

Communiqué

SOCIÉTÉ CANADIENNE D'HISTOIRE ET DE PHILOSOPHIE DES SCIENCES

CANADIAN SOCIETY FOR THE HISTORY AND PHILOSOPHY OF SCIENCE

N° 86

Winter/L'hiver 2014

CSHPS ANNUAL MEETING 2014 CALL FOR PAPERS

Le Français Suit

The Canadian Society for the History and Philosophy of Science (CSHPS) is holding its annual conference as part of the Congress of the Humanities and Social Sciences (CFHSS) at Brock University, May 24-26, 2014.

The program committee invites scholars working on the history and philosophy of science to submit abstracts for individual papers or proposals for sessions. Proposals for sessions (3 and 4 paper) are particularly encouraged.

Meeting languages. The CSHPS is a bilingual society. Individual papers may be given in English or French, but efforts to broaden participation are appreciated (e.g. a presentation in English could be accompanied by a PowerPoint in French, and vice versa). Similarly, sessions can be presented in either English or French, but bilingual sessions are especially welcomed.

Joint sessions: The CSHPS meeting overlaps with the meeting dates of a number of other member societies of the CFHSS, including the Canadian Historical Association, Canadian Philosophical Association, Canadian Association for the History and Philosophy of Mathematics, Canadian Sociological Association, Women's and Gender Studies et Recherches Féministes, Canadian Society for the History of Medicine and the Environmental Studies Association of Canada. We welcome proposals for joint sessions with these and other societies. However, no talk will be accepted for presentation at more than one society.

Number of submissions : Individuals can only submit one abstract for the CSHPS meeting (i.e. either an abstract for an individual paper or and abstract part of a session proposal).

Submissions

In order to preserve the anonymity of authors, it is important that contact information and other identifying information be excluded from the file containing the abstract.

Individual paper submissions should consist of a title, a brief abstract (150-250 words), and—in the accompanying email—the author's name and contact information. Session proposals should consist of a session title, titles and brief abstracts (150-250 words) for each paper, and—in the accompanying email—the names and contact information of the presenters and session organizer. Proposals should be in MS Word, pdf, or rtf format.

Deadline: February 2nd, 2014

Submission email address: program.cshps@gmail.com

Presenters: All presenters must be members of the CSHPS at the time of the meeting. For more information about CSHPS membership, consult: <http://www.yorku.ca/cshps1/>.

Student Prize: The CSHPS offers the Richard Hadden Award, a book prize for the best student paper presented at the meeting. To be considered for the award, students should submit a copy of their paper by e-mail five weeks

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Communiqué

Newsletter of the
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www.cshps.ca www.schps.ca

Please direct submissions and inquiries to Sofie Lachapelle or Aryn Martin, preferably by email (details below). Please note that submissions should be sent in both official languages. The editors are grateful to York University for assistance in printing and mailing costs, and to the University of Guelph for providing the necessary software.

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prior to the congress (i.e. April 20, 2012) Details of this prize can be found at: <http://www.yorku.ca/cshps1/HaddenPrize.htm>

CFHSS: Information about Congress registration and accommodation will be available at the CFHSS website: <http://www.fedcan.ca/>.

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APPEL DE COMMUNICATIONS

La Société canadienne d'histoire et de philosophie des sciences (SCHPS) tiendra son congrès annuel dans le cadre du Congrès des sciences humaines (FCSH) qui se déroulera à l'Université Brock du 24 au 26 mai 2012. Le comité de programme invite les historiens et philosophes des sciences à soumettre un résumé pour une communication individuelle ou une proposition de séance pour le congrès. Les propositions de séances pour 3 ou 4 communications seront particulièrement bienvenues.

Langues du congrès : La SCHPS est une société bilingue. Les communications individuelles peuvent être en français ou en anglais mais les efforts pour faciliter

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une participation diversifiée sont encouragés (par exemple, une communication en français accompagnée d'une présentation PowerPoint en anglais, ou vice-versa). De façon similaire, les séances peuvent être en anglais ou en français, mais les sessions bilingues sont particulièrement appréciées.

Nombre de soumissions : Une personne ne peut soumettre qu'un résumé de communication (c.-à-d. soit pour une communication individuelle soit pour une communication faisant partie d'une séance).

Soumissions

Afin de préserver l'anonymat des auteurs, aucune coordonnée personnelle ne doit être incluse dans le fichier contenant une proposition de communication.

Les propositions de communication individuelle doivent comprendre un titre, un résumé (entre 150 et 250 mots) et, dans le courriel les accompagnant, les coordonnées de l'auteur.

Les propositions de séance doivent comprendre le titre de la séance, les titres et résumés (entre 150 et 250 mots) de chaque contribution et, dans le courriel les accompagnant, les noms et coordonnées des auteurs et de l'organisateur de la séance.

Les propositions doivent être soumises dans des fichiers de format MS Word, pdf, or rtf.

Séances conjointes : Le congrès de la SCHPS se déroule en même temps que ceux de plusieurs autres sociétés membres de la FCSH, comme la Société historique du Canada, l'Association canadienne de philosophie, La Société Canadienne d'Histoire et de Philosophie des Mathématiques, la Société canadienne de sociologie, Women's and Gender Studies et Recherches Féministes, la Société canadienne d'histoire de la médecine, et l'Association canadienne d'études environnementales. Nous encourageons les propositions de séances conjointes avec d'autres sociétés. Cependant, aucune communication ne peut être présentée à plus d'une société.

Présentateurs : Tous les présentateurs doivent être membres de la SCHPS au moment du congrès. Pour plus d'information sur l'inscription à la SCHPS, consulter le site : http://www.yorku.ca/cshps1/index_fr.html

Date limite de soumission: 2me février 2014.

Email: program.cshps@gmail.com

La SCHPS décerne le prix Richard Hadden pour le meilleur texte étudiant présenté lors du congrès. Les candidats au concours devront envoyer par courriel une copie de leur article au moins 5 semaines avant le début du congrès (c.-à.-d. le 20 Avril 2014). Pour informations, visitez le site web : http://www.yorku.ca/cshps1/HaddenPrize_fr.html

Les informations concernant l'inscription et les possibilités d'hébergement pour le congrès se trouveront sur le site web de la FCSH: <http://www.fedcan.ca/>.

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Showcasing Our Graduate Students

Psychological Tests at Work: The Humm-Wadsworth Temperament Scale in Interwar America

Kira Lussier

"Do you like to meet people and make new friends?" "Do you like variety in your work?" "Are you a good mixer?" "Do you ever blush?" These are just a few of the 318 questions that appeared on the Humm-Wadsworth Temperament Scale, a psychological test that sought to probe the depths of test-takers' psyches to reveal their attitudes, emotions, and social disposition. The creators of these questions were an industrial psychologist, Doncaster Humm, and a personnel manager, Guy Wadsworth, who first met in 1932, while Humm was lecturing on industrial psychology to an audience of personnel managers that included Wadsworth. Wadsworth was particularly attuned to the talk, as a newly-fired employee at his company had recently murdered his former supervisor. Wadsworth approached Humm after the lecture seeking his help in developing a screening system to keep out 'problem employees' like this disgruntled murderer.

After testing the questions on employees at Wadsworth's own company, the scale was published in

1935 and marketed to corporate America, using business-friendly language, as a way to improve personnel practices. In writings addressed to psychologists, personnel managers, and the general public, Humm and Wadsworth heralded their temperament scale as a scientific tool that could reveal subjective emotional traits of an individual in an empirical, objective fashion to predict job-seekers' behaviour at work. They claimed that the test could help personnel departments hire temperamentally normal workers and screen out maladjusted, 'problem employees,' and thus that companies who adopted the test would gain a more efficient, productive, and harmonious workforce. And corporate personnel departments, including Lockheed Aircraft Company, heeded their call: by 1942, the test had been taken by over two million Americans.

This test is one object that appears in my broader dissertation project, which traces the history of personality testing in American workplaces from the end of World War I until the Cold War. The HWTS was one of hundreds of other tests of attitudes, emotions, and interests that were created during the 1930s; why I'm interested in this particular test is because it was one of the first psychological tests to be specifically created with business uses in mind. This object was both a psychological assessment technique and an administrative device: its intended use was to evaluate the psyche of individuals as a way to evaluate their suitability for the workforce. This relatively simple technology—requiring only a few pieces of paper and a pencil to write—was intended to be easily administered to large numbers of people, and scored equally rapidly. Thinking about this particular test, and psychological tests more broadly, as material objects offers an illuminating perspective on the conjunction of the history of psychology and the history of business in interwar America. What particular kind of values, assumptions, methods, and theories are embodied in this test, sitting as it does at the intersection of science and industry?

I can only provide brief answers to this question here. Humm and Wadsworth defined temperament as the part of one's overall personality that was responsible for social and emotional regulation—for adjusting to the environment, and particularly the social environment at work. Drawing on a psychiatric theory of personality, they divided temperament into seven components, each of which had a technical, medical name and a de-

scription in ordinary adjectives: hysteroid (selfishness), manic (excitement, drive), depressive (sadness, worry), autistic (shyness), paranoid (suspicion, conceit), epileptoid (inspiration, single-mindedness), and lastly, the tellingly-named 'normal' component. This last one was the component responsible for balancing and integrating the rest of the components, commonly described as self-control, or the "brakes" on the emotions. This test was not, as these descriptions may suggest, a theory of 'types'; the test results would instead show the degree of strength of each of these traits, understood to exist in everyone to varying degrees. What was crucial is that an individual's personality was well-balanced, through a sufficiently high degree of 'normal'—in this understanding, well-balanced individuals would result in a well-balanced workplace.

Questions interrogated the subjects' attitude towards work, towards other people, and towards themselves. This concern with the social relations in the factory, and Humm and Wadsworth's claims that use of the test could secure harmonious labor relations, resonated with the emerging 'human relations' approach to management, promulgated most famously by Elton Mayo. Human relations suggested that the emotional and social disposition of workers was key to harmonious labor relations overall—which, for corporate management who were adopting the test, was understood as decreased union agitation. In my larger project, I suggest that the assumptions built in to this understanding of temperament, and the continued practice of temperament testing throughout the 1930s and 1940s contributed to an understanding that labour relations and labour unrest in the workplace could be explained in terms of the affective dispositions of workers.

