SCIENCE FICTION
THE INTERDISCIPLINARY GENRE

a conference in honour of Robert J. Sawyer's
archival donation to the University Library Collections

with special guests:

ROBERT J. SAWYER   JOHN ROBERT COLOMBO

JULIE E. CZERNEDA   DAVID G. HARTWELL

ÉLISABETH VONARBURG   ROBERT CHARLES WILSON

and CHRIS SZEGO

SEPTEMBER 13 – 15, 2013

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Science Fiction: The Interdisciplinary Genre

An international conference featuring Robert J. Sawyer

September 13-15, 2013

FRIDAY, SEPTEMBER 13

Time	Event	Location
7:00 - 9:00pm	**Reception courtesy of Mills Memorial Library and the Office of University Advancement** • Welcome by Ken Cruikshank, Acting Dean, Faculty of Humanities • Presentation of the Sawyer Archive by Vivian Lewis, University Librarian • Inaugural address by Robert J. Sawyer • Thanks from the conference organizers, Cathy Grise, Associate Professor, Department of English and Cultural Studies and Nicholas Serruys, Assistant Professor, Department of French	**Faculty Club Dining Room**

SATURDAY, SEPTEMBER 14

Time	Event	Location
9:00 - 10:30am	**Invited author speakers** John Robert Colombo (presented by Robert J. Sawyer) "400 Years of Rob Sawyer" Élisabeth Vonarburg (presented by Nicholas Serruys) "Mythologies and Feminism among the Paradigms of SF"	**Council Chambers (Gilmour Hall 111)**

10:30 - 10:45am break

Time	Event	Location
10:45 - 12:15pm	**Session 1A: Anthropology and SF 1 (Moderator: Grace Kehler)** Lisa Yasek (Georgia Tech) "Liberating the Future: Feminism and Anthropology in Women's Pulp Era SF" Dominick Grace (Western) "Under My Skin: Loving the Alien in Phyllis Gotlieb" Shawn Malley (Bishop's) "Cyborg Sites: Ridley Scott's *Prometheus*"	**Council Chambers (Gilmour Hall 111)**
10:45-12:15pm	**Session 1B: Looking Back and Looking Forward (Moderator: Lisa Kabesh)** Herb Kauderer (Associate Professor, Hilbert College & PhD Candidate, Buffalo) "Fedora Hats and the Great Gazoo: Pop Culture References in Robert J. Sawyer's novel *Triggers and Red Planet Blues*." Rebecca McNulty (MA Candidate, University of Florida) "'Let Me Reveal Your Future!': Robert Sawyer's Use of Prediction in Near-Future Narrative" Carrie J. Cole (University of Arizona) "Science and the Staging of the Speculative Imagination: Interdisciplinary and Intertextual Performance Strategies"	**Chester New Hall**

SATURDAY, SEPTEMBER 14

Time	Event	Location
10:45 - 12:15pm	**Session 1C: Ethics & (Transworld) Identity*** **(Moderator: Élisabeth Vonarburg)** Jennifer Green (MA Candidate, McMaster) "La sémiotique comme méthode de distanciation et d'intelligibilité dans *Terre des Autres* de Sylvie Bérard" Gillian Benson (PhD Candidate, Toronto) "Transgressions corporelles, transformation sociale : épistémologie et éthique au sein des mondes science-fictionnels" Isabelle Fournier (PhD Candidate, Buffalo) "L'identité culturelle québécoise dans *Mutations* de Robert J. Sawyer" *en français	**Faculty Club** **Dining Room**

12:15 - 1:30pm lunch

Time	Event	Location
1:30 - 3:00pm	**Session 2A: Anthropology and SF 2 (Moderator: Kathryn Allan)** Patrick B. Sharp (California State, Los Angeles) "The Utopian Uses of Anthropology: L. Taylor Hansen and Robert J. Sawyer" Anindita Banerjee (Cornell) "Russia's Afrofuturism: T/racing Utopia in Zamyatin's We" Jason Vest (University of Guam) "Chasing Darwin: Race, Space, and *Star Trek: The Next Generation*"	**Council Chambers** **(Gilmour Hall 111)**
1:30 - 3:00pm	**Session 2B: Posthumanism, the Singularity and Ethics** **(Moderator: Paul Fayter)** A.J. Boulay (MA Candidate, Laurentian) "Human-Computer Interface in the work of Robert J. Sawyer and ethical approaches to the treatment of Technological Singularity" Andrew Kidd (PhD Candidate, Minnesota) "Factoring Unity: E.O. Wilson's *Consilience* and the Science Fiction of Sawyer and Van Vogt" Nick Matthews (Undergraduate Student, Waterloo) "Through a glass, brightly: Ethics in Robert J. Sawyer's Science Fiction"	**Chester New Hall** **102**
1:30 - 3:00pm	**Session 2C: Pedagogy and SF (Moderator: Wendy Pearson)** David DeGraff (Alfred University) "Sawyer and Czerneda in the Classroom" Danielle D. Gagne (Alfred University) "Science Fiction in the classroom" Adam Guzkowski (PhD Candidate, Trent) "Web of Trust: Transformative Learning and Technoculture in Cory Doctorow's *Little Brother*"	**Chester New Hall** **106**

3:00 - 3:30pm break

Time	Event	Location
3:30 - 5:00pm	**Special Para-literary Panel: From the Manuscript to the Bookshop (Moderator: Robert J. Sawyer)** Guest speaker: David G. Hartwell (Tor) "TITLE TBA" (On editing anthologies) Guest speaker: Chris Szego (Bakka-Phoenix) "TITLE TBA"	**Council Chambers (Gilmour Hall 111)**

6:00 - 8:30pm   banquet

SUNDAY, SEPTEMBER 15

Time	Event	Location
9:00 - 10:30am	**Invited author speakers (Moderator: Chris Szego? TO BE CONFIREMED)** Robert Charles Wilson Reading from his forthcoming novel, *Burning Paradise* Julie E. Czerneda "Keeping It Real: Worldbuilding in Science Fiction and Fantasy"	**Council Chambers (Gilmour Hall 111)**

10:30 - 10:45am break

Time	Event	Location
10:45 - 12:15pm	**Session 3A: Contemporary Canadian SF (Moderator: Susan Knabe)** Veronica Hollinger (Trent) "Time, History, and Contingency in Robert Charles Wilson's Science Fiction" Amy J. Ransom (Central Michigan) "Hockey & Science Fiction in Canada: 'A Combination Seen Rarely But in Québec'" Kristen Shaw (McMaster) "Mapping "It 2.0": The Utopian Potential of Virtual Space in Karl Shroeder's "To Hie from Far Cilenia"	**Council Chambers (Gilmour Hall 111)**
10:45 - 12:15pm	**Session 3B: Psychoanalytical and Theological Approaches (Moderator: Cathy Grise)** David Corman (MA, Brock, Independent Scholar) "Prometheus, Jung and Sawyer: reimagining ourselves and our relationship with technology" Cameron Ellis (PhD Candidate, Trent) "Sawyer's 'Neanderthal Parallax' Trilogy: A Jungian (re)interpretation of Rousseau's Eupsychia?" James Christie (Winnipeg) "Remembering the Future: Science Fiction and the Emerging Art of Dialogue Theology"	**Chester New Hall 102**

Time	Event	Location
10:45 - 12:15pm	**Session 3C: From McMaster to Mars** (Moderator: John Robert Colombo? TO BE CONFIREMED) Paul Fayter (Independent Scholar, formerly of York/UofT) "Canadians on Mars: A brief review of Robert J. Sawyer & Co., with a literary and contextual interpretation of Frederick Philip Grove's 'The Legend of the Planet Mars' (1915)" Mark Leslie Lefebvre (Author) "Digital pi: The Transcendence of Digital Publishing" Hendrik Poinar (McMaster) "TITLE TBA" (on cytosine methylation)	**Council Chambers** **(Gilmour Hall 111)**

12:15 - 1:30pm lunch

Time	Event	Location
1:30 - 3:00pm	**Session 4A: "Moving minds, transforming bodies: subjectivities as provisional, fluctuating, newly created" (Moderator: Kristen Shaw)** Laura Wiebe (McMaster) "Negotiating "Reality" with Language (and) Games: Karl Schroeder's "To Hie from Far Cilenia"" Jonathan Smith (ABD, Wilfrid Laurier University) "Be (More or Less) Human: Recognizing Emotions In Dreaming Idols, Curious Weapons, and Other Assorted Objectified "Others"" Anne Savage (McMaster) "Travelling in the Country of the Mind: Greg Bear's *Queen of Angels/Slant* and personality crisis"	**Council Chambers** **(Gilmour Hall 111)**
1:30 - 3:00pm	**Session 4B: Philosophy-Fiction (Moderator: Robert J. Sawyer)** Kate S. Kelley (Missouri) "Robert J Sawyer's Letter to Corinthians: body-mind dualism in *Mindscan and Rollback"* Joseph A. Novak (Waterloo) "Consciousness in the works of Robert Sawyer" David Robinson (Laurentian) "Games, Minds, and Sci Fi"	**Chester New Hall** **102**

