are less-well represented, but Lisa Poh’s fantasy “Graffiti Borealis,” features a newcomer to Montreal who discovers he has the power to bring graffiti to life; he saves a large group of brilliant drawings, as colorful as the Northern Lights the tale’s title invokes, by moving them before the buildings they decorate are demolished.

Canada’s natural beauty appears in Elise Moser’s fantasy “Sand Hill;” set in the western prairies, it depicts the ultimate transformation of its protagonists into sand hill cranes; in addition to its explicitly Canadian content, it engages a recurring theme in the volume: children at risk. While this does not seem to be an intentional choice on the editor’s part, almost one third of the tales feature children or young adult protagonists who face an extraordinary challenge with varying degrees of success. Also set in the west is Holly Schofield’s “Graveyard Shift,” a straight sf tale in which Ryan Leong seeks advice after his mother’s death from his Chinese grandfather; the interactive, motion-activated chip in the ancestor’s headstone actually provides Ryan with the necessary wisdom to face his grief and rebuild his life, reinforcing the notion of xiao, respect for elders. Dwain Campbell’s ludic “Hermione and Me” (yes, it is that Hermione) depicts an eight-year-old Newfie girl whose genius-level mind magically brings storybook characters to life, allowing her to save her mother from an alien abduction. (You’ve got to like a story which ultimately redeems its Alexander Keith’s IPA slugging drunken father.) This trope occurs in Megan Fennell’s chilling sf horror tale, “Bird Bones,” which features an Icharus-figure, a child with wings, scientifically manufactured by a (mad) scientist through a series of painful surgeries, as well as in Rhonda Parrish’s “Bedtime Story” and Patricia Robertson’s “The Calligrapher’s Daughter,” a fantasy set in the Arabic world during the conflicts in the Iberian Peninsula.

A number of contributors to T17, however, sought inspiration outside of their home and native land, from Lalumière’s portal fantasy set in Venice, “Verminilion Wine,” to several tales set on space vessels or off-world colonies. William Meikle’s “In the Bubble” is a self-conscious spaceship mystery, “a good old fashioned locked-room murder” (217); “Why Pete?” by Timothy Reynolds and “Star Severer” by Ben Goodby both depict starship commanders leaving stasis to face some kind of deep space challenge. Edward Willett’s “The Path of Souls” explores the consequences of the space mission, blending mysticism with sf in a poetic tale about an off-world memorial which engages the tragedy of encounter and offers an ethical human response in its first-person narrator’s actions.

Another group of tales features dystopian futures for both those who remain on earth and those who journey into space. Dianne Homan’s “M. E. L.” offers a critical utopia in her depiction of “Perfect Planet A” where “[c] ontrol was the highest value” (244), underscoring the totalitarian nature of the classic utopia. Its eponymous child protagonist (another child at risk), whose acronym (the only name individuals have here) derives from the initials of her egg- and sperm-donor parents, happily manages to escape this sterile environment. Zombie fans will love Catherine Austen’s clever, yet grim, “Team Leader 2040,” which depicts a near future dystopia in which the poor and the elderly act as zombies to be shot at by the privileged in a game blending the reality of paint-ball with the monstrous thrill of computer games like the Call of Duty franchise’s zombie mode; the tale has a real political conscience and it obliquely engages the US-Canada difference. Its narrator-protagonist, a legal immigrant from a land which “euthanized the elderly who were too sick and poor to care for themselves” to this one where “they call that fascism. They put the poor to use at every age and call it freedom” (158), is now employed to lead teams through the zombie-shoot-
ing course. Although he attempts to distance himself from the individuals who are essentially tasered to give realism to a “kill,” he becomes implicated in the actual slaughter of individuals very much like himself by an overzealous player. Lisa Smedman’s humorous “2020 Vision” depicts the formation of the on-line “Church of Spock” as a joke, which is taken too seriously by some. Its invocation of a “God-gene,” a gene that makes certain people more open to religious epiphanies, may be inspired by Robert J. Sawyer’s use of such a trope in the Neanderthal Parallax trilogy (2003). Finally, Rachel Cooper’s “Everybody Wins” (yet another child at risk tale!) riffs on Shirley Jackson’s classic “The Lottery” (1948), in which the adolescent narrator may also be a “last man” figure as a futuristic lottery—a golden snitch-like sphere bearing the words LOTTO offers a prize to all who touch it—actually wipes out humanity.