The Humm-Wadsworth Temperament Scale itself may have fallen out of widespread use, but the practice of testing workers' personality, emotions, and attitudes has become even more pervasive in contemporary corporations. One of the most widely-used tests today is the Myers-Briggs Personality Inventory: its creators were inspired to create their personality test by a 1942 article in Reader's Digest featuring the test. Average Americans encountered the test through articles like this, and through the increasingly popular practice of workplace psychological testing. This object is thus one important avenue through which millions of people came in contact with psychology: it shows that psychology was never an

isolated laboratory enterprise, but deeply embedded in the values and practices of its society. A case study of this once-well-known test, the Humm-Wadsworth Temperament Scale, can open up exciting questions about the intersection of applied psychology and personnel management in mid-twentieth-century America. By unpacking the history of this fascinating old test, and the many others like it, I hope to shed light on how and why we came to think that a psychological test can reveal profound truths about our personality at work.

Kira Lussier is a doctoral candidate at the University of Toronto's Institute for the History and Philosophy of Science and Technology. Her dissertation traces the history of personality testing in North American workplaces from the end of World War I until the Cold War.

Disordering (Inter) Sex Development: A Foucauldian Analysis of the Reclassification of Intersex Conditions as "Disorders of Sex Development"

Catherine Clune-Taylor

In 2006, the American and European professional associations for pediatric endocrinologists jointly published a special article titled "Consensus Statement on Management of Intersex Disorders" outlining the first official proposed revision in both treatment model and classification for these conditions since the development of the Optimal Gender of Rearing treatment model by Dr. John Money and his colleagues at Johns Hopkins Medical Center in the 1950s. The publication of the Consensus Statement represents a watershed moment in the entangled histories of intersex activism and feminist academic scholarship critiquing the pathologization of intersex conditions and their traditional treatment in infants and children unable to consent with medically unnecessary genital normalizing surgeries — often at the sake of later sexual function — as unethical, heterosexist and scientifically unfounded. Not only did both play a role in the pressuring clinicians to attenuate their support of the OGR model and officially revise the clinical standards for these conditions, but both have been the site of heated, divisive debate following the Consensus Statement's controversial reclassification of intersex conditions as "disorders of sex development" or DSDs, and the participation of some of those very same activ-

ists and academics previously critical of pathologization in the nomenclature's development, most notably the founding organization of the intersex activist movement — the Intersex Society of North America. For many of these former critics, their involvement in the adoption of the DSD nomenclature was strategic, situating the problem of intersex conditions within a highly medicalized framework was a way of meeting health care professionals "where they lived," so to speak, so as to better facilitate positive change at the level of the treatment model. The failure of this effort to achieve the only thing pretty much everyone involved in intersex activism and feminist academic critique agreed upon — a moratorium on medically unnecessary genital normalizing surgery — has elicited tense, at times visceral reaction in both arenas. In her currently untitled dissertation, University of Alberta Philosophy PhD Candidate Catherine Clune-Taylor provides a Foucauldian analysis of the move to DSD, critiquing the nomenclature, the treatment model and the arguments in its favour on ethical, sociopolitical and scientific bases, situating the reconceptualization of intersex conditions specifically as disorders of sex development within the larger history of what Michel Foucault refers to in the *History of Sexuality*, Volume One as the production of the "fictitious unity of sex," or the materialization and naturalization of dimorphic sex. Clune-Taylor traces the production and management of dimorphic sex through the related recent histories of biomedical science on and medical management of both sex and gender. Beyond an evaluation of the scientific theories and evidence underwriting the new clinical treatment model for intersex conditions as DSDs, Clune-Taylor examines the way in which the reclassification and treatment model function as incitements to produce knowledge the science of sex differentiation and of gender development (much of which is at best statistical and of little clinical use) and further, reinforces the constitution of the those with intersex conditions and trans* persons as objects of scientific knowledge. After considering some of the ways in which the knowledge produced in these fields is used to govern the gender and sex of everyone (intersex *trans or otherwise) within the clinic and elsewhere, she concludes by providing an outline of what an ethical approach to intersex conditions might look like according to Foucauldian accounts of freedom and technologies of the self, in light of the limitations of our current neoliberal context.

Catherine Clune-Taylor is a PhD student in the Department of Philosophy at the University of Alberta. Her dissertation undertakes a Foucauldian analysis of the 2006 clinical reclassification of intersex conditions as “Disorders of Sex Development,” as well as the ethical, sociopolitical and scientific arguments that have been offered in its favour, and situates this shift within larger histories of both the biomedical science on and the medical management of sex and gender. In 2013, Clune-Taylor presented at the annual meetings of philoSOPHIA: A Feminist Society, the Foucault Circle, and the Canadian Philosophical Association (CPA) and she currently holds positions on the CPA’s Equity Committee and on the executive of the Canadian Society for Women in Philosophy (CSWIP) as a graduate student representative.

Sheep, Sugar, and Steam: Networking Science in the Atlantic Enlightenment

Marc MacDonald

My research focuses on a British-Franco-Swiss network centred on the Delesserts, a family of Huguenot bankers in Paris. This network transmitted Enlightenment science and industry into the nineteenth century. The Delesserts’ Franco-Swiss heritage bound them to Jean-Jacques Rousseau (1712-78). His friendship fostered passion for botany and education. The family parlayed this bond into links to Birmingham’s Lunar Society, Genevan radicals, and British reformers. In the 1780s these groups participated in educational exchanges, which expanded into industrial ones. The Delesserts negotiated with Boulton & Watt for steam engines to supply Paris with water, Lyon flourmills with power, and France with coins.

Members of the British-Franco-Swiss network lived the Industrial Enlightenment, by quietly cultivating their gardens and industries. The network comprised of British Francophiles and Continental Anglophiles, including Huguenots, British Dissenters, and Swiss savants. Consequently, they sought practical application over philosophizing and self-promotion. Rousseau was an early uniting force for these families on both sides of the English Channel. He wrote the *Letters on Botany* (1781) for Madeleine-Catherine Delessert (1747-1816) to instruct her daughter, and the family was deeply in-

fluenced by Emile (1762). Yet, in the 1780s they became linked to British scientific and industrial leaders. Ironically it was Rousseau’s great rival Voltaire (1694-1778) who provided a better assessment for the future of the Delessert family and its network.

Voltaire was one of the most vocal proponents of Newtonianism on the Continent during. This support did not, however, extend to faith in Biblical prophecy. Yet, Voltaire predicted several trends that dominated the Industrial Enlightenment. Ever crafty Voltaire amassed a personal fortune by making shrewd financial decisions. He wagered wisely in choosing exile in England, over another stint in the Bastille, leading to him championing English toleration, industry, Baconianism, and empiricism. In *Letters on England* (1733) he argued that England’s limited toleration led Protestant Dissenters, blocked from holding office, to take up commerce. Sons of Dissenters made wealthy from their fathers’ industries would, Voltaire argued, join the dominant religion to be fashionable.[i] This was meant to critique the persecution of industrious Huguenots, forced to flee France in the 1680s, which fuelled the industries of its rivals. In the 1760s Voltaire personally drew Huguenots back from Geneva, by transforming his estate at Ferney into a minor industrial town. Ultimately, he promoted his message with both words and deeds. Voltaire did not live to see it, but the issues he raised came to fruition near century’s end. Dissenters in England’s Midlands grew rich and powerful from industry and commerce. Likewise, Huguenots returned in large numbers to France. Yet, this did not incline either group to joining the state Church, as Voltaire promulgated. It instead often resulted in an outcome he would have much preferred, their adherence to his church of secularism.

In the last decade of the eighteenth century a threat of religious violence, sparked by reformations, was replaced by political violence from revolutions. Subsequently, the British-Franco-Swiss network reunited in Paris in 1801-2, with the Peace of Amiens. The French Revolution and consequent wars dispersed the network like the main characters in Voltaire’s *Candide* (1759). Many people closely tied to the Delesserts, like *Candide*’s friends, were forced to flee across Europe or to cross the Atlantic Ocean to the Americas. There were distinct British, French, and Swiss schemes to found utopian colonies in America. People linked to the Delessert network were part of these projects. However,

they all failed to establish an Eldorado. Success came instead from practical plans. As Candide prepared to return to Europe he explained to his valet: “If we stay here, we shall be no different from anybody else; but if we go back to the old world with a mere twelve sheep laden with Eldorado stones, we shall be richer than all the kings of Europe put together.”[ii] The Delesserts’ network, again like Candide, sent sheep across the Atlantic. This brought great wealth to their owners, however, these sheep were sent from the ‘old world’ to the ‘new world.’ Their value was not from Eldorado stones found in their wool, but the actual wool itself. Finally these sheep were not big red South American sheep, but small yellow purebred Spanish Merino sheep.

My current research explores the expansion of the Delesserts’ network into the Atlantic World. Rapidly shifting European politics led to the deaths and arrests of some members of the British-Franco-Swiss network, while others fled to America. However, these same forces also created new opportunities. When Spain ceded its part of Saint-Domingue to France in 1795, and lost its monopoly on Merino sheep, Etienne Delessert (1735-1816) led the importation of 4,000 sheep to France. In 1801, Delessert sent four rams on a ship named the Benjamin Franklin for his New York farms. The sheep shared a cargo hold with materials that E.-I. du Pont (1771-1834) had collected in France to establish his gunpowder manufactory in America. Only one ram, Don Pedro, survived the Atlantic crossing. Consequently, Delessert was credited with introducing the first full-blooded Merino ram to America. Pedro’s great progeny would prove critical for America’s Merino mania and its indigenous wool industry.

The formation of a British-Franco-Swiss-American network, about 1800, led to the encouragement of indigenous industry throughout the Atlantic World. French and American officials, seeking to counter Britain’s industrial dominance, collaborated to improve wool and gunpowder production. They succeeded despite a British naval blockade, Napoleon’s Continental System, and America’s Embargo Act. Such measures encumbered trade, depriving France access to overseas possessions and vital staples like sugar. Top French scientists were given substantial state funding, over the next decade, to find alternatives. But it was Benjamin Delessert (1773-1847), an amateur chemist and botanist, who discovered the method for the mass production

of beet sugar in 1812. Sheep, sugar, and steam united the Delesserts’ network and its Enlightenment traffic, forming triangular trade across the Atlantic World. The Delesserts continued cultivating their garden, into the nineteenth century, by promoting science and industry over the English Channel, the Atlantic Ocean, and beyond.



photo credit: Hagley Museum and Library

[i] Voltaire, *Letters on England* (Harmondsworth: Penguin, 1980), pp. 35-6.