3:00 - 3:30pm break

Time	Event	Location
3:30 - 5:00pm	**Session 5A: Disability and Queer Studies** **(Moderator: Jocelyn Sakal Froese)** Kathryn Allan (Independent Scholar) "Backwards and Beyond: Neuroscience and Disability in Robert J. Sawyer's WWW Trilogy" Derek Newman-Stille (PhD Candidate, Trent) "Places of Suffering: Spacialising Disability and Trauma in Leah Bobet's *Above*" Wendy Gay Pearson (Western) "Queer Time, Postcoloniality, and Canadian SF"	**Council Chambers** **(Gilmour Hall 111)**

Time	Event	Location
3:30 - 5:00pm	**Session 5B: Prospective Perspectives** **(Moderator: Veronica Hollinger)** Lory Kaufman (Author) What is the social value of the science fiction writer? Claire Peacock (Saskatchewan) Atwood's "Wonder Tale": Old Boundaries and New Encounters Sherryl Vint (UC Riverside) "To Corrupt and Control the Present in Order to Win the Future": *Continuum* as Post 9/11 Television	**Chester New Hall** **102**

Closing of conference

Kathryn Allan, Independent Scholar <kathryn@academiceditingcanada.ca>

Backwards and Beyond: Neuroscience and Disability in Robert J. Sawyer's WWW Trilogy

In Robert J. Sawyer's WWW trilogy (Wake, Watch, Wonder), Caitlin Decker is a blind teenager who is given technology that enables her to see both the physical world and the virtual realm of the internet. She becomes a figure that stands between a human past where intelligence is characterized as singular and "primitive" (represented by the apes Hobo and Virgil) and a "posthuman" future where intelligence is multi-faceted and supported by a great number of organic and inorganic technologies (i.e. the spontaneous AI, Webmind). Framing my reading of the books within Disability Studies, I propose that Caitlin's prosthetic enhancement, as well as the novel kinds of intelligence displayed by both the apes and Webmind, disrupt the Western cultural construction of disability as a biomedical condition that can be known, contained and controlled.

In Cultural Locations of Disability, Sharon Snyder and David Mitchell contend that the disabled body is often characterized as temporally in flux: "As a vector of human variability, disabled bodies both represent a throwback to a human prehistory and serve as the barometer of a future without 'deviancy'" (32). Given that current neuroscience demonstrates that the brain is far more complex than previously understood--moving away from the study of the single neuron to positing that "communities" of neurons act together to complete a task, allowing for the direct integration of prosthetic technology into the brain (see Miguel Nicolelis' Beyond Boundaries)--the Western biomedical model's conception of disabled bodies as "primitive" or limited must be reconsidered. I will theorize how the threats to normative human embodiment displayed by the "enhanced" disabled/deviant bodies in Sawyer's WWW trilogy reflect the advancements in neuroscience that have disrupted the distinction between the "primitive" and "human" being. My reading of the science fiction series will address the necessity of changing our Western understanding of what constitutes intelligence and ability, and which bodies are therefore entitled to autonomy and self-determination.

Anindita Banerjee, Cornell, <ab425@cornell.edu>

Russia's Afrofuturism: T/racing Utopia in Zamyatin's We

Evgeny Zamyatin's We, first published in English translation in 1924 by Dutton of New York and subsequently hailed by Orwell as the inspiration for 1984, has been canonized as the quintessential dystopian allegory of a totalitarian world order. This paper argues for a utopian reading of We by tracing the central yet completely unexamined component of race in the novel. Using the narrator-protagonist's alter-ego R-13, the "poet with the African lips," as a point of departure, I argue that Zamyatin's iconic work encodes an insurrectionist anthropologization of the future where the affirmation of selfhood becomes indistinguishable from the performance of Blackness. Such a reading, in turn, reveals an unknown pre-history of trans-continental cross-pollination between the Russian revolutionary avant-garde -- of which the author of We was a prominent member—and the constellation of writers and activists who would subsequently constitute the Harlem Renaissance in the city where Zamyatin first found an audience.

Gillian Benson, PhD Candidate, Toronto, <gillian.benson@gmail.com>

Composite bodies, compassionate societies: knowledge, perspective, and ethics in science fictional world-building

Stories set in imaginary worlds allow for the projection of philosophical problems into an experimental framework. Science fiction's inquiries are scientific in operation, in that the fictional territory in which the narrative takes place provides fertile ground for thought experiments. Two French-Canadian novels demonstrate this tendency to great effect: both Sylvie Bérard's Of Wind and Sand (Terre des Autres, 2004) and Élisabeth Vonarburg's The Silent City (Le silence de la cité, 1981) explore questions of gender and racial ethics, as they arise from problems of knowledge.
Both novels describe characters offering marginalised perspectives. Vonarburg features beings whose bodies are capable of both male and female presentation, while Bérard's creatures have interspecies origins. The hybridity detailed in the novels

suggests an epistemological problem, wherein personal experience of the world through the filter of a body delineates what can be known. Isabelle Stengers, philosopher, defines characters as partial observers, through whom questions of knowledge are defined by the characters' limitations. As we learn in the stories at hand, technological modifications allow for a certain transgression of these boundaries. Nevertheless, limits are imposed by the characters' subjectivity: Donna Haraway (A Cyborg Manifesto) describes cyborgs as necessarily partial beings, and both Bérard's and Vonarburg's characters fit this description. As such, they cannot obtain complete knowledge of their world.

Both stories chronicle the development of a social ethical framework as a consequence of the fragmented epistemologies of its members. Each concludes with the creation of an open, blended community, reinforcing a collective value to subjectivity: knowledge gleaned from subjective experience allows for improved ethical outcomes by way of a more egalitarian, pluralistic social structure. Epistemological concerns thus have a direct relation with moral issues, and the topic of this presentation is an analysis of these implications as they occur in the novels.

A.J. Boulay, MA Candidate, Laurentian, <aj_boulay@laurentian.ca>

Human-Computer Interface in the work of Robert J. Sawyer and ethical approaches to the treatment of Technological Singularity

This paper will survey the works of Robert J. Sawyer for examples that will help demonstrate the importance of HCI in the treatment of the Singularity. These ideas will be supported by opinions of respected philosophers and computer scientists and strong future perspectives will be provided by experts in the field of HCI.

Robert J. Sawyer has developed the ideas of I.J. Good, Vernor Vinge and Ray Kurzwield through such novels as his WWW series and Mindscan. These ideas center around the notion of Technological Singularity, an idea that began in science fiction where artificial intelligence surpasses human intelligence. However, there is a prima facie case for the problem of the Singularity and it is now discussed by computer scientists and philosophers. In many of his fictional scenarios, Robert has described Human-Computer Interfaces (HCI), such as prosthetic bionic eyes to treat the blind, bio-synthetic systems that interface with human consciousness, and other examples. Moreover, authorities such as Vernor Vinge have provided some possible ways to address the concerns of the Singularity in presentations to NASA (1993) and in almost all examples that he mentions there is inclusion of some form of HCI. Philosophers David Chalmers and Andy Clark have published on the topic of the Singularity and Human-Computer Interaction (1998-2008) under the title of "The Extended Mind". This notion suggests that technologies, like iphones, are currently being used to facilitate a human-computer system that is greater than the human alone. Thus, it is evident that a real domain of action in addressing the Singularity is in the niche of HCI, a subdivision that combines computer science, psychology and design methodology. Most importantly, the questions of ethics and values in regard to the Singularity may find the greatest influence when applied in this niche.