The volume also includes some really gruesome horror tales like Rhea Rose’s enigmatic “The Wall” and Vincent Grant Perkins’ “The Ripping,” both of which feature mothers at risk; more suspenseful is Catherine MacLeod’s “Pique Assiette,” set in the Maritimes and invoking that region’s link between tourism and artisanal industry through its potter protagonist. Readers will also find some straightforward fantasies which include trolls, wizards, and so on, like Alyxandra Harvey’s “Anywhere” and Costi Gurgu’s “Secret Recipes.” The latter draws on his own Dacian (in present-day Romania) heritage, representing—like the several stories which draw on the Chinese contributions to the nation—Canada’s identity as a land of immigrants.

The theme for Mark Leslie’s previous volume, Tesseracts Sixteen: Parnassus Unbound, focuses not on Greek mythology itself, as a quick glance at the cover illustration might suggest, but rather on Mount Parnassus’s role as “home of the Muses” (1). Thus, all twenty-eight of the stories and poems collected here represent Canadian “speculative fiction [...] inspired by literature, music, art, and culture” (1). With this theme, Leslie has broken one of the Tesseracts’ traditions of providing a platform for original works, as he has included four reprinted stories and allowed an interloper from the US onto this sacred Canadian territory. Two of the reprints feature major figures in Canadian popular culture and genre literature, so perhaps this trespass can be forgiven if it helps earn recognition for writers on the rise by selling a few more copies of the volume. Namely, these include “Immortality,” by Robert J. Sawyer—recently honored by McMaster University in Hamilton, to which he donated his papers—and “Drumbeats,” a collaboration between the prolific American franchise novelist Kevin J. Anderson and iconic progressive rock band Rush’s drummer and lyricist, Neil Peart.

Given the series’ broad approach to “speculative fiction,” this volume is fairly evenly divided between works of genre science fiction and tales of fantasy, horror, and the slipstream; as Leslie also asserts in his brief introduction, the nature of the volume’s theme has also led to the inclusion of a number of “meta-reflective works” on the creative process (3). One of the most “Canadian” tales in the collection is also one of the most self-conscious, (co-editor of T17 reviewed above) Steve Vernon’s “Three Thousand Miles of Cold Iron Tears.” His story’s goal is to counteract precisely the problem it introduces, that of both heroes and monsters needing to be “told into life” (216); once people stop telling them, they begin to lose their power. Reminiscent of James Alan Gardner’s Canadian classic, “All the Cool Monsters at Once,” this wonderful romp concludes in a kaiju-like battle in which the Thunderbird helps Sasquatch and Sam Steele—a superhero grafted onto a real hero of the Canadian Mounties—defeat the Yaksha, a demon feeding on the spirits of Chinese workers killed during the railway’s construction. The figurative power of writing rendered literal is a core theme here, recurring in Michael Kelly’s kafkaesque “Blink” and “Writer’s Block” by Sean Costello. In the former, a science-fiction writer meets his on-line date for the first time, but the encounter spins into the Twilight Zone as both are writers and appear to be writing themselves as they go along. When Kelly’s protagonist quips, “[i]t could be worse. I could write horror;” this is actually the case for Costello’s piece. He sets a horror writer in a remote British Columbia cabin during a storm with only his Underwood for company; reminiscent of Jack Torrence in the The Shining (1977), he “gets got” by his own monster.