[ii] Voltaire, *Candide or Optimism* (New York: Penguin, 1947), p. 82.

Marc MacDonald is a graduate student at the University of Saskatchewan. His PhD focuses on the emergence and expansion of the Delessert family’s British-Franco-Swiss network. His dissertation is titled “Crossroads of Enlightenment, 1685-1850: Exploring Scientific and Industrial Traffic Across the English Channel and Beyond”. In 2013, he gave talks at the meetings of the MOMS-SSHM Connections and Communities in Health and Medicine, Canadian Society for the History and Philosophy of Science, *Alternative Enlightenments: An interdisciplinary conference in the humanities, and History of Science from Below*.

The public perception of large and small scale wind turbines in Nova Scotia, as told by social media.

Izzy Morin

Groups of Nova Scotians, such as the “Friends of Jeddore” have reacted with towards the development of

land-based wind farms in their communities, and in some cases have even prevented the development of wind farms. The group advocates against the development of industrial-sized wind farms in rural Nova Scotia. Their main concerns are an appropriate setback for turbines, and increasing the level of community input in turbine development decisions.

In 2011, the government of Nova Scotia changed their energy policy to include a Community Feed-In Tariff (COMFIT), which was a policy aimed at making the development of renewable energy more economically beneficial to groups in Nova Scotia. These groups include community economic development investment fund (CEDIFs), municipalities, Mi'kmaw band councils, universities, co-operatives, not-for-profit organizations, and combined heat and power biomass facilities. These groups are eligible to submit project ideas, with the possibility of developing wind-power, small-scale in-stream tidal, run-of-the-river hydroelectricity, and combined heat and power biomass projects, and receive energy return rates at a premium for the energy developed.

There are environmental benefits associated with onshore wind. Wind power has the ability to reduce greenhouse gas emissions, when compared with other energy sources. Some environmental costs are also associated with onshore wind development. One cost is land use, which includes effects on natural habitats. Another cost is negative effects on certain wildlife populations, such as birds and bats. There are also potential human health costs, associated with the sound and vibration produced by turbines, as well as "shadow flicker", which is the shadow caused by the turbine blades spinning.

The problem that will be explored is how the public perceives these costs and benefits. Further, does the research present significant differences in public perception of these costs and benefits that differ between large scale and small scale wind.

The main purpose of the study is to gauge whether public perceptions of large scale and small scale wind turbines are sufficiently different that small scale wind turbines could be developed in communities who might object to large scale wind developments. This research will be based in the current discussion in academic literature surrounding the methodologies of evaluating public perception. Part of the narrative around hostility towards wind has been the idea of individuals in certain

communities having positive reactions to the theoretical idea of the development of renewable energy, but not wanting it to be developed in their communities. This is a phenomenon that is referred to as "not in my back yard", or "NIMBY". The emerging narratives around NIMBY, including the critiques of the language used already put forward in academic literature, will create a platform on which to base an analysis of the discourse around onshore wind power technology in Nova Scotia.

The research will ask several key questions. Are the public perceptions of small scale and large scale wind turbines in Nova Scotia sufficiently different to be able to develop small-scale wind in a community that could have reason to object to the development of large-scale wind turbines? The first facet of this question lies in determining whether there are discernable differences between the public perceptions in the Nova Scotian discourse. If there do prove to be differences, what are the differences? This question will take into account different existing methods of analysis of public perception found in academic literature, with the goal of creating an analysis of discourses within Nova Scotia. The methods of analysis that will be taken into account will be text analysis and narrative analysis. Are these differences in perception, if any are discovered, likely to affect public perception of small versus large scale wind power generation in Nova Scotia?

The context of the study is the viability of large scale and small scale wind energy development in Nova Scotia, and the potential hostility towards this technology, which has been made apparent in some public discourses. This research may suggest questions to further explore attitudes toward renewable energy developments. This exploration may further inform the question of acclimatization, as it applies to renewable energy. For example, based on the data that will be found, analysed and synthesized, the question of whether or not the public has different opinions about small scale and large scale wind power technology can lead to better indicators for establishing the right scale of wind turbines in a given community.

Izzy Morin is a student in Dalhousie's College of Sustainability and Contemporary Studies Program at the University of King's College. She is a Situating Science Student Project Assistant.

Allan Birnbaum: early insights about foundations of statistics

Nicole Mee-Hyaang Jinn

Birnbaum was among the first researchers to introduce the notion of a principle of evidence. He is also perhaps the first to raise the question as to whether sampling theory admits of a principle of evidence. In raising this question, Birnbaum proposed something he called the “confidence concept” (1969), which Don Fraser (2004) and Ronald Giere (1977; 1979) have further developed.

Definition 2.1 (Birnbaum’s confidence concept (Conf)) A concept of statistical evidence is not plausible unless it finds ‘strong evidence for H2 as against H1’ with small probability (α) when H1 is true, and with much larger probability ($1 - \alpha$) when H2 is true. (A. Birnbaum 1977, 24)

In Birnbaum’s view, the performance of any decision function (e.g., any rule for using data on a sample of lamps from the batch to arrive at a decision d_1 or d_2) is characterized fully – under H1 and H2 – by the error probabilities α and β . Here, the first of the two interpretations of decisions is defined: A behavioral interpretation of the decision concept is used to refer to any comparatively simple (i.e., in the context of two point hypotheses), literal interpretation of a decision appearing in a formal model of a decision problem. However, Birnbaum criticizes and rejects this interpretation – he does not find it appropriate in the context of scientific research that utilizes the “standard methods of data analysis” (A. Birnbaum 1977, 22), for the following reason: formulating a problem of testing hypotheses as a problem of deciding whether or not to “reject a statistical hypothesis” is unsatisfactory when seeking an evidential interpretation – and not a behavioral interpretation, because the meaning associated with rejecting a hypothesis is unclear. Instead, the decision-like term “reject” indicates an evidential interpretation, the second of the two interpretations of decisions: “an interpretation of the statistical evidence [in scientific research contexts], as giving appreciable but limited support to one of the alternative statistical hypotheses” (A. Birnbaum 1977, 23). The meaning of statements of acceptance/rejection (e.g., “reject H_1 ”) is called an evidential interpretation, which comprises Birnbaum’s confidence concept. What is more, the motivation for providing evidential interpretations came earlier from David Cox: “one of the

main general problems of statistical inference consists in deciding what types of statement can usefully be made and exactly what they mean” (1958, 354).

Having made explicit the distinction between behavioral and evidential interpretations, Birnbaum declares that the Lindley-Savage argument for Bayesian theory has no direct cogency as a criticism of typical standard practice, because it is based on a behavioral – as opposed to an evidential – interpretation of decisions. In particular, Birnbaum criticizes assumption (II) of the Lindley-Savage argument, as formulated in the appendix of (1977). The criticism comes from the concept of rationality (or consistency, or coherence) only applying to ‘decisions’ under behavioral interpretations, and not under the standard statistical practice that is comprised (primarily) of evidential interpretations. Particularly, “if the knowledge in the background of a linkage investigation includes conclusive statistical evidence for the locations of all but one of the factors which control certain immune relations, then with certain scientific goals in view I would strongly prefer, rather than the guarantee of strong (but inconclusive) evidence provided by (0.05, 0.05), the uncertain possibility of completing with conclusive evidence the pattern of knowledge in questions which is provided by either (0.1, 0) or (0, 0.1); and I would be indifferent as between them” (1977, 38-39). Birnbaum also examines Neyman and Pearson’s understanding of tests and decisions as indicated in (1933): the 1933 paper supplied a precise mathematical definition of ‘an efficient test.’ Specifically, an efficient test is defined as one in which “the [pre-data] error probabilities (such as α and β in our schema) are minimized (jointly in some appropriate sense)” (A. Birnbaum 1977, 31). Though, no concept of an ‘efficient test’ has been proposed to date without any reference to error probabilities under explicit alternative hypotheses. However, the use of ‘decision’ is neutral, in terms of not favoring a behavioral interpretation over an evidential interpretation (or vice-versa). Regardless of which interpretation is used, Birnbaum takes minimization of error probabilities to be a clearly appropriate goal in all typical scientific research situations. It is uncontroversial that Neyman and Pearson made some changes to the mathematical formulation of testing problems; yet the endorsement of the behavioral interpretation seems misplaced because their notion of ‘decision’ supposedly did not hinge on the behavioral interpretation – the Neyman-Pearson

theory was (and still is) thought to apply to both types of interpretations.

Here is what Birnbaum thinks of the confidence concept – its status in theory and application: There is no precise “mathematical and theoretical system” that guides closely the wide use of the confidence concept in standard practice (A. Birnbaum 1977, 34). He assumed that important concepts for guiding application and interpretation of statistical methods are largely implicit and could not be defined in any systematic theory of inference. In fact, he describes his confidence concept as “a concept whose essential role is recognizable throughout typical research applications and interpretations of standard methods, but a concept which has not been elaborated in any systematic theory of statistical inference” (A. Birnbaum 1977, 28). Notably, the problem of minimization of error probabilities α and β in the context of two simple hypotheses – solved in (Neyman and Pearson 1933) – leads not to a unique best test or decision function, but to a family of best tests. This is because two simple hypotheses rarely exhaust the parameter space, and therefore multiple combinations of two simple hypotheses are required, in order to cover all possible points in the parameter space. What makes the confidence concept ad hoc – in Birnbaum’s view – is the lack of mathematical/formal elegance, as demonstrated in a generalized kind of test of statistical hypotheses, where a formal decision function takes “three (rather than the usual two) possible values”: d1 – strong evidence for H2 as against H1; d2 – neutral or weak evidence; d3 – strong evidence for H1 as against H2.