James Christie, Winnipeg, <j.christie@uwinnipeg.ca>

Remembering the Future: Science Fiction and the Emerging Art of Dialogue Theology

Dialogue Theology, established in June of 2012 as an interdisciplinary stream in the Master of Arts in Spiritual Disciplines and Ministry Practices in the Faculty of Theology of The University of Winnipeg, may best be defined as "the art and discipline of bringing Christian theology into intentional conversation with other religions and worldviews for the sake of 'mending the world.'" Dialogue theology is inspired by the groundbreaking work of luminaries in the mold of Huston Smith and Karen Armstrong, and by pivotal thinkers of the stature of Hannah Arendt who wrote, "We are most human when we are in dialogue." The intersection of science fiction, ethics and theology/religious studies is obvious: science fiction is the closest modern and postmodern analogy to biblical prophecy extant. From Heinlein's "If This Goes On . . ." to Herbert's Dune to McCarthy's The Road, the references are legion. In addition to this inherent prophetic tendency, Robert Sawyer has enhanced the dialogue around the question, "What does it mean to be human?" Rarely has one practitioner addressed so cogent a theme in so many intriguing, engaging and significant ways. From our deep roots in Hominids, Humans and Hybrids to a startling future in Calculating God; from the quandaries of the techno-human spectrum in Mind Scan to the evolution of intelligence in Wake, Watch and Wonder, Sawyer opens up new dimensions of dialogue with

science and society for the theologian. This paper will employ Sawyer's work in an attempt to advance the observation of Sri Jawaharlal Nehru at the opening of the then Ceylon Academy of Science in 1961, that "The time is past for politics and religion; the time has come for science and spirituality."

Carrie J. Cole, Arizona, <carriejcole@gmail.com>

Science and the Staging of the Speculative Imagination: Interdisciplinary and Intertextual Performance Strategies

Peter Nicholls closes his entry on hard science fiction in the Encyclopedia of Science Fiction by stating that "while a rigorous definition of 'hard sf' may be impossible, perhaps the most important thing about it is, not that it should include real science in any great detail, but that it should respect the scientific spirit; it should seek to provide natural rather than supernatural or transcendental explanations for the events and phenomena it describes." This may seem in direct opposition to both the ritualistic roots of theatre and performance and the psychological realism that dominates much of the modern Western theatrical canon. However, just as Robert J. Sawyer has called science fiction "the literature of juxtapositions", science fiction in the theatre becomes the embodied performance of these juxtapositions.

This paper examines what Linda Hutcheon refers to as the "palimpsestuous intertextuality" of adapting/adopting the tenets of hard sf as a genre into performance strategies of two world premiere science fiction stage plays. The first, Jennifer Haley's Susan Smith Blackburn Prize winning play, The Nether, investigates the "moral complexity of our increasingly virtual existence" by coupling a near future virtual reality with the framework of a procedural crime drama. The second play, The Bargain and the Butterfly, devised by The Ghost Road Theatre Company, explores "the survival of the human race through the prism of neurology, bio-genetics, and psychology."

Both productions ground their dramatic structures in science; both extrapolate that science into their fictional worlds in a manner integral to the central conflict of the narratives. However, I argue each play engages different performance strategies, working to expand theatre makers' vocabulary of the speculative in performance.

David Corman, Independent Scholar

Prometheus, Jung and Sawyer: reimagining ourselves and our relationship with technology

Literature provides a space to question personal identity and 'human nature'. Or understanding change and usually coincides with radical leaps in technology and invention. The transition from hunter gatherers to farmers, the industrial revolution, the atomic age, and the destructive power of the nuclear bomb have all forced us to re-conceptualize the our place in the world. With the exponential growth in computer technology, the singularity is a very real possibility– the potential of computers to design and manufacture increasingly advanced generations of potentially conscious machines challenges deeply held beliefs about consciousness, personal identity and the human 'soul'.

Science fiction provides a space from which to examine future advances in science and technology by utilizing the philosophical tool of possible worlds to explore what we could have, still might, or can choose to become. This project is divided into three sections: the first examines the Greek myths of Prometheus and the depiction of technology and invention as contrary to human nature; the second takes up Carl Jung's' concept of integration as a way to heal the psyche through a reconciliation of apparent opposites; and the third will explore the work of Robert Sawyer (especially the Neanderthal Parallax) as an attempt at a Jungian integration – a bringing together seemingly opposing conceptions of the human being – through technology.

Sawyer's work reveals and questions conceptions of human nature while several of the central characters in Sawyer's work can be viewed as an attempt to reconcile ways of life, and expressions of humanity, that often seem at odds with one another. Tying the three sections of my piece together, I hope to make the case that Sawyer has inherited the legacy of Jung and capitalizes on the inherent potential of science fiction to use technology as a lens through which to view a possible world other than our own – reminding us that we have chosen to become what we are, and that we might always choose to be otherwise.

David DeGraff, Alfred University, <degraff@alfred.edu>

Sawyer and Czerneda in the Classroom

I like to teach science while students are doing something they already enjoy, whether on the ski slopes (The Physics of Snowboarding), thinking about aliens (Life in the Universe) or reading science fiction (Science in Science Fiction). For this paper I'd like to discuss how I use Mindscan by Robert J Sawyer and Survival by Julie E Czerneda in the classroom. Both these novels are soaked in science so completely that each chapter could have a whole class period devoted to it.

  In Czerneda's Survival, the metaphors of biology infect the whole story structure so that students can learn biological principles such as natural selection, ecosystems and reproductive strategies without any long info-dumps. The advantages of r-strategy reproduction become, not just another term to learn, but horrifyingly real.

  One could argue that consciousness studies, the subject of Mindscan, cannot fit the goals of a science course. There are no experiments that can be done at the moment that can test the location of the mind, whether consciousness drives our zombie bodies or if consciousness if a emergent property from the complexity of the brain. Therein lies the beauty of science fiction: the novel is the experiment. We can see how the scientific method could be used. With the first-person narration, we see the thought processes of Jake both before and after the mindscan procedure. We see the mechanical nature of a biological mind in Jakes vegetative father, and again in the personality change after Jake has brain surgery on the moon.

  The scientific mindset of a world that can be known, tested through experiments, the notion that all mysteries can be solved permeates the works of both Sawyer and Czerneda in a way that makes them perfect authors to study in a course such as this.

Cameron Ellis, PhD Candidate, Trent, <cameronellis84@gmail.com>

Sawyer's 'Neanderthal Parallax' Trilogy: A Jungian (re)interpretation of Rousseau's Eupsychia?

Frank and Fritzie Manuel's 1979 tome Utopian Thought in the Western World organizes the history of Utopia into a series of 'constellations'. Nestled in the middle is their constellation 'Eupsychias of the Enlightenment' wherein they mention the following on Rousseau: "Rousseau's eupsychian legacy is the fantasy of a perfectly autonomous, fulfilled 'I' for everyman, the wholeness of a communal 'I' that is an organic unity, and the integration of the entire, individual 'I' with the communal 'I' with hardly a ripple on either surface" (440).

Rousseau's appeal to the "healthy psychological attributes of man in a hypothetical state of nature" pose decidedly valid concerns to any critic sensitive to the 'essentializing' tendencies of Enlightenment thought; however, Rousseau's attention to the utopian nature of the mind, soul, psyche, or state of the individual is alien to those presently living in late modern capitalism: a culture in which the individual is situated (reified) primarily as a productive site for the consumption of commodities and political ideologies. Has the eupsychia been wholly coopted? a thing of the past, relegated to a historical 'constellation'? My argument is decidedly no.

Sawyer's 'Neanderthal Parallax' offers a SF narrative whereby Eupsychia may be thought anew without falling victim to perils of essentialism. That is to say, Sawyer's Trilogy allows for Eupsychia to be brought back into utopian discourse, during a time where there is resurgence in trying to (re)think the Utopian in an otherwise anti-utopian cultural milieu. Using the psychoanalytic approach specific to Carl Jung, I attempt to unpack the nature of Sawyer's eupsychia in terms of the reconciliation of archetypal opposites. This Deep psychological approach will be presented as one way of interpreting Eupsychia in non-essentialist terms while simultaneously sustaining a critique that hinges on dualisms.

Paul Fayter, Independent Scholar, <paulfayter@gmail.com>

Canadians on Mars: A brief review of Robert J. Sawyer & Co., with a literary and contextual interpretation of Frederick Philip Grove's 'The Legend of the Planet Mars' (1915)

  As an historian of science (especially of Darwinism), of theology, and of science fiction I have explored the question of extraterrestrial life for thirty-five years, focusing on Mars as a multidisciplinary case study for the past twenty. In

my collecting and bibliographic work on the last two centuries of Martian material I noticed a curious paucity of Martian stories in Canadian literature (about which I am an amateur). There are thousands of post-1800 texts covering fictional, speculative, and non-fictional treatments of Mars, Martians, and voyages to and from the Red Planet. Not surprisingly, for a planet named after the Roman god of war, accompanied by two small satellites named for Mars's twin sons, Deimos and Phobos, a great many stories imagined Mars as an alien landscape for wild adventure and pulpy battles and romances. Not unexpectedly, most of the primary sources I was gathering came from France, the U.K., Germany, Italy, and America. What about Canada? Apart from recent stories by Rob Sawyer—i.e., End of an Era (1994), "The Blue Planet" (1999), "Come All Ye Faithful" (2003), "Identity Theft" (2005), "Biding Time" (2006), and Red Planet Blues (2013)—and a few other examples, I was drawing blanks. Was Canada insulated from historic epidemics of international Martian mania?