Among the best of the sf tales collected here is Ryan Oakley’s volume-opener, “Ghost in the Meme,” which speculates upon the question, what if “language really was intelligent, just using humans as hosts” (7). This conclusion appears to be a real possibility when a team of scientists crack the language algorithm, a formula that can be applied to all books, “a logic independent of the author” (7). Robert H. Beer’s “Artistic License” explores a reverse concept: what if a single gene governs artistic creation, in particular the ability to create fictions? He does this within the context of a near-future dystopia in which such a gene has been nearly eradicated, along with other “flaws” like homosexuality. Genetics and the arts return in “The Day the Music Died” by Randy Mc-
Charles who links a future decline in musical creativity with a genetic cure for depression. In response, a team performs “time extractions,” rescuing rock musicians of the past just before their deaths, so that their music can live on in the future. Another ludic tale engaging rock and roll fantasies is Chadwick Ginther’s “Back in Black,” which envisions collectors seeking (and finding?) recordings which could only exist in an alternate timeline, such as “Jimi Hendrix playing Lollapalooza [...] Sean Connery as Gandalf” (19), or in this case AC/DC’s Back in Black with vocals by Bon Scott. Kimberly Footit’s darker “I’m With the Band,” stages a shapeshifter/demon figure who assumes the form of a young rock star so he can take the stage one last time before dying of an inevitable overdose, quoting Canadian rock icon Neil Young, “better to burn out than to fade away” (173) in the process.

As might be expected, a few tales extrapolate how technological advances may lead to new developments in the arts. For example, Stephen Kotowych’s “Saturn in G Minor” features a composer who has devised a means of playing a symphony by firing projectiles off the rings of Saturn each of which has its own harmonics. Derwin Mak’s “The Faun and the Sylphide, an sf-horror tale extrapolates the development of an “experimental fabric, memory cloth” (159); unfortunately, his un-self-confident protagonist obtains such a costume worn by a dancer who strangled his partner during a performance with nearly tragic results. Virginia O’Dine—herself the author of a stage version of Robert J. Sawyer’s novel Rollback (2007)—imagines the use of a brain scanner on both theatrical audiences and actors to heighten the sense of drama experienced by both.

Contributors interpreted the call for science-fiction inspired by the arts in a number of ways; perhaps the most straightforward are those that invoke a central intertext, either an explicit one, like Scott Overton’s reprint “Once Upon a Midnight,” which riffs on Poe’s “The Raven,” or a more diffuse one, as in Hugh A. D. Spencer’s “Cult Stories.” One of the volume’s highlights, this “novella-à-clef” invokes L. Ron Hubbard and Dianetics; it begins in 1979 with its protagonist, Ethan, researching member behavior in a new cult called Mentotechnics for his dissertation in anthropology. Founded by a popular science-fiction writer called D. H. Evanston, Mentotechnics proves to be a particularly powerful form of brainwashing disguised as therapy; when his life is threatened perhaps because he is getting too close, Ethan changes his research topic to studying the behavior of Star Trek fans. The story doesn’t end there, but I don’t want to spoil it. Finally, a handful of fantasy tales take the call to Parnassus more literally, featuring figures from classical mythology. Melissa Yuan-Innes, in “Burning Beauty,” links Scooby Doo to Greek myth via her teenage protagonist named Daphne who is saved by a Dryope when her classics professor mom’s guest, a Harvard don suffering from satyriasis, attempts to rape her in the woods. L. J. Getty’s satire “Bemused” literalizes the “blue muse” as a parasitic creature, and Overton’s tale mentioned above invokes Pallas Athena.