Nicole Mee-Hyaang Jinn is a MA student at Virginia Polytechnic Institute and State University. Her MA thesis - titled “Toward Error-Statistical Principles of Evidence in Statistical Inference” - is in progress. Her research interests are in philosophy, the foundations of statistics, philosophy of science, experiment, statistics education, statistical reasoning, statistical literacy, and using technology to most effectively teach statistics. She plans on beginning a PhD in statistics next year.

An Important Question not to Answer

Sharon Woodill

That the Bible provides important insight on morality is less of a debate than whether or not the Bible provides valuable or any insight on science, yet the two issues are

intimately connected. Some would argue that if the Biblical record is unreliable in its account of the becoming of the natural world, it is also unreliable in its assertion of moral imperatives derived therefrom. For many, faith and science comprise a complimentary pairing in matters of nature and nurture, but what comprises “faith” and “science” is quite a different matter altogether. But it matters a great deal when science and faith are paired in politics: this pair becomes potentially potent in the shaping of social parameters.

The Bible as an epistemological framework imbues “faith” with a certainty in the power of God as creator of all things and an authoritative voice on how the world is and ought to be. Here, the Bible is source and symbol of truth and science succumbs to the social directives as interpreted by its readers. Its text speaks to a creative source that is external to and acting on the material world in a science of building as becoming.

The Bible as an epistemological framework imbues “science” with a certainty of the validity of the source of the text and the primary source of knowledge. Here, science is symbolic and subordinated to normative initiatives as interpreted by its readers. When one seeks to ‘prove’ the truth of its text, one fuses scientific and biblical authority such that definitional distinctions become blurry.

It may be wise to accept the validity of some of the moral precepts that The Bible proffers and it may be wise to reject some. Love your neighbor. Don’t kill. Don’t steal. Women obey your husbands. Be fruitful and multiply. Spare the rod....And there are more. Many more.

A biblical epistemology must be both true and false. This is to say that this issue should not settle into uniform certainty, on either side or in any one way. That God created the world is a scientific ‘fact’ in the Christian worldview that many espouse, and from this view, the creation story is often interpreted as providing a naturalized account of the nature of male and female, heterosexuality, and marriage in a prescriptive description of ‘natural’ society and moral order. That this epistemology is pursued and enacted through hegemony and policy, both in secular and sacred domains is problematic for those who find themselves uncomfortably situated within and without these parameters. Science in other contexts is ineffective as a means to challenge a biblical epistemology or its entailments because there are funda-

mental discrepancies in the respective conceptual frameworks, and challenges quickly becomes loud exchanges that fall on mutually deaf ears. Science in other contexts and on its own is not the savior anyway, as it too (whatever “it” is) requires careful and perpetual attention to the (often tacit) conflation of the ever-present “is” and “ought”.

More importantly is the question. What is the Bible? Object? Subject? Person? Is it text? Is it science? Is it law? Is it policy? Is it inspiration? Is it true? Is it false? So long as the question remains open and the answers remain dynamic and in flux, there is always space for diversity even among dissenters. In this case, answering is much less important than asking, and ignorance is a significant epistemic value.

Sharon Woodill is a PhD candidate in the Interdisciplinary PhD Program at Dalhousie University in Halifax, Nova Scotia and the student project assistant for the Situating Science Strategic Knowledge Cluster. Her current research interests span philosophy and religious studies with a focus on religion and sexuality. More specifically, her work explores the connections and implications of the creation/evolution controversy for gender and sexual politics in Canada.

Member Updates

BROCK UNIVERSITY

Elizabeth Neswald spent her Sabbatical last year as a Visiting Scholar in the History of Science Department of Harvard University and had a great time studying the behaviour of Madagascar hissing cockroaches in the Museum for Comparative Zoology library during her writing breaks. She gave a talk on “Creating Commensurability in Early Nutrition Science and Metabolism Studies” at the “Dimensions of Measurement” conference in Bielefeld in March, one at the last CSHPS meeting on experimenting with humans and animals in early nutrition physiology and one at Harvard on nutrition physiology as a field science. At the HSS she spoke on the history of metabolism measurement, and she will be giving a talk on conceiving body as a machine in metabolism experiments at the conference “Ma(n)chines” in Berlin. Her essay, “Strategies of International Community-Building in Early 20th-century Metabolism Re-

search: The Foreign Laboratory Visits of Francis Gano Benedict” came out in HSNS 43 (2013), as did one on “Kapitalistische Kalorien” in a German edited volume. Beyond that, she was Programme Committee Chair for the last CSHPS meeting (and thanks everyone for coming), local organiser for this year’s (and thanks everyone in advance for coming) and had her first year on the Hadden Prize Committee.

CAPE BRETON UNIVERSITY

In July 2013 **Andrew Reynolds** presented a paper, “From Pathways to Networks: Developments in the Science of Intracellular Signaling” at the biannual meeting of the International Society for the History, Philosophy and Social Studies of Biology at the Université Montpellier, in Montpellier, France. He is currently working on a book on the role of metaphor in science, with particular emphasis on cellular biology.

DALHOUSIE UNIVERSITY

Brian K. Hall delivered the annual Thomas S Hall Lecture in the History of Science at Washington University in St. Louis in October. He was chair and commentator of the session Evidence and evolutionary theory at Darwin’s deathbed: Rethinking the “Eclipse of Darwin” at the History of Science Society Annual Meeting in November. The fifth edition of his *Strickberger’s Evolution* (co-authored with Benedikt Hallgrímsson) was published in February by Jones and Bartlett, Publishers, Burlington, MA. Other publications are Hall, B. K. Epigenesis, Epigenetics and the Epigenotype: Toward an Inclusive Concept of Development and Evolution. In *Beyond Mechanism: Putting Life Back Into Biology* (B. G. Henning and A. C. Scarfe, eds), pp. 345–368. Lexington Press, Lexington, KT; and Hall, B. K. Homology, homoplasy, novelty and behavior *Devel. Psychobiol.* 55, 4–12.

Sharon Woodill is a PhD candidate in the Interdisciplinary PhD Program at Dalhousie University in Halifax, Nova Scotia and the student project assistant for the Situating Science Strategic Knowledge Cluster. Her current research interests span philosophy and religious studies with a focus on religion and sexuality. More specifically, her work explores the connections and implications of the creation/evolution controversy for gender and sexual politics in Canada.

INDEPENDENT SCHOLARS

Allan Olley is continuing work on the Jet Propulsion Laboratory's work in celestial mechanics, the history of its acquisition of skills in this field and eventually its authoritative position as a source of standard information in the field. He just completed a research trip to the Air and Space Museum archives in November of 2013 pursuing relevant JPL documents. He is also doing work on the role of the personnel computer in academic and amateur astronomy. He also works on other issues in scientific computation, the history of computers and the work of astronomer and computer pioneer Wallace J. Eckert.

David Orenstein (Toronto District School board, retired) writes that, having completed my first year of retirement, he is energised to pursue his research interests, both by burrowing into the research libraries and archives of the Toronto area and through travel. His project explores the ramifications of the early international scientific conferences in Canada, such as the 1857 American Association for the Advancement of Science in Montreal, the 1897 British Association in Toronto or the 1913 International Geological Congress also in Toronto. He finds the associated expeditions especially fascinating: repeated visits to Niagara Falls, locally to Mount Royal or the Don Valley Brickworks, and massive cross-Canada rail safaris. As a sideline he is developing an appreciation of the HPS aspects of important popularisation series: the 4,000 volumes of *Que Sais-Je?* (Presses Universitaires de France), *Very Short Introductions* (Oxford University Press) (which includes the exquisite appreciation of Galileo by CSHPS icon Stillman Drake) and the *World University Library* (McGraw-Hill).

Derek Webster is currently developing a grade 12 course: Philosophy the Big Questions for a new online high school. His approach is somewhat different from others of which he is aware. Firstly, he is attempting to use popular culture – i.e. television's big bang theory – to provide a spring board into some of philosophy's big questions. It will be based upon a wonderful book edited by William Irwin and Dean Kowalski – *the Big Bang Theory and Philosophy*. This will also allow use of videos / audio, which students seem to love, and model the use of scripts as a potential course deliverable. Besides this,

the authors of the book make philosophy a real hoot! Secondly, Derek's approach will have scholarship as a potential career pathway as a main focus of the course. What is scholarship as a career pathway? What are the characteristics of scholarship itself? What does being a scholar look like? He is attempting to scaffold the activities to engage his students by developing a student-relevant introduction to scholarship utilizing the amazing context of philosophy and certainly philosophy of science, rather than introducing them as an interesting topic or past time (although this is a good goal as well). Derek is also interested in scientific orthodoxy and is beginning a long-term project on creationism.

MCMASTER UNIVERSITY

Richard T. W. Arthur has been researching and writing on Leibniz, on thought experiments and on the history of natural philosophy. 3 articles appeared in print: "Leibniz's Theory of Space" in *Foundations of Science*, "Leibniz's Syncategorematic Infinitesimals, Smooth Infinitesimal Analysis, and Second Order Differentials" in *Archive for History of Exact Sciences*, and "Can thought experiments be resolved by experiment? The case of 'Aristotle's Wheel'", in *Thought Experiments in Philosophy, Science and the Arts*, ed. Melanie Frappier, Letitia Meynell and James Robert Brown. He also completed and submitted for publication two entries for *the Descartes Lexicon*, ed. Larry Nolan: "Atoms", and "Time"; "The Labyrinth of the Continuum", for the *Oxford Handbook of Leibniz*, ed. Maria Rosa Antognazza; "Leibniz's Actual Infinite in Relation to his Analysis of Matter", for Leibniz on the interrelations between mathematics and philosophy; "On the mathematization of free fall: Galileo, Descartes and a history of misconstrual", for *The Mathematization of Nature*; "The relativity of motion as a motivation for Leibnizian substantial forms", for Leibniz's metaphysics: the adoption of substantial forms; and a translation of Leibniz's essay Mechanical Principles, with commentary, for *the Leibniz Review*. In May he took part in workshops in Bucharest, Romania, at the Scuola Normale Superiore, Pisa, Italy, and at the Max Planck Institute for the History of Science, Berlin, reading papers on "Points of view, substantial forms and the situations of monads", "Leibniz in Cantor's Paradise", and "Physical indivisibles in matter and motion: remarks on Scaliger, Beeckman and Leibniz", respectively.