I've not been obsessive in my searching for Canadian sources; in matters Martian the scientific, theological, and literary action did lie elsewhere, after all. However, in searching my own files a few years ago, I came up with forgotten notes I'd made after a trip to Winnipeg about an unpublished poem set on Mars, written by Frederick Philip Grove (1879-1948), preserved in the University of Manitoba's Archives, and dated "1915" i.e., two years after he began work on Consider Her Ways (1947), and two years before Edgar Rice Burroughs's John Carter of Mars series (1917-1943). My paper will examine this century-old text which—like Rob Sawyer's fresh, genre-blending stories—raises important human moral and religious questions from an imagined extraterrestrial perspective. "The Legend of the Planet Mars" deserves to be better known by Canadian sf readers as a neglected but worthy addition to the literature on Mars.

An earlier, shorter and unpublished version of my paper was delivered at the Academic Conference on Canadian Science Fiction and Fantasy at Toronto's Merril Collection in 2005.

Isabelle Fournier, PhD Candidate, Buffalo, <ifournie@buffalo.edu>

Quebec's literature counts its fair share of novels depicting one side or another of Quebec's cultural identity; however authors from outside "La belle province" rarely venture in this avenue. Among the exceptions, Robert J. Sawyer occasionally includes French-Canadian characters in his novels, as it is the case in Frameshift. Being from Quebec myself, it was particularly interesting and intriguing to encounter a French-Canadian protagonist in a SF novel written by an Anglophone author. Through the experience of Pierre Tardivel, a Montreal-born geneticist who moved to California for his work, Frameshift highlights cultural differences between the two neighbouring countries (Canada and the USA), including some cultural aspects relevant to Quebec's cultural identity. While the novel captures flavours of the essential Canadian experience of needing to leave for a fuller realization of self, this book is the Anglophone's take on the Francophone's version of the experience. In this presentation, I will compare and contrast the various representations of the values and stereotypes of the USA and Canada, including Quebec, as they appear in the printed version of the novel itself and in the "deleted scenes", and discuss the Anglophone view of the Quebec experience of leaving. To further develop my argument, a comparison with Jacques Godbout's Une histoire américaine, for example, will likely be included to present a French-Canadian author's perspective on this experience.

Danielle D. Gagne, Alfred University, <gagne@alfred.edu>

Science Fiction in the classroom

One of the major advantages of using science fiction in the classroom is the ability to explore "what if…" Moreover, good science fiction (the kind that is based on actual science) facilitates students' ability to consider current technology and theory and consider the implications for a plausible future. This paper explores issues of aging presented in Robert Sawyer's novel, Rollback.
Students in an Adult Development and Aging course read Rollback in addition to a standard textbook. Student comments suggested that the book complemented the course well, and provided a unique and surreal insight into aging and issues of "getting old" and made the concepts discussed in class easier to understand. For example, we discussed theories of longevity in class (i.e., whether aging was caused by free radicals, shortening telomeres, etc.), and then followed with a discussion of how the Rollback procedure addressed these theories – why didn't it work for one person and not the other? We talked about physical and sensory changes, and then saw the manifestations of those gradual and insidious changes as Don talked about how he navigated everyday life before and after the procedure. The story also provided a backdrop for values

clarification -- many strenuously objected to Don's cheating, which led to talks of what "death to us part" means, exactly, and whether our views of marriage and commitment may need to be revisited if our lifespans regularly exceed the century mark.

Overall, student ratings indicated that reading Rollback helped them to think about aging in ways they hadn't previously, and offered insight into the aging process that the textbook did not. Therein is the value of science fiction – to prompt students to question what might be within the realm of possible.

Dominick Grace, Brescia, Western, <dgrace2@uwo.ca>

Under My Skin: Loving the Alien in Phyllis Gotlieb

Gary K. Wolfe has argued that stories of human/alien interaction rest on a central tension, "the opposition between man and not-man" (204); "Even to conceive of an alien intelligence is to conceive [. . .] of an invasion of one's own personality by outside forces, a violation of one's community by strangers" (205). Phyllis Gotlieb challenges this formulation when her alien cats, the Ungrukh, disguise themselves as humans via hypnoforming, a process whereby their appearance is concealed from human observers, who will see them as human instead. The process also involves an implantation onto the hypnoformed alien's mind of the experiences and memories of the kind of creature he or she is being disguised as. Khreng, the hypnoformed alien, knows that, as a result, "his mind would always be threaded with wisps of alien memory" (33). A more intimate invasion of personal space is difficult to imagine, but here the alien is invaded by the human mind. This is in keeping with Gotlieb's practice of insisting on the commonality among all sentients, not merely humanoids. Indeed, she has these feline aliens refer to each other as "man" and "woman." One might argue that such a practice is anthropocentric speciesism, as some have argued that Ursula K. Le Guin's use of the masculine pronoun to describe the ambisexual characters in The Left Hand of Darkness perpetuates the sexist stereotypes the novel attempts to challenge. However, just as Genly is confronted by his own sexist preconceptions when Estraven begins to assume female form, so are readers shocked out of their preconceptions, as derived from the pronoun reference, when that transformation takes place. A simple matter of language use strips the implications of the reader's preconceptions bare. Similarly, by requiring her readers to associate cats or other overtly alien and animal creatures with themselves, Gotlieb does not so much transform her aliens into humans as she forces her readers to redefine what human means. To make us love the alien, she takes us under the skin.

Jennifer Green, McMaster, <je1987nn@gmail.com>

Distanciation and Intelligibility through Semiotics in Terre des Autres by Sylvie Bérard

Written by Montreal native Sylvie Bérard and published in 2004, Terre des Autres (Of Wind and Sand, 2008) is a Quebecois science fiction story that takes place on Sielxth (or Mars II), a faraway planet where the native darztls and human colonisers live in conflict. The story is an exemplary representation of the science fiction genre by virtue of its use of semiotic methods that facilitate the creation of a world that is both radically other and intelligible. In this study, we will examine the semiotic methods through which Sylvie Bérard is able to construct the fictional world of Sielxth and effectively establish and communicate the parameters of this novel paradigm to the reader. We will highlight how the author succeeds in filling the gap that exists between the fictional world and the empirical world of the reader by drawing first and foremost on didactic segments which provide details about the extraterrestrials of Sielxth, the darztls; secondly, on fictional words as well as fictional ideas in the story, demonstrating how the reader is able to understand their meanings through syntagmatic irradiation; finally, on references to the reader's presumed empirical knowledge in order to draw comparisons with the darztl language and names.

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Web of Trust: Transformative Learning and Technoculture in Cory Doctorow's Little Brother

This paper explores the similarities and useful interconnections between theories of transformative learning and science fiction literature, through an examination of Canadian sf author Cory Doctorow's Little Brother (2008). Theories of

transformative learning and sf literature share an earlier focus on rationality, such as Jack Mezirow's emphasis on disorienting dilemmas and critical reflection being essential to the perspective transformation involved in transformative learning, or Darko Suvin's emphasis on cognitive estrangement as being integral to the efficacy of sf literature. Likewise, the two seemingly disparate areas of scholarship share subsequent critiques of the focus on rationality, with scholars such as Maxine Greene and Istvan Csicsery-Ronay Jr. arguing for the importance of affect in the contexts of transformative learning and sf literature, respectively. In weaving together these two theoretical engagements, this paper explores how science-fictional literary texts can be read as pedagogical texts, as well as creative reflections on and critical engagements with their cultural and political contexts. In particular, this paper examines the pedagogical possibilities that can be read in Canadian sf literature through a theoretical exploration of Cory Doctorow's Little Brother (2008). Through the application of theoretical frameworks related to critical pedagogy and transformative learning as well as sf literary theory and criticism, this paper explores this exemplary text and its narrative representations of personal development and change, community empowerment and strength, resistance, and social change. Readings of the selected text are positioned in terms of how the text can be read as pedagogical, and what potential dimensions of transformative learning those pedagogical possibilities might enable. These readings are then applied to demonstrate the relevance of the exemplary text to Canadian cultural and political contexts, including politics of activism, technology, securitization, and citizenship.