These anthologies, as you can see, offer a smorgasbord of regional, cultural, and generic variety, with—I’ll say it again—the glaring exception of almost any acknowledgment of the fait français (the French fact) and its contribution to this settler nation’s development. Prior to the Edge era, French-Canadian writers often served as co-editors to the volume (for example, Jean-Louis Trudel worked on T7 and Yves Meynard T8) or volumes were edited by Anglo-Canadian writers with ties to the SFQ community (in this case, Candas Jane Dorsey [T3 & T8], Nalo Hopkinson and Geoff Ryman [both T9] have all been guests at the annual Congrès Boréal). Happily, Edge acquired rights for the past volumes and advertises that Tesseracts Q, edited by Élisabeth Vonarburg and translator Jane Brierley, is still available for purchase for those with an interest in French-Canadian sf in translation; however, published in 1996 the volume no longer reflects the current state of SFQ. Perhaps I should get off my soapbox for a moment and admit that there may be a bright side to this nonetheless exclusionary move: Anglo-Canadian speculative fiction has grown to such an extent that it no longer needs to include tales by French-Canadian writers to fill an anthology. Indeed, the contributor bios for both T16 and T17 indicate that other series of Canadian anthologies are appearing all the time, and that other publishers than Edge have entered the game. That is certainly something to celebrate.
**Media Reviews**

**The Lego® Movie [film]**

Amy J. Ransom


Judging by the peals of irrepressible giggles coming from the back of the theater, *The Lego® Movie* definitely had what it takes to please the four-something crowd, but what about us forty-somethings? In fact, *The Lego® Movie's* self-referential, tongue-in-cheek, culturally savvy dialogue and fascinating graphics can also succeed with more “mature” audiences. That is, if you can get around the fact that a film constructed to market a product—and which even contains the symbol for a registered trademark in its title—ostensibly critiques Western, late-capitalist, consumer society. Not only did my ten-year-old son and his friends enjoy the film, I was surprised by the number of my university students who had already seen or planned to attend the film. Precisely because of the underlying irony that a film which presents a dystopian society led by a corporate dictator is built on the Lego toy franchise, *The Lego® Movie* offers some interesting teaching possibilities. Furthermore, its potential to engage in dialogue with theories of play, games and utopia may make it an interesting course text.

The discovery of construction set 70803, Cloud Cuckoo Palace, while Christmas shopping offered a first clue that this film would surpass the usual Lego tie-in DVDs and television programs in visual quality and intellectual content. Clearly a film whose developers could reference Aristophanes might be about more than just selling toys. Perhaps as guarantors of Lego authenticity, however, the film’s writing team included Dan and Kevin Hageman, authors of the tie-in television series *Ninjago: Masters of Spinjitzu* (2011-2013). Its directors Phil Lord and Christopher Miller had launched their careers with the successful (and recently sequelized) big-screen animated feature *Cloudy with a Chance of Meatballs* (2009). A musical score by Mark Mothersbaugh, best-known for his work on the classic animated series *Rugrats* (1991-2003) and more recently on (one of my favorites) Cartoon Network’s *Regular Show* (2010-2013), adds to the film’s production values. However, it is the film’s plot and dialogue, featuring a clever *mise-en-abyme* and riddled with references to contemporary popular culture, which are of greater interest to us in the science-fiction research community.

Emmet Brickowski (Chris Pratt) is a construction worker in Brickville, a near-future ostensibly utopian society where “Everything is Awesome,” as workers around the city all sing together in the film’s early sequences. As in most utopias since Thomas More’s, there is a dark side to this world of one-hundred percent employment (and $37.00 coffees) which appears as its leader, President Business—actually Lord Business (Will Farrell)—reveals his plan to control the Lego universe. Chance leads Emmet to be in the right place at the right time to find a special brick called the “Piece of Resistance,” whose name offers an example of the film’s silly wit, as it references the French cliché *la pièce de la résistance* but also literalizes it, as this piece will allow the forces of good to resist Lord Business’s evil plot. Emmet, however, is so average in a world of conformists that even his co-workers fail to recognize him; the unlikely hero must unlock his own potential with the help of the great Brickmaster Vitruvius (Morgan Freeman)—his name another reference to the classical era, honoring Marcus Vitruvius Pollio (c. 75 BCE – c. 20 BCE) the architect after whom da Vinci named his famous rendering of bodily symmetry, the Vitruvian Man (c. 1490). Emmet is joined on his heroic journey by another Brickmaster and his love interest, Wyldstyle/Lucy (Elizabeth Banks), as well as his rival, Lego Batman (Will Arnett).