QUEEN'S UNIVERSITY

Donald Forsdyke writes that one of the delights of the history of science is bringing its unknown contributors out of the shadows. When introns were discovered in 1977 there were a number of well-placed persons (e.g. Francis Crick, Ford Doolittle), who had “first shot” at speculating what they were for, if anything. Less prominent was the microbiologist, Darryl Reaney in Australia, who later became better known for his metaphysical speculations and died of leukaemia in 1994. There is now growing evidence that Reaney, supported by another shadowy figure, Virgil Reese (USA), and Donald himself, may have been on the right track (see Forsdyke 2013 *Biological Theory* 7, 196-203).

Daryn Lehoux published a co-edited volume, *Lucretius: Poetry, Philosophy, Science* with Oxford UP in 2013, and had papers appear in that volume as well as in *Isis*, and *Zeitschrift für Papyrologie und Epigraphik*. He gave talks at Columbia, Florida State, Leiden, HSS, and ICHSTM. He is very excited to be giving the Singleton Center's Distinguished Lecture Series at Johns Hopkins in 2014.

QUEST UNIVERSITY CANADA

Glen Van Brummelen's *From Alexandria, Through Baghdad: Surveys and Studies in the Ancient Greek and Medieval Islamic Mathematical Sciences in Honor of J. L. Berggren* just came out (co-edited with Nathan Sidoli, Springer, 2013). A description may be found here: <http://www.springer.com/mathematics/history+of+mathematics/book/978-3-642-36735-9?otherVersion=978-3-642-36736-6>

SIMON FRASER UNIVERSITY

Ari Belenkiy is a mathematician and science historian. He received his M.Sc. in Mathematics from Donetsk State University (Ukraine) and his Ph.D. in Mathematics from University California at Irvine (1995). For some years, he has been teaching Mathematics at Bar-Ilan University (Israel). Currently, he is teaching statistics at Simon Fraser University (British Columbia, Canada). His most recent works are on Isaac Newton's unpublished universal calendar (*Notes & Rec. Roy Soc*, 2005), the murder of Hypatia of Alexandria (*Astronomy & Geophysics*, 2010), Alexander Friedman's contribution to the modern cosmology (*Physics Today*, 2012)

and Isaac Newton's work at the Royal Mint (*J Roy Statist Soc A*, 2013). He is teaching Statistics at Simon Fraser University.

TECHNICAL UNIVERSITY BERLIN

Adrian Wüthrich is a postdoctoral researcher and lecturer (“wissenschaftlicher Mitarbeiter”) in History of Science at the Technical University Berlin. In 2013, he published and gave talks on the history and philosophy of Feynman diagrams. He is currently revising a manuscript on how arguments for non-local quantum mechanical interactions presuppose the validity of the principle of causality. In the near future, he plans to focus more on his case studies on how the existence of elementary particles, such as the Higgs boson, is inferred from experimental data.

UNIVERSITY OF ALBERTA

Robert Smith was co-organizer with Kathleen Lowrey (Department of Anthropology at the University of Alberta) of a series of five talks in October 2013 to mark the 100th Anniversary of the death of Alfred Russel Wallace. Robert's own talk was on “Alfred Russel Wallace, Mars, Extra-Terrestrials and the Nature of the Universe”. Revised versions of the five talks will be the basis for a special issue of *Victorian Studies*. Robert's chapter on “The ‘Great Plan’ of the Visible Universe: William Huggins, the Nature of the Nebulae, and Evolutionary Naturalism” will appear in early 2014 in the book *The Age of Scientific Naturalism*.

UNIVERSITY OF BRITISH COLUMBIA

Margaret Schabas is currently President of the History of Economics Society and will give her presidential address at the next annual meetings, to be held at the University of Quebec at Montreal (UQAM) June 20-22nd, 2014.

Henry Trim is a graduate candidate at UBC. He is presently completing his dissertation, “Experts at Work: The Canadian State, North American Environmentalism, and Renewable Energy in an Era of Limits, 1968-1983”. It examines environmentalists use of technical expertise, such as modeling and forecasting, to manipulate government policy and convince the federal government to provide more than \$140 million in funding for solar energy in 1978. While completing his dissertation

Henry has also contributed papers, which rethink the relationship between technology and the counterculture, to Colin Coats' forthcoming collection, *Canadian Countercultures and the Environment* and David Kaiser's and W. Patrick McCray's forthcoming collection, *Groovy Science: Counterculture and Technoscience in the Long 1970s*.

UNIVERSITY OF CALGARY

J. J. MacIntosh recently published: "Robert Boyle," in *The Oxford Handbook of British Philosophy in the Seventeenth Century*, ed. Peter Anstey (Oxford: Oxford University Press, 2013), 73-95. His "Hooke's Mechanical Mind," is forthcoming in *Brain and mind: Essays in the hard problem in the history of neuroscience*, eds. C. Smith and H. Whitaker (Springer). He is also working on a book (*The Philosophical Views of Robert Boyle*, and two papers ("Necessity and Necessary Truths in the Mediaeval and Early Modern Periods" and "Boyle discovered something all right, but was it Boyle's law?") to be given at the University of Saskatchewan, Feb., 2014).

UNIVERSITÉ DE GENÈVE

Pierre-Olivier Méthot's research focuses on historical and philosophical issues in biology and medicine in the 19th and 20th centuries. He is particularly interested in the epistemological and historical relations between evolutionary theory and medicine, the conceptual foundations of bacteriology and immunology, and in the development of integrated approaches in the history and philosophy of science. Other research interests include current modelling practices of host-parasite interactions and the ethics and governance of dual-use technologies in the life sciences. His most recent paper is titled "On the genealogy of concepts and experimental practices: Rethinking Georges Canguilhem's historical epistemology" and was published this year in *Studies in History and Philosophy of Biological and Biomedical Sciences* (2013).

UNIVERSITY OF GUELPH

This year, **Sofie Lachapelle** has participated in the workshop Sign or symptom? Exceptional corporeal phenomena in medicine and religion organised at the University of Leuven. She is presently writing a book chapter tentatively titled "When Religion and Medicine meet Politics: The Rise and Fall of Marie Bergadieu, the Ecstatic

of Fontet" for an edited collection coming out of that workshop. She continues to work on her manuscript "Amusing Experiments and Wondrous Tricks: Science, Magic, and Entertainment in Modern France," and her article "From the Waters of the Empire to the Tanks of Paris: The Creation and Early Years of the Aquarium Tropical, Palais de la Porte Dorée," co-written with her undergraduate research assistant Heena Mistry, has been accepted in the *Journal of the History of Biology*.

UNIVERSITY OF KWAZULU-NATAL

John Collier thought that it was nice to see some old friends and meet some new people in Victoria. He is retiring from his position in Durban, and has to decide whether to stay there or return to Canada as a base. After the World Cup in Brazil he will spend his third three month stint at the Institute of Biology at the Federal University of Bahia to continue working on function in ecology. His group gave three papers on the topic at the International Society for the History, Philosophy and Social Studies in Biology meetings in Montpellier, France in July. Wherever he lands up, he plans to continue with shortish visits to various institutions over the next few years to work on common interests.

UNIVERSITY OF LETHBRIDGE

Kent Peacock (Philosophy) has been giving a lot of thought recently to the web of problems around climate change, sustainable energy, and the mobilization of human ingenuity in ecologically helpful ways. He and Bryson Brown recently were awarded a University of Lethbridge CREDO grant to study these pressing issues. Kent continues to explore the foundations of physics, and his longish paper, "Would Superluminal Influences Violate the Principle of Relativity?" is forthcoming in *Lato Sensu*; preprint at <http://arxiv.org/abs/1301.0307>.

UNIVERSITÉ DE MONTRÉAL

Yvon Gauthier (Department of Philosophy) announces three publications in the year 2013:

1. Gauthier, Y. A General No-Cloning Theorem for an Infinite Multiverse. *Reports on Mathematical Physics*, Vol. 72, no.2 (2013), pp. 191-199.
2. Gauthier, Y. Bachelard et Brunschvicg, *Revue de synthèse*, tome 134, 6e série, no. 3 (2013), pp. 343-353.
3. Gauthier, Y. Kronecker in Contemporary Mathematics : General Arithmetic as a Foundational Programme ,

Reports in Mathematical Logic, Vol. 48, (2013), pp. 37-65.

Professor Gauthier is also preparing a book on *Arithmetical Foundations. Towards an Arithmetical Logic* and has participated in the 4th International Congress on Universal Logic in Rio (April 2013) and the annual congress of the CSHPS in Victoria last June with papers on the internal logic of constructive mathematics.

In December 2013, **Parzhad Torfehnezhad** presented his paper entitled “In Carnap’s Defence” at the first annual Dutch Research School of Philosophy (OZSW) conference held at Erasmus University in Rotterdam. He is grateful to Prof. Jean-Pierre Marquis (Université de Montréal) and the Centre interuniversitaire de recherche sur la science et la technologie (CIRST) who made this possible.

UNIVERSITY OF NOTRE DAME

Anjan Chakravartty enjoyed revamping the Consulting Editors Board of *Studies in History and Philosophy of Science* this year with some fine Canadian content in the form of Kathleen Okruhlik and Alan Richardson. Publications included “On the Prospects of Naturalized Metaphysics” in a new collection entitled *Scientific Metaphysics* (OUP, 2013), and a review of Mumford & Anjum’s *Getting Causes from Powers* (OUP, 2011) in the *BJPS*. Highlights of travel included a paper at the Eastern APA on the idea of causal structure, a series of talks at the IHPST in Paris on scientific explanation, a paper on scientific taxonomy at the Law and Order conference at UCSD, and wonderful feedback from the HPS Colloquia at Minnesota and Indiana.

UNIVERSITÉ SAINTE-ANNE

James Crombie (Département des Sciences humaines) is currently working on issues surrounding the discovery by the 18th century Scottish philosopher Thomas Reid of a non-euclidean geometry of visibles and Gaston Bachelard’s dialectical approach to the philosophy of science. He is also interested in Reidian influences in 19th-century France and, in particular, the Franco-Argentinian philosopher and educator Amadeo Jacques. Another recent area of interest is the philosophy and ethics of pharmaceuticals and medical research. His latest publication (following a Peirce Studies conference in Buenos Aires in August 2012) is “Charles Peirce, Gas-

ton Bachelard y Paulo Freire: Reflexiones sobre los conceptos de obstáculo epistemológico y de conocimiento dialectizado” available online at www.unav.es/gep/VPeirceArgentinaCrombie.pdf.