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Time, History, and Contingency in Robert Charles Wilson's Science Fiction

Robert Charles Wilson has been writing excellent science fiction for over two decades, but he is still not as widely read as he should be. On the occasion of the publication of Axis (2007), for instance, an article in Toronto's Globe and Mail included his fiction in a list of "Canada's best-kept secrets in the arts" (Adams). I propose to offer a broad introduction to Wilson's fiction that emphasizes the narrative entanglements of time and history that I find so striking in his work – for the sake of brevity, I will focus on two of his best-known novels, Darwinia (1998) and The Chronoliths (2001). Darwinia was a finalist for the Hugo Award, and The Chronoliths was selected as a New York Times Notable Book and was co-winner of the 2002 Campbell Award.

From one perspective, Wilson's fiction is "deeply humanistic" (Barbour 313), but the brief lives of Wilson's very ordinary characters tend to be played out in the framework of momentous events and against temporal and spatial backgrounds of more-than-human scope. I find it interesting to read both Darwinia and The Chronoliths in terms of how their plots set up tensions between time and history – time as unstructured temporality without meaningful origin or conclusion; history as temporality shaped into stories of humanly significant events. Tension between cosmic time and human history continues to shape Wilson's more recent novels such as the Hugo-Award-winning Spin (2005) and its sequels Axis and Vortex (2012). While Wilson's fiction may be "deeply humanistic," his is an appropriately science-fictional kind of humanism. The play of time and history in Darwinia and The Chronoliths – the decentering of the human in stories which at the same time insist on recognizing the significance of the human – also supports Wilson's commitment to the importance of contingency as a defining quality of human life.

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Fedora Hats and the Great Gazoo: Pop Culture References in Robert J. Sawyer's novels Triggers and Red Planet Blues

Robert J. Sawyer has stated in an interview that regardless of the setting of a science fiction novel it is always about the time in which it was written. In fact, he often uses pop cultural references to draw readers away from the novel's setting such as the many 20th century references in the futuristic Red Planet Blues which ground it within the hardboiled and noir movements. Over dinner Sawyer admitted that one of his favorite uses of a pop culture reference was using The Great Gazoo to explain a point in Triggers. This is remarkable because Triggers was contemporary to its publication in 2012 while The Great Gazoo is an obscure animated character from 1965. In this case Sawyer's pop reference moves the reader from the present to the past. Such temporally displaced references may threaten the readers willing suspension of disbelief, but Sawyer finds them an irresistible component in positioning his readers in multiple time settings.

This paper is intended to be a multidisciplinary examination and comparison of the effects of pop cultural references in

Robert J. Sawyer's novels Triggers and Red Planet Blues. Particular attention will be paid to differences caused by Triggers' movement of the reader's attention from the present to the past versus Red Planet Blues' movement of the reader's attention from the future to the past, the past in both cases referring to the middle of the 20th century. In addition to textual analysis, interviews will be referenced (and more conducted), and some sociological analysis of the choice of pop culture references will be considered.

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What is the social value of the science fiction writer?

My paper will explore the idea of humans as a tribe, whether in a group of thirty to sixty, as was apparently the case for many thousands of years, or in a collection of seven billion plus. It will include a discussion and examples of how nature has ensured that individuals appear who are necessary for the tribe's survival – including sf writers.
A tribe needs members with a variety of talents to work towards its prosperity and longevity. For me, the sf writer is the ultimate interdisciplinary worker, one who plays an important role by synthesizing ongoing developments in all the sciences, both physical and social, and describing them using a vehicle that humans have used to impart information to their tribe for millennia, that is – through the story.
The paper will examine different types of sf stories that have surfaced over the years in response to developing technologies. These will include the cautionary tales, ones in which technology threatens humanity's extinction – stories of nuclear war, chemical and biological agents, diseases, totalitarian domination by means of technology, and creation of new types of humans and artificial intelligences that run amok.
But not all sf stories reveal impending doom. My paper will also address stories that illustrate how science can offer a better future for the human tribe. This is an interesting subgenre of sf stories because, by definition, showing a near-perfect world leaves little room to find conflict and resolution, the whole cloth from which much story telling is cut. Finding that dynamic tension can form the basis of a very interesting discussion.
In my paper, I will cite examples of the above in Rob Sawyer's work, and in the work of many other past and present authors.

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Robert J Sawyer's Letter to Corinthians: body-mind dualism in Mindscan and Rollback

The question of what constitutes 'human being' is one written about in the discourses of Western philosophy and Christian theology. Many of the arguments conceive the essence of human being as an intangible substance variously called consciousness, mind, or soul. This is perhaps nowhere more famous than in Descartes' 'cogito ergo sum.' The mind-body dualism that results from Descartes' writing has grown to dominate Western thought. Furthermore, Descartes' dualism privileges the abstract mind over the biological body to the point that its integrity is rarely in question. While the problem of bodily resurrection has occupied many thinkers concern about the continuity of the mind in the same circumstance is less prevalent. Indeed, the multitude of exegesis on Corinthians 15:35 "How are the dead raised? With what kind of body will they come?" (NIV) are evidence enough to suggest an assumption that the soul is not altered by resurrection.
Like many works of science fiction, Sawyer's MindScan (2005) and Rollback (2008) explore fundamental questions about what it means to be human, but the point of contention is not always the material body. What makes an analysis of Sawyer's novels particularly interesting is that these stories are about the resurrection of the mind. To be sure, Sawyer agrees with Cartesian dualism: the mind, for instance, can be copied and downloaded into a synthetic body in MindScan, and the violations of time on the biological body can be repaired in Rollback. What is of significant in the novels is the 'othering' of these newly resurrected characters. Loved ones, family and friends see them as fundamentally different people – not the people they knew. This paper explores Sawyer's books in the context of philosophical and theological approaches to mind-body dualism to identify an intersection between philosophy, theology and science fiction.

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Factoring Unity: E.O. Wilson's Consilience and the Science Fiction of Sawyer and Van Vogt

Robert Sawyer's definition of science fiction as "the literature of intriguing juxtapositions" that draws upon multiple disciplines in the sciences and humanities and not just extrapolates from them but finds connections between them, has an analogy in E.O. Wilson's notion of Consilience, the idea put forth in his 1998 book of the same title that we are moving towards a Unity of Knowledge in the sciences and the humanities. Well before Wilson set forth his idea, another preeminent Canadian science fiction writer, A.E. Van Vogt, had anticipated it with the fictional science of Nexialism in his fix-up novel, Voyage of the Space Beagle. Sawyer's own work, although very different from that of Van Vogt, displays a similar running motif of Unity of Knowledge in both scientific and humanistic disciplines, with the work in seemingly divergent areas of science converging and interweaving, leading towards Humanistic conclusions where there is a recognition of the unity between the actors involved in those disciplines, and their responsibility towards each other and on global scales. The proposed paper will examine critically the role the consilience of inductions plays in two of Sawyer's key works, Factoring Humanity and Mindscan, as well as in Van Vogt's Voyage of the Space Beagle, and tries to answer why the Unity of Knowledge has been a specific preoccupation of Canada's two foremost science fiction writers, in spite of their divergent approaches and socio-political perspectives.

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Digital pi: The Transcendence of Digital Publishing

McMaster University and Robert J. Sawyer have both long been at the helm of technological innovation. And although running parallel paths, the two came together beautifully in 2010 when Sawyer was at the campus bookstore for the world launch of his novel Wonder.
A fascinating aspect of Sawyer's visit to campus involved launching his latest novel in front of an innovation that he had dreamed of in his novel Flashforward more than 10 years earlier – a machine that could produce a perfect bound book from a secure digital storage of millions of titles right there inside the bookstore.
McMaster University has owned an Espresso Book Machine since 2008, and has used it not only to save students millions of dollars on textbooks, to offer McMaster faculty members bold new ways to make their work available to the student body, to publish innovative new science fiction themed projects and also to provide a simple solution to a century-old distribution and storage/warehousing problem that continues to plague the book industry.
As the driving force behind bringing the Espresso Book Machine to McMaster (the 2nd EBM in Canada and the 9th in the world – there are now almost 100 in existence), I would relish a chance to both show off how McMaster as well as institutions like UBC, U of Toronto and University of Waterloo have embraced this technology to the benefit of academics and demonstrate how this and similar digital innovations (like eBooks), allow storytellers and teachers the ability to interact with readers at the most intimate level.