Because of the diversity of the real Lego empire’s media tie-ins, the film offers a plethora of references to the entire pantheon of contemporary popular culture through the assembly of resistance Brickmasters which includes Wonder Woman, Gandalf, Dumbledore, Green Lantern, among others. It also features cameo appearances by a number of *Star Wars* characters, including Lando Calrissian voiced by Billy Dee Williams himself. An example of how the film works to appeal to adults appears precisely in its treatment of Lego Batman, characterized as a pastiche of the contemporary Christopher Nolan/Christian Bale Dark Knight. But its real genius lies in its integration of the CGI world of Brickville with live action sequences featuring an unnamed father (also Will Farrell), referred to as The Man Upstairs by the Lego characters, and his son. Their conflict—whether things should be built according to the instructions or if the imagination should be given free rein—quite obviously mirrors in a macrocosm the microcosmic between the anal dictator Lord Business and the Master Builders’ resistance movement. Any parent who has played Legos with their child
can immediately identify with this dilemma, adding to the film’s already rich pleasures of recognition.

Among the most entertaining and fascinating aspects of the film is its literal universe-building; as I watched, I wondered if they had actually used stop-motion with real Lego bricks, based on the detailed surface imperfections during close-ups. Although mostly computer-generated imagery (Murphy), the creators of the film have done an amazing job of reproducing the look and feel of an actual Brickfilm (a stop-motion process), beginning with the details of its main character’s apartment to its simulation of a major metropolis and various imaginary worlds, like the aforementioned Cloud Cuckoo land.

But above all, for us academics, the inherent contradictions in The Lego® Movie’s overt message and its actual status as a “feature-length product placement,” as Richard Erlich reminds us, offers food for thought and discussion about the nature and possibility of utopia in contemporary late-capitalist Western society. Anyone over the age of ten who is paying attention to the film cannot fail to read its near-future extrapolation of government’s complete merger with business—a notion explored by so many science-fictional texts that it has become a cliché—as an indictment of contemporary Western civilization’s current direction. In its characterization of Lord Business and The Man Upstairs as totalitarian, dehumanizing control freaks, opposed to the Brickmasters as dynamic, fascinating, superheroes, the film generally demonizes conformity and praises imagination and originality as marks of true humanity. Perhaps in deference to the fact that most Legos are sold and marketed as pre-packaged kits with instructions to follow, the film does hedge its bets, depicting Cloud Cuckoo land—filled with utopian dreamers—as a world of nut jobs who eventually need Emmet’s ability to design and follow instructions in order to work as a team and defeat the forces of evil. The irony of the film’s very existence as a product tie-in acknowledged through the presence of the registered trademark symbol in its title notwithstanding, it offers a meta-commentary on the nature of utopia itself. In the end, the writers’ conception of Lord Business’s grand scheme—to fix perfection for all time by super-gluing his Lego universe into stasis—reveals, of course, the inherent problem of utopia as a perfect society.

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Europa Report [film]

Chris Pak


Order option(s): DVD | Blu-ray

EUROPA REPORT (2013) is Ecuadorian director Sebastián Cordero’s first full English language feature film, and his first foray into science fiction (sf). Nominated by the SFWA for the upcoming 2013 Ray Bradbury Award for Outstanding Dramatic Presentation, Europa Report has been positively received by critics but is in danger of being overshadowed by the release of Alfonso Cuarón’s Gravity (2013). Nevertheless, Europa Report presents the viewer with a different sort of narrative from Cuarón’s, one that is embedded in a more expansive context that invites the viewer to speculate on the future of space travel and colonization. Europa Report recounts the manned voyage to Jupiter’s eponymous moon, an endeavour initiated by the private space company Europa Ventures. In Gravity, triumph and relief follow from trauma and the overcoming of personal barriers; in Europa Report, inspiration ambivalently mixed with great regret overturns the initial sense of an unspeakable failure and of tragedy.