UNIVERSITY OF SASKATCHEWAN

Marc MacDonald is a graduate student at the University of Saskatchewan. His PhD focuses on the emergence and expansion of the Delessert family’s British-Franco-Swiss network. His dissertation is titled “Crossroads of Enlightenment, 1685-1850: Exploring Scientific and Industrial Traffic Across the English Channel and Beyond”. In 2013, he gave talks at the meetings of the MOMS-SSHM Connections and Communities in Health and Medicine, Canadian Society for the History and Philosophy of Science, Alternative Enlightenments: An interdisciplinary conference in the humanities, and History of Science from Below.

Katherine Zwicker is working on a book manuscript under contract with Johns Hopkins University Press that is tentatively titled *Radiation Nation: Building Biomedicine from X-rays to the Atomic Bomb*. It examines interdisciplinary collaboration amongst radiation researchers from the discovery of radiation through to the post-World War II period and argues that, despite shifts in the political economy of science during and following the war, there were important continuities in biomedical discipline-building from pre- to postwar. As a SSHRC Situating Science Postdoctoral fellow at the University of Saskatchewan, Katherine also hosted an international conference in September, “Connections and Communities in Health and Medicine.” This conference brought together scholars from the Manitoba-Ontario-Minnesota-Saskatchewan (MOMS) History of Medicine organization and the Society for the History of Medicine (SSHM).

UNIVERSITY OF TORONTO

In 2013, **Joseph Berkovitz**’s research focused on two topics: the propensity interpretation of probability and mathematical explanations of physical facts. Joseph’s work on the propensity interpretation is forthcoming in *Erkenntnis* in a special issue on probability in biology and physics, which he co-edited with Philippe Huneman from the IHPST in Paris. Joseph’s work on mathematical explanations of physical facts was presented at

the Philosophy departments of the University of Rome III, the University of Florence and the London School of Economics, and at the 40th Dubrovnik Philosophy of Science and the CSHPS annual conferences.

Lucia Dacome spent three happy months as a Visiting Scholar at the Max Planck Institute for the History of Science (Berlin) in the group 'Art and Knowledge in Pre-Modern Europe'. In April 2013, she organized a workshop on 'Picturing Health and Medicine' at the IHPST, U of T. She presented papers at several venues, including the Canadian Society for the History of Medicine, the History of Science Society, and the 24th International Congress of History of Science, Technology and Medicine, as well as at the Max Planck Institute for the History of Science. She was keynote speaker at the workshop 'Case Studies of Medical Portraiture' at King's College, London. In 2013, she completed two articles: 'Ai confini del mondo naturale: anatomia e santità nell'opera di Prospero Lambertini', came out in Maria Teresa Fattori (ed.) *Storia, medicina e diritto nei trattati di Prospero Lambertini*; and '«Une dentelle très bien agencée et très précise»: les femmes et l'anatomie dans l'Europe du dix-huitième siècle' is forthcoming in Patrice Bret and Adeline Gargam (eds.), *Sur les traces d'Hypatie. Réalités et représentations des femmes de sciences avant Marie Curie*.

Yiftach J. H. Fehige has been enjoying his very first sabbatical since July 2013. This has allowed him to accept more invitations for talks than usual, and also to intensify his collaborations with the University of Frankfurt (Germany) and Manipal University (India). When he returns to teaching his appointment for Christianity and Science will be 100% at the IHPST, ending 7 years of cross-appointmet to the Christianity and Culture Programme of St. Michael's College in the University of Toronto. He is very happy to be part of two partnership grant applications that were submitted to SSHRC recently. Together with Jim Brown and Mike Stuart he accepted an invitation from Routledge to edit a companion to thought experiments. Publication is planned for 2015. Yiftach has also a special issue of the journal *Perspectives of Science* forthcoming which he co-edited with Mike Stuart. The issue collects a number of original papers on thought experiments. He has two more papers on thought experiments under review, and is happy that the following papers are available in print

now: "The Relativized A Priori and the Laboratory of the Mind: Towards a Neo-Kantian Account of Thought Experiments in Science." *Epistemologia: Italian Journal for Philosophy of Science* XXXVI: 55-73; "Sexual Diversity and Divine Creation: A Tightrope Walk between Christianity and Science." *Zygon: Journal of Religion and Science* 48: 35-59; "Poems of Productive Imagination: Thought Experiments, Christianity, and Science in Novalis." *Neue Zeitschrift für Systematische Theologie und Religionsphilosophie* 55: 54-83; (with Harald Wiltsche) "The Body, Thought Experiments, and Phenomenology," in: *Thought Experiments in Philosophy, Science, and the Arts*, edited by James R. Brown, Melanie Frappier, Letitia Meynell, pp. 81-104. New York; London: Routledge [Routledge Studies in the Philosophy of Science]; "Quantum Physics and Theology: John Polkinghorne on Thought Experiments." *Zygon: Journal of Religion and Science* 47: 256-288; "Experiments of Pure Reason." Kantianism and Thought Experiments in Science." *Epistemologia: Italian Journal for Philosophy of Science* XXXV: 141-160;]; "Miracles and Science: More than a Miraculous Relationship," in: *Toronto Journal of Theology* 28: 159-164. [A solicited reply to Robert Larmer's "Miracles, Divine Agency, and the Laws of Nature." *Toronto Journal of Theology* 27: 167-190.

In his doctoral studies at the IHPST in the history of science, **Paul Greenham** has focused on science and religion in the early modern period, particularly in Isaac Newton's natural philosophy. He is currently writing my dissertation, considering the intersection of Newton's divine metaphysics and his work in optics, chemistry and alchemy. Other research interests include the relationships between the natural sciences, alchemy and religion in the Islamic world, notably in the work of al-Razi, and scientific instrumentation. As co-curator of the University of Toronto Scientific Instruments Collection (UTSIC), he has continued the efforts to preserve, catalogue and showcase Toronto's material culture of science. This past year, he has presented on Newton and theology at both the Scientia 2013 conference in Warwick, UK and the 300th anniversary conference on Newton's General Scholium in Halifax. An article on science and Islam in the alchemy of al-Razi is forthcoming in a Routledge edited volume.

Kira Lussier is a doctoral candidate at the University

of Toronto's Institute for the History and Philosophy of Science and Technology. Her dissertation traces the history of personality testing in North American workplaces from the end of World War I until the Cold War.

John Percy (Professor Emeritus, Astronomy & Astrophysics, and OISE) led two heritage walks on "Campus and Cosmos: Toronto's Rich Astronomical Heritage" at Doors Open Toronto 2013, and gave presentations on the topic at several Toronto libraries and other venues. He gave a continuing studies course at Ryerson University on "Galileo's Legacy", and gave the keynote address at a two-day conference on Galileo: Science, Faith, and the Arts, at the University of St. Michael's College in the University of Toronto, on "International Year of Astronomy 2009: Bringing Galileo to the World".

Bruce J. Petrie is completing his dissertation "The Roots of Transcendental Numbers: A Historical Perspective on the Development of Transcendental Number Theory 1737 - 1844" at the Institute for the History and Philosophy of Science and Technology at the University of Toronto under the supervision of Craig Fraser. Most of his time nowadays is devoted to writing thesis chapters, but he has also given several talks on epistemic cultures in mathematics.

Sara T. Scharf is pursuing her interest in scientific invention and discovery as a Postdoctoral Fellow at the Institute for Multidisciplinary Design and Innovation, Faculty of Engineering, University of Toronto. Her current research examines the factors that encourage and inhibit innovation and creativity in undergraduates studying engineering design. She also freelances as a scientific editor and is the treasurer of the Toronto Branch of the Editors' Association of Canada. Sara also continues to be involved in academic conversations about the history of information management and 18th-century natural history.

As a PhD candidate at the Institute for the History and Philosophy of Science and Technology at the University of Toronto, **Kristen Schranz** is currently working on her comprehensive exams. Her research interests include eighteenth-century chemistry, particularly chemical correspondence and industry centring on the Lunar Society of Birmingham. She also has an interest in peripheral

members of the Lunar Society and would like to explore Anglo-American connections in chemistry through Joseph Priestley and the Vaughan family. This past summer she presented a paper at CSHPS in Victoria, BC and at the 24th International Congress of History of Science, Technology and Medicine held in Manchester, England. As well, she has a forth-coming paper publication with The International Journal for the History of Engineering and Technology.

Mark Solovey (IHPST) is happy to report that his 2013 book *Shaky Foundations: The Politics-Patronage-Social Science Nexus in Cold War America* has been reviewed in *Science* and in *the LSE Reviews of Books*. His co-edited 2012 book *Cold War Social Science: Knowledge Production, Liberal Democracy, and Human Nature* has been reviewed in Society for U.S. Intellectual History (S-USIH), *Ether Wave Propaganda* (6 substantial posts!), *Journal of American History*, *Journal of the History of Economic Thought*, *Regional Studies*, *Cold War History*, *Isis*, *Science as Culture*, *History of Political Economy*, and *British Journal for the History of Science*. For your reading convenience, all of these reviews have been gathered together in one place, on Mark's homepage: <http://individual.utoronto.ca/solovey/solovey/Home.html>. Also, the (reasonably priced) paperback version of *Cold War Social Science* will be published in January 2014 by Palgrave Macmillan. Mark's current book project is called: *Social Science for What? Scientific Legitimacy, Public Purpose, and Federal Funding at the U.S. National Science Foundation*.