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Cyborg Sites: Ridley Scott's Prometheus

This paper examines what Stanford archaeologist Michael Shanks identifies as the archaeological cyborg—the hybrid figure of artifact and body, history and technology—in Ridley Scott's prequel to the Alien films, Prometheus (2012). This particular species of cyborg is as hybrid figure that collapses anthropological, ethnographic, and archaeological practices and politics. The archaeological cyborg demonstrates that the material past—whose semiosis is always in flux—is only available to the imagination as a version of the future. As an "archaeology" of Ridley Scott's Alien films, and their imaginary of race and miscegenation that is variously exploited and engineered by the Weyland Corporation, Prometheus provides ample material for cyborg criticism in the figure of its android protagonist, David. Modelling himself after the archaeologist, promoter of Arab nationalism, and British spy T.E. Lawrence, David functions as both a cultural artifact in, and an agent of, Prometheus's expedition to the origins of human life, an enterprise that, like the myth of Lawrence, is both

an anthropological recovery of an early phase of civilization (like the myth of Arab purity infusing Lawrence's The Seven Pillars of Wisdom) but aligned with the interests of the industrial-military complex that David serves (in Lawrence's case, Britain's Foreign and Colonial Office). Within the genealogical imagery of the film, David's cyborg body and being is clearly connected to the origin of human life that Weyland desperately seeks. The archaeological cyborg is thus the pivot upon which the film's anthropological fabula turns (of finding the origins of the species, the Engineers) and is also the "cyborg site" into which the diegetic environment of material science functions as a "science fiction": as a non-human marginalized figure, the cyborg David simultaneously embodies and resists the originary trajectory and the racist/specieist discourse that lay at the heart of early anthropological and archaeological thinking. By elevating the cyborg to protagonist, Scott, creates a potentially subversive future history for the Alien franchise itself.

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Through a glass, brightly: Ethics in Robert J. Sawyer's science fiction

The novels of Robert J. Sawyer have contained dinosaurs, aliens, Neanderthals and artificial intelligences. While including these science fiction tropes, his novels have always been about the human condition. These scientific nova are used as a mirror for the reader to examine humanity, with an eye to ethical behavior.
Sawyer once suggested that his novels "fight the good fight about the value of rationalism over superstition, of openmindedness but not credulousness over dogma" (SF Site July 2002). As part of this scientific rationalism, Sawyer's works show continued interest in ethics as an ultimate good.
While his early novels take place in far-future environments, Sawyer's recent novels are in the near future, with relatively few SF tropes.
Darko Suvin once defined science fiction as "a literary genre whose necessary and sufficient conditions are the presence and interaction of estrangement and cognition, and whose main formal device is an imaginative framework alternative to the author's empirical environment" (Suvin 1979: 7-8). According to Suvin's definition, Sawyer's novels are weighted in favour of a world very much recognizable as our own, with specific elements which form the imaginative frameworks.
In novels like the Neanderthal Parallax trilogy, or Wake Watch Wonder, Sawyer presents the reader with reasoned arguments towards an alternative ethical framework, by substituting our human experiences with those of Neanderthals or AI. Through eyes not unlike our own, Sawyer's readers look at society until the light of a new world, illuminating the darkness of our past.

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"Let Me Reveal Your Future!": Robert Sawyer's Use of Prediction in Near-Future Narrative

Sawyer's uncanny predictions have shocked his readership since The Terminal Experiment when he predicted the next pope would adapt the name Benedict XVI; since, he has predicted papal resignations, distinguished Nobel Laureates, and countless significant details that memorialize the present in which he writes as much as the future he imagines. Despite Sawyer's external predictions, his stories treat their internal futures with the same care and relevance to characters as to his readers. From the soothsayers in "The Hand You're Dealt" to the painful predictions littering Flashforward, Sawyer uses the future as both a reflection for his characters' intentions and a funhouse that alters their predicted realities.
In his tendency to occupy the realm of near future within his settings, Sawyer opens the door to predict both the socio-political directions our societies will turn, but also the present that has inspired those directions. Whether he predicts rightly or wrongly, Sawyer's tenacity and tendency to predict supersedes any flaws in his guesswork. The accuracy matters less than the social climate that fuels his predictions. In an analysis of Sawyer's near-futures, his reader experience the climate in which Sawyer originally wrote a given text -- the Flashforward that, published in 1999, retains a post-millennium culture even as it predicts the future of 2009 and glimpses of its twenty-one year future. Despite their near-future speculations, Sawyer's stories recreate his present and the future that present might inspire.
For presentation at the McMaster SF Conference, I propose Sawyer's predictions create a timeless environment of literary speculation that echo our current timeline and vicariously create an image of our impending future. In Sawyer's predictions, I propose that readers find a cultural understanding of the world in which he wrote, and the present in which we, collectively, read as the future.

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Places of Suffering: Spacialising Disability and Trauma in Leah Bobet's Above
Abstract

Leah Bobet's SF novel Above questions the medical and scientific hegemony of our world, particularly focussing on ideas of the 'normalised' body and the impulse by medical practitioners to try to enforce a singular interpretation of the 'proper' body. Bobet explores the implications for diverse bodies, bodies that defy normative notions of the body and the trauma that can be written onto the bodies of people while medical procedures are used to attempt to force their bodies into a normative mold. In attempts to 'rehabilitate' diverse bodies, characters with claws for arms endure them being cut off and replaced with prosthetics, characters with lion feet experience repeated foot bindings and breakages to force their feet into a human shape, and all of the characters are subjected to chemicals to control their behaviour.
To escape from the "Whitecoats" who have tortured them, characters formed their own community called "Safe" where the focus is shifted away from a medicalised interpretation of individuals to individual stories and self-narrativisation - where the figure of the Teller, who saves and re-narrates the community's stories, is the most significant figure. Community is formed through collective stories of trauma and the sharing of traumatic narratives that create a community history and resist the erasure that often occurs to people with disabilities or bodily differences in mainstream historical narratives.
The characters in Bobet's novel have retreated underground, into the sewers to escape from the places of trauma in the city above and when they are forced to return to the city above, they undergo a re-awakening of trauma as history, memory, and space intertwine to reawaken the pain inscribed on their bodies.

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Consciousness in the works of Robert Sawyer

The qualities of lucid style, engaging plots, suspense and humor that characterize the corpus of Robert Sawyer's work are matched by an additional feature which is only rarely found in a developed way among SF writers, namely, solid philosophical acumen. Reoccurring through so many of his pieces is his treatment of the notion of consciousness, whether it be awareness found present in living organisms or a kind of knowing state in a being of some artificial intelligence. The interweaving of analyses of consciousness with the unfolding actions of the author's characters appears in numerous creative ways. In the Nebula winning The Terminal Experiment consciousness is discussed in terms of living and dying humans and computer simulations that instantiate the personal, idealized, or immortalized projections of a human self. In Flash Forward the reader is confronted with the differing awareness of a present and future self. In Awake the implications of the entwining of human and computer consciousness provokes reflection on the individuality and community of mind. The novel Starplex confronts the reader with varied types intelligence (human, animal, and alien) that are all able to communicate. In the Hominids, Humans, and Hybrids trilogy, Sawyer speculates on the origins of consciousness in both humans and Neanderthals. In Mindscan he speaks of the multiplication of consciousness and personal identity while in Calculating God he speaks of the very different types of consciousness of two alien species visiting earth.

The aim of this paper is not simply to examine these manifold glimpses into consciousness (both real and fictional) but also to trace parallel insights found in the major Western philosophers. Sawyer explicitly cites, on some occasions, one or another of the major thinkers. Moreover, insights from Plato, Descartes, Locke, Hegel, and others can be shown to be arising in his work. This philosophical intersection makes Sawyer's literary corpus a rich museum for the exhibition of theories of mind and self.

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Atwood's "Wonder Tale": Old Boundaries and New Encounters

As a genre, SF has come to ambiguously represent diverse classifications and distinctions including, but not limited to,

scientification, science fiction, speculative fiction, and crossovers into fantasy. In her work, In Other Worlds: SF and the Human Imagination, Margaret Atwood explains how "bendiness of terminology, literary gene-swapping, and inter-genre visiting has been going on in the SF world - loosely defined - for some time." Interdisciplinarity is inherent within the genre, thus enabling a vast exploration of "those imagined other worlds located somewhere apart from our everyday one: in another time, in another dimension, through a doorway into the spirit world, or on the other side of the threshold that divides the known from the unknown" and "all of them might be placed under the same large 'wonder tale' umbrella" (Atwood).