I set up this contrast not to valorize Europa Report over Gravity, but to hint toward some differences that make these two films ideal companion pieces for teaching sf film. Both make use of tracking and sweeping shots to add dynamism and excitement to the cinematic sequence. Europa Report takes this experimentation with the visual to conceal and play with perception and narrative in those classic sf spaces of the enclosed and claustrophobic spaceship and spacesuit. It is, in fact, a found footage film, but one which is not recovered from an independent recording device, but rather pieced together from unreliable transmissions from Europa. The
sequence of clips compiled from the ship’s sensors and from cameras fitted into the modules and compartments of the spaceship is wide-ranging, from crisp high-quality video images to clunky polygonal shapes reminiscent of 1980s computer simulations. It is this inventive use of multiple visual inputs combined with this modification to the found footage mode that results in Europa Report’s most prominent flaw. Given the quality of the cameras that the crew have on board, their restricted locations and the ship’s ever-increasing distance from Earth—and the corresponding degradation of the signal used to transmit this data—those moments where the familiar high quality and freely roaming cinematic camera takes precedence feels peculiar and out of place, breaking the narrative logic set up by the found footage mode.

This issue does not spoil the rest of Europa Report’s achievements. The narrative of the first manned mission is interspersed with segments narrated by the CEO of Europa Ventures, Dr. Unger (Embeth Davidtz). It becomes clear that the whole of film is presented as a documentary that functions as a kind of apologia for the company’s decision to embark on this venture. Unger’s distress, her visible tears, and the assumption that the audience knows the outcome of the mission, generates much of the suspense and dread that comes with the mystery of the mission’s outcome. The film reminds me in many ways of Duncan Jones’s Moon (2009), specifically the way in which the film continually positions the viewer to read the unfolding events against the traditional protocols of sf. Without giving anything away, these stereotypes are, as with Moon, systematically and satisfyingly undermined.

Unlike Moon, the corporation in this instance is not a faceless and exploitative entity. Something much more ambivalent is at work here, something that raises in complex ways the question of the ethics of long range and hence high risk missions into space. The film as a whole presents us with what seems from one point of view to be a disturbing attempt by the highest representative of a private company to lionise the crew of their privately funded mission, and so justify their decisions and their raison d'être. The sacrifice of the crew—and throughout the film it is certainly not entirely clear what the specifics of this is—is portrayed as a difficult but ultimately worthwhile exchange for the knowledge gained. But is it? Would it not have been better to have waited until technological and infrastructural innovation made the excursion, if not safe, much less high risk? The spaceship itself, Europa One, is surprisingly anachronistic, especially when we remember that it is to Europa and not the Moon or even Mars that the mission is aimed toward. It seems reasonable to infer that the payoffs to high risk endeavours and the existence of competitors present private companies with a forceful argument for engaging in such activity sooner rather than later. But it is also clear that Unger’s distress appears genuine and, when we recognize the idealism and sense of adventure that accompanies thoughts of space travel, its seemingly irresistible glamor, it is easy enough to accept that much of the drive for the mission was inspired, not by thoughts of profit, but by curiosity, and by the fame and triumph that would attend the discovery of alien life on Europa.

Europa Report is a thought provoking work that plays games with the viewer and with narrative. The sf parabola that it initiates shoots off into unexpected directions; when reflecting on the trajectory of the narrative it is hard not to feel satisfied with the question that the film poses and ostensibly answers. However, it does not quite resolve this question, and it left me with the sense that the whole exercise may have been a propaganda attempt on the part of Europa Ventures, which had complete control over the footage and could organise and frame it in a way that would downplay their responsibility for the mission’s conclusion. The film’s masterful pivoting between dread and awe, between fear of the unknown and surprising moments of sublimity, recall and revise analogous moments from such films as Stanley Kubrick’s 2001: A Space Odyssey (1968), Danny Boyle’s Sunshine (2007), and those films already mentioned above. Europa Report works well when dialogised with other sf films, and would certainly be worth teaching on an sf film course. It is also a worthwhile experience in its own right, and I would highly recommend it for its refreshing novelty.