UNIVERSITY OF WATERLOO

This past year, **Heather Douglas** had a great deal of fun giving talks at the University of Alberta, University of Guelph, University of Ottawa (at the Science and Society Conference in October), York University, University of Vienna, University of Bielefeld, University of Copenhagen (at a conference on the Special Role of Science in Liberal Democracy), Vrije University Amsterdam, and SUNY Oswego, on moral responsibilities in science, responsible innovation in democracies, and the relationships between science, values, and democracy. One paper based on these talks has been published (*The Moral Terrain of Science in Erkenntnis*, DOI 10.1007/s10670-013-9538-0), and she hopes to use the great questions and comments to draft the other talks into papers in the

new year. Her book review of Kitcher's recent book on this area has also been published in *British Journal for Philosophy of Science* (vol. 64, no. 4, pp. 901-905). In addition, a paper on the value of novel prediction co-authored with P.D. Magnus has appeared in *Studies in History of Philosophy of Science* called "State of the Field: Why Novel Prediction Matters" (vol. 44, pp. 580-589). This paper continues her efforts to understand aspects of scientific inference. Another paper on that topic, "The Value of Cognitive Values," is forthcoming in *Philosophy of Science*. Heather Douglas also participated in a workshop at the University of Notre Dame on cognitive attitudes in science in June, where she talked about norms for claim-making, and argued that such norms properly fell in between pure and practical reason. She also wrote two public essays, which have been published online, on the problems with Canadian science policy, and another explaining why social conservative might indeed have reason to be more distrustful of science than liberals ("Canadian Science Under Attack," *The Scientist*, April 2, 2013 and "Science and the Public Square," *Science Progress*). She plans on continuing work on science policy, responsible science, scientific inference, and the place of science in democracies in the coming year!

This year **Doreen Fraser** has continued to work on a large research project on the connections between particle physics and statistical mechanics. Analogies between quantum field theories and classical and quantum statistical mechanics have played a pivotal role in the development of these theories since the 1940s. These analogies led to the application of similar mathematical formalisms in QFT and statistical mechanics. She has given talks on the implications of these analogies for interpreting QFT at the University of Guelph, the University of Michigan, the Bucharest Colloquium in Analytic Philosophy, and talks on the application of mathematics in these theories at Simon Fraser University and the LSE. She is also serving as Graduate Chair for her department and is a member of the PSA program committee.

VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY

Nicole Mee-Hyaang Jinn is a MA student at Virginia Polytechnic Institute and State University. Her MA thesis - titled "Toward Error-Statistical Principles of Evidence in Statistical Inference" - is in progress. Her

research interests are in philosophy, the foundations of statistics, philosophy of science, experiment, statistics education, statistical reasoning, statistical literacy, and using technology to most effectively teach statistics. She plans on beginning a PhD in statistics next year.

YORK UNIVERSITY

In the past year **Jordan Bimm** has presented new work on the history of space medicine at meetings of the International Congress of History of Science Technology and Medicine (ICHSTM) in Manchester, the Society for the History of Technology (SHOT) in Portland, Maine, and the History of Science Society (HSS) in Boston. His paper "Rethinking The Overview Effect" was awarded the 2013 Sacknoff Prize for Space History, and another paper, "Primate Lives in Early American Space Science", was published in the journal *Quest: The History of Spaceflight*, and received press coverage in *the LA Times* and *Metro Toronto*. He continues work on a dissertation about the history of American astronaut selection.

James Elwick became Assistant Professor in the Science and Studies Department and in the Division of Natural Science at York University. He uses STS approaches to study how written science examinations became standardized, and sometimes writes about the history of research into biological individuality. Elwick also coordinates and is a series editor on the John Tyndall Correspondence Project, a multi-university effort funded by the Mellon Foundation, SSHRC, and NSF to transcribe the collected letters of this 19th century physicist and science popularizer. These will appear in sixteen volumes between 2015 and 2022.

Christopher Green and **Michael Pettit** have co-founded a laboratory devoted to the digital study of the history of psychology. They call themselves The PsyBorgs. Current projects include networking long runs of scholarly journals to reveal historical research communities, as well as the geographical mapping of the travels of past psychological workers to uncover their "turf" and popularity "hotspots." The laboratory has received significant SSHRC funding and is in search of new MA students who have an interest in history of psychology and, especially, have relevant computer skills.

Erin Grosjean is an MA student in the STS program at

York University, with plans to continue her studies in their PhD program next year. The focus of her research is in the history of forensic sciences, specifically as relates to the myriad factors at play in the increasing development of sub-specialized investigative and evidence producing techniques. Her research will narrow the scope of this topic, by studying the development within forensic anthropology of the decomposition study, which seeks to better understand and quantify the postmortem interval. Also, of current interest is examining social factors and potential reciprocal influences between the legal and scientific worlds in the pursuit of expert evidence.

Kristen A. Hardy is presently a doctoral candidate in Social & Political Thought at York University. Her work explores relations between systems of power and the constitution of marginalized subjects, with a focus on embodiment and pathologization in science, medicine, and other sociocultural spheres. Her research interests include the role of affect in the development of scientific cultures, the historical negotiation of human-non-human boundaries, and the constitution of fatness and fat bodies as socially and medically salient entities. Her scholarly publications address bodily difference and subjectivity, and include an article in *Body & Society*, “The Education of Affect: Anatomical Replicas and ‘Feeling Fat’” (March 2013: 3-26), and an essay, “Fleshy Histories: Fatness, Sex/Gender, and the Medicalized Body in the Nineteenth Century,” in the second edition of *Reading Sociology: Canadian Perspectives* (L. Tepperman and A. Kalyta, eds., Oxford University Press, 2012). Her dissertation, tentatively titled “Feeling Human: Affect and Animality in the Victorian Sciences,” investigates the role of emotions in delineating ‘the human’ with respect to nineteenth-century anthropology, biology, zoology, and medicine in Britain and its empire.

**We are deeply saddened to share the news of Rich Jarrell’s sudden passing, on December 28. Rich’s absence, like his legacy, will be long felt at York and in the Canadian HPS community. He submitted this update before his death.*

-the Editors

Richard Jarrell (Science and Technology Studies) was on the editorial team of the Biographical Encyclopedia of Astronomers (Springer – second edition – in press) and wrote a dozen new entries for this edition. He gave a presentation at the Mississauga Centre of the Royal As-

tronomical Society of Canada in September 2013 on “A Different Kind of Genealogy: Intellectual Family Trees of Astronomers.” He also presented a paper at the Canadian Science and Technology Historical Association in Montreal in November 2013 on “From Curiosity to Menace: the Medical Community and Malignant Melanoma in Canada before 1990.” Richard Jarrell was a member of the AstroGen team of the Historical Astronomy Division of the American Astronomical Society.

Muhammad Ali Khalidi is currently working in the philosophy of cognitive science and on general issues in the philosophy of science, particularly natural kinds and reductionism. His book, *Natural Categories and Human Kinds: Classification in the Natural and Social Sciences* was published this year by Cambridge University Press.

Having completed his term as Grad Program Director of York STS, **Kenton Kroker** has now returned to his SSHRC-sponsored history of epidemic encephalitis. He still harbours a vague worry that the acute illness he contracted while doing research in Sheffield was from some unknown (encephalitic?) microbe in the archival dust, rather than from the steak and mushroom pie he ate at a local pub.

Aryn Martin spent a rewarding sabbatical stint at Copenhagen University’s Centre for Medical Science & Technology Studies. Her paper “‘Something there is that doesn’t love a wall’: Histories of the placental barrier”, coauthored with Kelly Holloway, came out in *Studies in History and Philosophy of Biological and Biomedical Sciences*. In the fall, she gave papers at the annual meeting of the American Anthropological Association in Chicago, and at the Harvard Humanities Centre.

B.D. Mitchell is in the fifth year of his PhD at York University in Science and Technology Studies. His dissertation focuses on the history of the physiological aesthetics of the German philosopher Friedrich Nietzsche. He also researches the relationship between science and the occult and paranormal in the nineteenth century and is the editor of *Beyond Borderlands: A Critical Journal of the Weird, Paranormal, and Occult* (<http://www.beyondborderlands.com/>). His academia.edu profile can be viewed at: <https://yorku.academia.edu/BDMitchell>

David Pantalony continues to research (and teach) on the topic of provenance in the collections at the Canada Science and Technology Museum. He is now an adjunct member in the York STS program, which formalizes a growing, creative relationship between York and the museum's collections. Recently, the museum sent a large ship of de-accessioned artifacts to York STS to form their new teaching collection.

Ryan Staples is a PhD candidate in the Humanities Graduate Program at York University. His doctoral research draws from Lacanian psychoanalysis to consider the role of desire in giving shape to epistemic practices in scientific objectivity. His dissertation will examine this relationship in the context of neuroscientific research about dreaming.

Situating Science Update December 2013

The team behind the Situating Science SSHRC Strategic Knowledge Cluster (www.situsci.ca) are applying for a few grants to sustain some of its activities beyond the end of the Cluster program. These include a national partner project on Sciences, Technologies and Their Publics as well as a partnership development project on Cosmopolitanism between institutions and scholars in India, Singapore and Canada.

This fall we teamed up with the Institute for Science, Society and Policy for the symposium, Science and Society 2013 to understand and provide input on improving the interface between science, society and policy. A report on the recommendations that resulted from the discussions will be shared widely.

This winter we plan a national lecture series on The Lives of Evidence examining the cultural, ethical, political, and scientific role of evidence in our world with talks planned at UBC, Western and Waterloo, King's/Dalhousie and University of Toronto and Institute for Science, Society and Policy.

This summer we will hold a special Summer School in Kingston on the themes of the Situating Science project,

which reflect the strengths in Canadian scholarship in HPS/STS. It will aim to introduce graduate students who are unfamiliar with STS and HPS to the field.

There are many other events in the works across the country including a visit by Donna Harraway at University of Alberta, a Spaces of Science symposium at the University of Saskatchewan and Oceanography workshop at King's/Dalhousie. Blogs, videos and podcasts of our events and interviews are frequently uploaded online and are available on our website, YouTube and podomatic.com/situsci. Events and news are regularly announced on our Twitter (@situsci) and Facebook Page. In addition to podcasting interviews with visiting speakers, our students are planning video interviews with Situating Science managers across the country to highlight their work and the work of STS/HPS. These will be uploaded on our YouTube channel.

ANNOUNCEMENTS

Calls for Papers

2014 Annual Meeting of the History of Economics Society

Montreal, Quebec June 20-22, 2014

The next annual meeting of the History of Economics Society will be held on June 20-22nd, 2014, at the Université du Québec à Montréal (UQAM), Montreal, Canada. The conference will begin on the Friday afternoon, with an opening reception that evening, and close on the Sunday evening with the Presidential address, awards ceremony and conference banquet.