Interdisciplinarity can also be extrapolated beyond the genre. The "wonder tale" serves as a critical location wherein experimental socio-political dream work can be hypothesized and realized within fiction and beyond the limits of the social and biological sciences. In particular, an examination of the increasing effects of globalism as it relates to the environment, science, and technology can be stretched beyond what we may currently envision and/or experience in our world. Atwood's novel, Oryx and Crake, confronts the consequences of increased corporatization in a globalized market such as genetic modification, decreased biodiversity, and the effects of global warming over transnational boundaries. This grand hypothetical, framed by an understanding of David Held and Anthony McGrew's concepts of globalism, encourages readers to draw conclusions surrounding the present reality of "societies becoming increasingly enmeshed in worldwide systems and networks of interaction" as the "constraints of social time and geographical space" present increasingly complex socio-cultural encounters and interactions across transnational boundaries thus shifting the way we understand our world economically, culturally, and politically.

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Queer Time, Postcoloniality, and Canadian SF

This paper considers tropes of time travel within Canadian works that are not necessarily science fictional, or that are not always considered as science fiction, in the light both of contemporary theoretical work on queer time and queer phenomenology and of postcolonial approaches to literature and to science fiction in particular. The paper will compare the use of historical figures in the work of Nalo Hopkinson, particularly Salt Roads, and of Geoff Ryman (both Was and Lust), in contrast to the films of queer Canadian director John Greyson, whose work frequently mobilizes historical figures translated into the present (notably in Urinal, Zero Patience, and The Making of 'Monsters') in ways that, while not normally taken as science fiction, are remarkably science fictional. The paper will thus use these works as exemplars through which to examine the relationship between theoretical ideas of queer time, postcolonial literary theory, and Canadian SF. Although none of these works involve straight-forward time travel, they all involve dislocations in time that reference ideas about time travel and that, in reorienting the reader/viewer to a queered perspective on history, allow us to think queerly about our relations in and to time.

After examining the ways in which the inherently interdisciplinary nature of theories of queer time and queer phenomenology function to elucidate new understandings of historical time in these works, this paper will consider the extent to which contemporary queer theory allows for new and productive insights into science fiction more generally – something for which the tropes of queer time/queered history function metonymically, as they allow new lenses into the ways in which contemporary queer theory can be brought to bear on particular science fictional devices.

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On Cytosine Methylation…

Methylation of DNA involves the placement of a small methyl group, that is a molecule consisting of one carbon and three hydrogen molecules onto the outside of one of the four DNA bases that make up our genome. In this case it happens to be a Cytosine (C). Amazingly the presence or absence of this small molecule dictates which genes get turned on (expressed) or off (no expression), leading to a cascade or perhaps a cacophony of events in our cells, bodies and minds, perhaps even influencing the patterns of people around us. Most intriguingly these patterns appear to control memory, amongst other things, both short and long-term. I am in the midst of exploring how manipulation of these patterns (genetically) could alter memory and hence identity in a real and fictional format. I would expand on my recent attempts (painful I might add – as I am no writer) to put this line of research into a futuristic context in the development of a script I have been working

on for quite some time.

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Hockey & Science Fiction in Canada: 'A Combination Seen Rarely But in Québec'

In an article entitled 'Sport-Fiction,' Jean-Pierre April a pioneer of Québec's contemporary science-fiction movement (SFQ), argued that hockey and science fiction are a combination but rarely seen outside Québec, but natural for the majority-francophone province since 'la S.F. se nourrit tout naturellement de grands mythes populaires, ou de fantasmes collectif, and that in Québec hockey represents one of the most powerful of these myths. Elsewhere, I have examined how science-fiction writers from Québec—even writers of youth fiction—offer complex and ambivalent reflections on what they label the 'sport national du peuple québécois.' Since hockey is generally viewed as a marker of the 'Canadian' that unites the two solitudes, it seemed only natural to extend my investigations of the intersection between hockey and science-fiction into the realm of Anglo-Canadian literature.

This paper sketches the beginnings of that research, linking the Québécois to the Canadian via a look at the hockey references in the visual media franchise, Dans une galaxie près de chez vous. After a fleeting examination of how mainstream hockey novels may borrow fantastical elements (namely in the writing of Paul Quorrington) and how sf novels may mention hockey (Ven Begamudré's Van de Graaf Days), I then analyze in greater depth two Anglo-Can hockey-themed short stories by Edo van Belkom in genres peripheral to sf: an alternate history, "Hockey's Night in Canada" (1996), and a horror story, "Heart" (2000). This paper not only examines the interdisciplinary relationship between an actual sport and its discourses (journalism, history, sport biography) and science-fiction media (short story, novel and visual media), it implements an interdisciplinary toolbox, drawing from sport history and sociology, as well as from literary criticism.

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Games, Minds, and Sci Fi

Sci Fi, probably more than other popular literature, directly deals with the deep sociological and philosophical problems of the age. Dealing with the problem or implications of the mind is at the heart of the work of some of the most influential theorists of the 20th century: Wittgenstein (language games), Von-Neumann and Morgenstern (economic games) and Bern (games people play). Understanding and representing interactions between agents who are aware of each other as conscious and thinking beings (agents with a theory of mind) has been the major challenge and accomplishment of of 20th century philosophy and social science. It has also been a core concern in science fiction, particularly in the form of the alien or the (alien) future or past human society.

This paper looks at theories of mind in Sci Fi by mapping specific works onto the formal theories in linguistics, game theory, psychology and philosophy. It attempts to illuminate an important feature of 20th century thought present in Sci Fi through its representation in an admittedly partial selection of Sci Fi stories and Novels, with specific reference to the works of Rob Sawyer.

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Travelling in the Country of the Mind: Greg Bear's Queen of Angels/Slant and personality crisis

Three characters in Queen of Angels and then Slant experience personality crises which involve transformations. The protagonist Mary Choy has undergone extreme physical alteration. The poet Emmanuel Goldsmith has murdered a small cohort of young followers; while being hunted by the police Goldsmith is hidden by the father of one of the victims, who arranges a banned process of personality examination which he hopes will help him understand why the murders were committed. Bear's character, Martin Burke, theorized that archetypal mental personality structures grow with us from childhood, taking form as a kind of 'place' for the life of the mind, growing richer and more complex with age. Burke's process uses neurological scans on a subject, along with himself and a colleague, which allow him and a fellow voyager to examine the 'country of the mind' as though participating in the subject's personality as observers; discovered in jobless

ignominy by the wealthy father, he and a former colleague go into a kind of territory in Goldsmith's mind which Burke had never imagined existed in a human being. Mary Choy, as a police officer involved in the search for Goldsmith, enjoys her transformation from a small, physically unremarkable Chinese-American woman into a very tall, jet-black woman with many unusual abilities (not least of which are her untiring feet, ideal for a cop on the beat), while dealing with her family's complete rejection, and her unresolved pain, as a result. An AI, Jill, becomes self-aware, which causes her to shut down in order to understand this new state; having overcome this crisis, she is invaded and occupied by a completely different kind of AI designed by a rogue researcher who generates and roots its operation in insect neurology and dirt.

Emmanuel Goldsmith, respected poet; Mary Choy, police officer and transform; and Jill, AI, are vehicles for models of the personality within Martin Burke's theory and process. Bear's array of scientific, psychological and science fiction methodologies for examining personal crisis and change correspond, in some ways, to known neurological territory, and merge with some aspects of Jungian theory; but his fiction is a revelation of how utterly different approaches to 'the mind' via neurology and archetype are mutually compatible. My paper will lay out this compatibility and assess its possibilities as a possible model of the mind.

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The Utopian Uses of Anthropology: L. Taylor Hansen and Robert J. Sawyer

In the late nineteenth century and early twentieth century, a number of feminists turned to evolution and anthropology to imagine perfectly engineered societies that liberated women from patriarchal oppression. Charlotte Perkins Gilman's Herland used Darwin's concept of sexual selection to posit a utopian community where women had control of reproduction, allowing them to develop a world without conflict that was in balance with nature. At the dawn of World War II, L. Taylor Hansen used insights from contemporary anthropology in a more subtle fashion to challenge many of the ideas and ideologies that were central to the global conflict. For example, in the July 1942 issue of Amazing Stories Hansen published a multi-page essay entitled "The White Race—Does It Exist?" Using insights from Boasian anthropology, Hansen carefully undercuts the conceit that the "white race" is somehow more evolved than other races. In doing so, she undercuts not only the rhetoric Nazis were using to justify their atrocities, but also the rhetoric used by many in the United States to characterize the war in the Pacific. Over a series of essays, Hansen also used current ideas from geology and anthropology to posit a utopian lost race of people from Atlantis who were the ancestors of Indigenous Americans. Using Hansen's work as a touchstone, this paper will explore the ways in which Robert J. Sawyer uses contemporary anthropology to create an alternative world in his Neanderthal Parallax trilogy (2002-2004). Like Hansen, Sawyer uses recent discoveries about the cultures and characteristics of Neanderthals in his vision of a not-quite-utopian world where Neanderthals became the dominant Hominid on the planet. Sawyer uses this anthropological lens to criticize the contemporary culture of warfare. As such, his novels use anthropology to provide a scathing critique of the ongoing wars in Afghanistan and Iraq, and to imagine more peaceful and ecologically sustainable futures.