**SF-BBC: Speculative Television from the UK**

Amy J. Ranson


**Primeval.** Created by Tim Haines and Adrian Hodges. Perf. Andrew Lee Potts, Hannah Spearritt, Ben Miller. ITV/Impossible Pictures, 2007-11. **DVD**

THE RAGING POPULARITY and longevity of the Doctor Who (1963-89; 2005-present) franchise, now accompanied by a growing body of critical literature, undoubtedly demonstrates the UK’s ability to produce highly successful speculative television programming. Yet, apart perhaps from the on-again, off-again Red Dwarf (1988-2012), the British Broadcasting Company’s image in the US remains linked to public television for its marvellous mysteries and literate literary adaptations. A spate of programming beginning in the middle of the first decade of the new millennium, however, reveals a broad range of creativity, and in spite of their often short lives, a number of the series reviewed here have tempted US producers to attempt remakes. In this review, then, I survey these less watched media offerings from Great Britain’s BBC and ITV.

Let’s begin with sf film and television’s ur-motif: space exploration and colonization. Following in the vein of Red Dwarf as a parody of Star Trek and other television space operas, Hyperdrive follows the (mis-)adventures of the endearingly human crew of the HMS Camden Lock for two seasons of six episodes each. An epilogue to each episode orients the viewer: the year is 2151 and the ship’s mission is “To protect Britain’s interests in a changing galaxy.” Tongue in cheek, the ship presses ever forward as its vain but portly Commander Henderson (Nick Frost) unceasingly seeks new commercial opportunities as its vain but portly Commander Henderson changing galaxy. “Tongue in cheek, the ship presses ever forward as its mission is “To protect Britain’s interests in a changing galaxy,” and so on. Henderson even has a catch-phrase, “commencify.” Frankly, I much preferred it to Red Dwarf; the Internet Movie Database (www.imdb.com) posts an sf project of this title as “In development.” Could an American remake be in the works? In contrast with the riotous humour (am I allowed to add the “-u” if I’m writing about things British?) of Hyperdrive, Outcasts is a straight sf drama about Earth’s colonization of the planet Carpathia, a planet initially thought to be empty. Most likely meant to capitalize on the popularity of the Battlestar Galactica (2004-09) reprise series, Outcasts does a respectable job of building viewer interest through character development and the enigmas linked to the ultimate discovery of a life form already inhabiting the planet. Fans of MI-5 (aka Spooks; 2005-11) and Wire in the Blood (2002-08) will recognize the brilliant Hermione Norris as the colony’s physician, Dr. Stella Isen. The show lasted only a single eight-episode season; apart from its engagement with the discourses of colonization, I didn’t find a lot of potential for use in courses, but in terms of entertainment value and production quality, I found it far more engaging than various Syfy network series currently on the air, such as Defiance.

The deceptively titled Life on Mars, made familiar to US viewers by the ABC remake set in New York City, does not, of course, deal with space colonization, but rather time travel. Manchester police detective Sam Tyler (John Simm) is blasted back from the present (then, 2006) to the 1970s; his challenges include adapting to a completely different style of policing, one in which profiling and brutality were the rule rather than the (hoped-for) exception, and figuring out how and why he is where he is. Once again, compelling characters, including Sam’s positive influence upon his very old school commanding officer Gene Hunt (Philip Glenister) keep the viewer engaged, and disappointed when the series ends abruptly after two eight-episode seasons. Generically speaking, the show is more of a police procedural with a twist than science fiction since the potential explanations for Tyler’s situation verge on the psychological (he’s in a coma after his car accident and this is all imagined) to the metaphysical (this is some kind of afterlife). It is, thus, watched more fruitfully with the realist crime dramas, The Red Riding (2009) trilogy, set in Yorkshire in the 1970s and 1980s, based on the novels by David Pearce.

Jekyll is also more of a crime thriller than sf, but its inspiration from Robert Louis Stevenson’s sf-horror novella, Strange Case of Dr. Jekyll and Mr. Hyde (1886), make it worth a quick nod here. Starring James Nesbitt as Dr. Tom Jackman, an actual descendant of Henry Jekyll, the mini-series recalls in some ways Breaking Bad (2008-13), in its exploration of the vicissitudes of an extraordinary situation upon a generally “normal” hus-
band and father. Jackman—unable to kill the other half of his self—has made a deal with his Jekyll, but the latter escapes, of course, the strictures of his confinement, placing the doctor’s wife, played by Gina Nebitt of the romantic comedy Coupling (2000-2004), and child in jeopardy. Fans of Jekyll might also enjoy Whitechapel (2009-2013), set in the present but in Jack the Ripper’s old haunts, starring Rupert Penry-Jones (also of MI-5 fame). As with Hyperdrive, an imdb.com posting also indicates a project of this name as “In development.”

Also set on present-day Earth, the playful romp Primeval might be described as a sort of reverse Doctor Who with dinosaurs. Instead of the adventurer traveling all over space and time, dangerous creatures from the past find their way back to the present via a time portal; Dr. Nick Cutter (Douglas Henshall) puts together a team and acquires secret government permission to found an institution devoted to the capture and containment of these time-travelling behemoths. True to the tropes of the Lost World and Extraordinary Voyages to which the series owes a major debt, the first seasons include both a femme fatale, Cutter’s psycho wife, Helen (Juliet Aubrey), and an unattainable new love interest, Jenny Lewis (Lucy Brown), the team’s government liaison. As the cast changes, the series declines in quality; the junior members of the team, nerdy monster hunter Connor Temple (Andrew Lee Potts) and cutie-pie zoo worker Abby Maitland (Hanna Spearritt), move up in the ranks, with their potential romance taking a centre stage, as well. The introduction of the quirky Danny Quinn (Jason Fleming) somewhat makes up for the loss of the charismatic Cutter, as do the increasingly bizarre plot twists as Helen has found portals leading to the future, through which not only do deadly post-humans enter the present, but Quinn and crew must also follow Helen through various portals in their attempt to stop this future’s arrival.

By far the most successful project in this review with five seasons and thirty-six episodes, Primeval is the only show discussed here not initially made for BBC, but rather for ITV. One of its most interesting features is its special effects: the realistic insertion of mososaurs, gorgonopsids, giant spiders and centipedes, as well as cuddly proto-mammals, into the landscape of present-day Britain. Impossible Pictures, the digital animation group responsible for the animation in the Walking with Dinosaurs (1999; 2000; 2008) and Walking with Monsters (2005) documentaries, many of which were narrated by Kenneth Branagh, including last year’s feature film, Walking with Dinosaurs 3D (2013; dir. Barry Cook and Neil Nightingale). Considered together, Primeval and the Walking with Dinosaurs franchise offer interesting fruit for discussions about the contemporary blurring of fiction and reality, of documentary and fiction typical of contemporary television. For more on these and other shows, such as Blake’s 7 (1978-1981; again listed on imdb.com with a remake in development dated 2013); for more information, check out the website An American View of British Science Fiction.
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SFRA Website
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The Science Fiction Research Association is the oldest professional organization for the study of science fiction and fantasy literature and film. Founded in 1970, the SFRA was organized to improve classroom teaching; to encourage and assist scholarship; and to evaluate and publicize new books and magazines dealing with fantastic literature and film, teaching methods and materials, and allied media performances. Among the membership are people from many countries—students, teachers, professors, librarians, futurologists, readers, authors, booksellers, editors, publishers, archivists, and scholars in many disciplines. Academic affiliation is not a requirement for membership. Visit the SFRA Website at www.sfra.org. For a membership application, contact the SFRA Treasurer or see the Website.

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