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Mapping "It 2.0": The Utopian Potential of Virtual Space in Karl Shroeder's "To Hie from Far Cilenia"

Karl Shroeder's short story "To Hie from Far Cilenia" explores how virtual technologies contribute to the development of alternative utopian spaces and, by extension, alternative social and political economies. While searching for stolen plutonium, protagonists Gennedy and Miranda must navigate a series of ARGs – Alternate Reality Games – that function as virtual overlays that modify physical spaces. These are interactive and multiple-player games accessed through virtual reality glasses. While ARGs do have goals and levels, they function as more than mere entertainment, and it is their spatial dimension that is most appealing to participants. While the real world is mapped according to stable coordinates that situate individuals "in place," ARGs dismiss stable places and focus alternatively on the mapping and re-mapping of "nodal points" or attractors that represent shifting networks of social and political relations. This creates the effect of non-linear and effervescent online worlds that conflict with and modify the "real" maps of physical space. This paper explores how these alternative maps – dubbed "It 2.0" within the story - have deterritorializing effects that enable the production of utopian spaces in opposition to capitalistic economies and social relations. I employ Michel de Certeau's theory of space and place as well as Deleuze and Guattari's distinction between territorialized and deterritorialized space and mobility to argue that the virtual

worlds within "To Hie from Far Cilenia" cause a fundamental rearticulation of spaces and socio-spatial practices. Whereas the virtual realm is often articulated as a space of capitalistic capture in commodified landscapes, "To Hie from Far Cilenia" demonstrates the potential of virtual worlds as productive overlays to the material world that allow for emergent and utopian forms of community, mobility, and spatial practices.

Jonathan Smith, PhD Candidate, Wilfred Laurier

Be (More or Less) Human: Recognizing Emotions In Dreaming Idols, Curious Weapons, and Other Assorted Objectified "Others"

In my paper I examine the increasing blurring of the material and the virtual in relation to the construction of emotion as central to subjectivity. Using a framework composed of recent affect, feminist, and critical posthumanist theories, I discuss William Gibson's 1996 novel Idoru and Kenji Kamiyama's 2002-2003 animated series Ghost in the Shell: Stand Alone Complex and demonstrate how in these texts subjectivity formation is increasingly less based upon particular physical embodiments and experiences. Rather, the ability to perform, and more importantly express, certain kinds of emotions are what enable certain subjects to be recognized as "human" within the physical, virtual, and social networks which contribute to individual senses of self. The significance of such representations increases when we recognize the ways in which they suggest a progressive ethics for inter-connected subjects, and how those subjects complicate contemporary debates and anxieties around liberal humanist conceptions of individuality, rights, and citizenship in a networked world.

Jason P. Vest, Guam, <japaves@yahoo.com>

Chasing Darwin: Race, Space, and Star Trek: The Next Generation

Although the Star Trek franchise has long been noted for examining racism within its future history, the Original Series frequently represents nonwhite peoples as different alien species, thereby endorsing—even while contesting—persistent racial stereotypes. Despite its groundbreaking multiracial cast, the original Star Trek's (1966-1969) fictional linking of Klingons with Africans and Romulans with Asians is less progressive than the program's most ardent fans admit. Star Trek: The Next Generation (1987-1994), although continuing its parent program's general approach to racism in early episodes (none more notorious than "Code of Honor"), contests racial stereotypes with increasing sophistication as the series unfolds. This presentation will discuss how TNG's sixth-season episode "The Chase" fuses archaeological and anthropological approaches to racial difference in a story that suggests a common genetic background for the Trek franchise's many humanoid species. The existence of an ancient, ancestor species that seeded the Milky Way Galaxy extends Charles Darwin's evolutionary theory onto a cosmic scale to set TNG apart from its famous predecessor even while maintaining internal continuity with the Original Series.

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To Corrupt and Control the Present in Order to Win the Future": Continuum as Post 9/11 Television

Stacy Takacs argues in Terrorism TV, that science fiction television is able to dissent from a hegemonic politics of fear "by absorbing real-word issues into the relatively 'safe' realm of fantasy" and creating "a space for alternative solutions to emerge." My paper will read the time-travel series Continuum as an example of such alternative post-9/11 visions. Although the series begins as a conventional time travel narrative striving to secure the "proper" future, as it unfolds we develop a paradoxical relationship to this promised future. Its celebration of technology, progress and their achievement through stable corporate order is undermined as more details of the relationship between present and future are revealed, and protagonists come to embrace changing rather than securing the future.
Continuum displaces the anxieties of terrorism to 2077, with 2012 serving as the hinge point when a decisive terrorist attack changed the world and shaped their present. In this future history, terrorism is associated with resistance to the

corporate neoliberal takeover of our present: the erosion of human rights in favour of corporate profit; the displacement of farmers and privatization of food through terminator seeds; and the crushing debt into which citizens are born while corporations are "bailed out" by government fiat.

Through its reworking of the typical pattern of the time travel narrative, then, Continuum obliquely comments on our own post-9/11 world, reframing our understanding of the last decade. The important legacy of 9/11, it suggests, is not a newfound vigilance against terrorism but instead a political polarization toward the right. In this way, Continnuum reveals the ongoing work of neoliberalism to "corrupt and control the present in order to win the future" – a future viewers, as democratic citizens, are urged to change from our own vantage point in 2012.

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(Re)Negotiating Reality: Karl Schroeder's Near-Future Metatropolis

This paper addresses the negotiation of virtuality, materiality, and temporary stability in Karl Schroeder's short story "To Hie from Far Cilenia" (published in the 2008 anthology, Metatropolis). Schroeder's story is an examination and extrapolation of the complexities and challenges of postmodern subjectivity and post-national social organization. Living in the me(ta)tropolis of the not-so-distant future, the characters of "To Hie from Far Cilenia" find themselves in a world where national, economic, and even personal stability are only temporary. This is also an environment where traditional forms of representation – from political and legal organizations to maps and language – no longer adequately convey the shifting fluidities of late modern reality. The characters who seem best equipped to operate in these fluid networks are gamers. Embracing the virtual and augmented realities of game play and developing new "pointing words," these characters free themselves to put on multiple identities like the coats of uniforms, even "riding" the bodies of other players to conduct activities in disparate regions of the world. Finding new ways of speaking and interacting, these game players are able to then imagine, perform and construct a kind of countercultural alternative to existing forms of sociopolitical and socioeconomic organization. As Schroeder's protagonists penetrate deeper into these games, the interaction of virtual and material realities becomes increasingly complex but, importantly, the virtual is never 'liberated' from the material. Human relationships (between mother and son, for example) continue to influence characters' actions, destructive political factions continue to operate, and material objects (such as plutonium) prove to be enduringly "real" in their effects. Ultimately, Schroeder's story champions the creative and pragmatic power of game play and new linguistic frameworks for helping us negotiate political, economic and personal realities, but the author reminds us of material accountabilities, that the virtual is a tool, not a route of escape.

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Liberating the Future: Feminism and Anthropology in Women's Pulp Era SF

This presentation explores how women in the 1920s and 30s used SF to participate in anthropological debates about the past, present, and future of humanity, especially as marked by different kinds of sex and gender organization. Yaszek begins by reviewing women's work in anthropology during this period, noting, in particular, women's use of poetic narrative forms to complicate the (dryly scientific) arguments of their male counterparts. She then turns to a more extended consideration of the diverse ways that women publishing in the early SF magazine community used their chosen genre—and the different modes of representation associated with it—to contribute to ongoing anthropological debates within scientific journals. Broadly speaking, these contributions can be divided into three types. Many women, such as the poet Julia Boynton Green, were SF centrists, reiterating the anthropological ideals of their male counterparts in both science and SF. However, even in their most seemingly conventional moments, such women often asserted a distinctly feminine (and even feminist) anthropological authority grounded in both intellect and emotion. Others, such as author Lilith Lorraine, demonstrate a second kind of contribution, using conventional SF story types including the lost race tale and technological utopia to dramatize feminist arguments linking racial evolution to female liberation. More often than not, such stories also dramatized the evolution of the male narrator whose commitment to science leads him, however reluctantly, to accept female liberation as key to human progress. Authors demonstrating a third kind of contribution capitalized on the most sensationalistic aspects of anthropology to expand the audience of the genre itself. This is particularly true of artist Margaret Brundage, whose