The deadline for submitting an abstract or a session proposal (3 to 4 papers) will be March 1, 2014. The same deadline will apply for applications for Young Scholar awards from the Warren and Sylvia Samuels Fund. This is open to graduate students or early career scholars (up to two years past the PhD), with recipients receiving \$500 toward travel, plus free registration and one year's membership in HES. (For further information on the Young Scholars award, please see: historyofeconomics.org). The conference website will soon be online, providing complete information on abstract submission, session proposal, Young Scholar application, and accommodation.

Sociedad Latinoamericana de Estudios Sociales de la Ciencia (ESOCITE) and Society for Social Studies of Science (4S)

Buenos Aires, 20-23 August 2014

Deadline for Submissions of Individual Papers, Movies, and Session Proposals: March 3, 2014:

The 2014 ESOCITE/4S joint conference will be held in Buenos Aires, Argentina. The general theme of the conference is "Science in context(s): Souths and Norths", which refers to the opportunity for STS scholars to meet colleagues (and research traditions) from other parts of the world, giving rise to new dialogues and exchanges.

For more information: <http://www.4sonline.org/meeting>

Science, Technology, and Gender: Challenges and Opportunities

Waterloo, Ontario August 10-13, 2014

Submissions are invited for joint meeting of The Association for Feminist Epistemologies, Methodologies, Metaphysics, and Science Studies (FEMMSS) and the Canadian Society for Women in Philosophy (CSWIP) to be held at the University of Waterloo, August 10 to 13, 2014. FEMMSS is a multidisciplinary organization. This conference welcomes submissions from across the disciplines. We invite feminist papers, posters, panels, and workshops related to Science, Technology and Gender. Conference presentations are eligible for submission for consideration and review in a resulting anthology or special journal issue.

Submission instructions:

You are permitted one submission, unless you are submitting a poster. If you are submitting a poster, you can additionally submit an abstract for a paper, panel, or workshop. To submit please go to <https://www.easychair.org/conferences/?conf=stg2013> and sign up for an account.

If you have questions, email science.technology.gender@gmail.com

North American Victorian Studies Association Conference 2014

London, Ontario

November 13-15, 2014

Victorian Britain belonged to the classifying age. Imperial expansion and new techniques of observation and production confronted Britons with an expanding

universe of natural and man-made phenomena.

In response, scientists, writers, artists, and educators sought to articulate some underlying sense of order through ever more complex systems of organization, arrangement, and tabulation. Natural philosophers vastly extended and revised the taxonomies of Linnaeus. Medical professionals developed new diagnostic tools and coined a broad range of new pathologies and diseases. Criminologists gathered biometric data that allowed them to constitute and apprehend criminal types. Literary critics debated the rise of new classes of literature, from the penny dreadful and sensation fiction to the naturalist novel. Librarians set out the protocols for indexing the classes and sub-classes of literature that resulted from the vast outpouring of printed matter. Teachers began to organize their classrooms into distinct groupings of students by age and ability. But with these efforts came, too, a new concern and fascination for that which exceeded classification, the anomalous, the mutation, the hybrid, the monstrous, and class struggle emerged as a theory of history and as a basis for political organization.

The organizers of the North American Victorian Studies Association's 2014 conference welcome papers studying any aspect of the Victorians' self-organization, organization of culture, and organization of the natural world. Proposals for individual papers or panels should be submitted electronically by March 1, 2014.

Proposals for individual papers should be no more than 500 words; panel proposals should include 500-word abstracts for each paper and a 250-word panel description.

Applicants should submit a one-page CV.

For more information, see <http://navsa2014.com/index.html>

Conferences, Workshops, and Forums

Technoscience Salon

Toronto, Ontario

Launched in 2008, the Technoscience Salon is an open forum for entangling intellectual and political questions about technoscience while remixing the disciplines composing Science and Technology Studies. Meeting monthly, the Salon aims to create a lively community of thinkers with interests in technoscience studies from

around the GTA and beyond. Drawing participants from multiple universities as well as artistic and technical communities, the Salon aspires to prompt playful and experimental engagements, as well as new collaborations and conversations.

The Salon is currently in its sixth season. The 2013-14 Salon is organized by Michelle Murphy (UofT), Shiho Satsuka (UofT), and Sebastian Gil-Riaño (UofT). The Salon is organized out of the Technoscience Research Unit located in the Women and Gender Studies Institute at the University of Toronto. We are funded by the Toronto Node of the SSHRC Situating Science Research Cluster Grant and generously supported by the Institute of Science and Technology Studies at York University and the Institute of History and Philosophy of Science and Technology at University of Toronto. We also acknowledge the History Department for providing space. If you would like to be on our email list, write techscisalon@gmail.com

See the current lineup of speakers here: <http://technosalon.wordpress.com/2013-14-events/>

Innovation and its Contestants

Department of Art History and Communication Studies

McGill University, Montreal

Fifth Annual Graduate Student Conference

18 April 2014

The concept of innovation buttresses a paradigmatically modern Western belief in the possibility of infinite economic growth and technological progress. It is in fact a buzzword with remarkable contemporary currency, one that is instrumentalized as a constant search for new technologies, means of production, market adaptations, scientific discoveries and social changes. As a fundamental tenet in Western systems of thought, it is also – and has long been – inscribed within the West's very view of itself as more successful and more 'progressive' than other societies. Note, for example, G.W.F. Hegel's famous juxtaposition of Europe's ever-changing art against the allegedly stagnant visual culture of India: the first modality accounted for the privileged position of the West as the locus of the emanation of universal Geist; while the latter stipulated an essentially 'un-progressive' timelessness in India.

The Western valuation and definition of innovation has thereby been mobilized as a justification

for diverse colonial, post-colonial and now neoliberal enterprises. It operates as a smoke screen to preserve dominant power regimes both within the West and globally, concealing simultaneously the biased valuation of cultural production, and the unequal distribution of technological and scientific headway among diverse social strata. This is the case even as the current global financial crisis challenges the West's ability to regenerate perpetually. In fact, the stakes involved in the Western impetus to innovate seem to intensify even as recent projections of economic acceleration in several non-Western countries rouse fears that the West is losing ground as innovation's main stimulant.

The innovation paradigm is moreover implicit within the bulk of humanistic academic production. As a case in point, the Greenbergian approach to art history, which dominated much of the twentieth century, revolves indisputably around a teleology of formal innovation. Meanwhile, within a number of current academic discussions – for instance those concerning experimentation and invention in the history of science (Galison); global art history (Elkins); visual culture studies (Moxey); history of ideas (Godin); the philosophy of mondialisation (Nancy); media archaeology (Parikka); technological obsolescence (Kittler); and the aesthetics of failure (Halberstam) – innovation is tacitly treated with caution, if not skepticism.

Given this tangle of collusions and complexities, how are we to approach and define innovation in academic discourse? Is the paradigm purely a means of disarming social pressure for an all-inclusive equalized prosperity; or might it be recuperated to provide a stimulus for sustainable growth? Can we understand innovation in a broader global spectrum without falling into the trap of cultural essentialism; or does this concept perpetuate Western-centric views and mores? Can the concept of innovation be used for the analysis of historical periods; or does it figure too easily in teleological narratives?

For more information, please refer to the conference website (<http://ahcsconference.wordpress.com/>) or contact ahcsconference@gmail.com.

Environments, Societies, Imaginaries: The Americas in Motion

Calacs 2014 Congress

Quebec City, Quebec

May 16-18, 2014

The Americas are in the process of reconstruction and restructuring. The voices of civil society movements can no longer be silenced as they are calling for a cleaner environment, better living conditions, justice for all as well as respect towards indigenous people and cultural/ethnic minorities.

This is also true for the demands of young people who want to explore new avenues for a better future. In order to free themselves from the influence of external powers, the people of Latin America and the Caribbean are redefining their models of society and asserting their independence.

Regional solidarities—whether in the Caribbean, Central America or South America with the foundation of UNASUR—as well as contributions from different social and cultural groups reflect these important changes. The main challenge, however, is to make sure that all levels of society benefit from the progress made by these societal and political forces.

In 2014, CALACS wishes to include the environmental sciences and thus addresses a special call to researchers/teachers/activists/officials and diplomats who work for the protection of natural resources—water, forests, soil, air—and biodiversity. The growing interest in sustainable development has generated new ideas, innovations, and participation of youth leaders, community organisations, educational institutions and other agents. The congress aims to portray the social actors and their strategies which put the Americas in motion. In keeping with the multi- and interdisciplinary spirit of the congress, we strongly encourage submissions from scholars working in all disciplines as well as practitioners in all fields and sectors. We especially encourage submissions from scholars and other participants from Latin America and the Caribbean.

CALACS congress will be held at Laval University – Canada’s oldest institution of higher education and the first institution in North America to offer higher education in French. The university is located in Québec City, one of the oldest cities in North America. The historic district of old Québec was declared a World Heritage Site by UNESCO in 1985. Come and experience the old city’s heritage, culture, food and beautiful surroundings.

For further information, please contact us at calacs-congress2014@ffgg.ulaval.ca

Websites and Publications

Spontaneous Generations: A Journal for the History and Philosophy of Science

Spontaneous Generations is an open, online, peer-reviewed academic journal published by graduate students at the Institute for the History and Philosophy of Science and Technology, University of Toronto. It has published seven issues and is a well-respected journal in the history and philosophy of science and science and technology studies. We invite interested scholars to submit papers for our eighth issue. We welcome submissions from scholars in all disciplines, including but not limited to HPS, STS, History, Philosophy, Women’s Studies, Sociology, Anthropology, and Religious Studies. Papers examining any time period are welcome.

The journal consists of four sections:

- A focused discussion section consisting of short peer-reviewed and invited articles devoted to a particular theme. The theme for our eighth issue is “Science and Social Inequality”. Recommended length for submissions: 1000-3000 words.
- A peer-reviewed section of research papers on various topics in the field of HPS. Recommended length for submissions: 5000-8000 words.
- A book review section for books published in the last 5 years. Recommended length for submissions: up to 1000 words.
- An opinions section that may include a commentary on or a response to current concerns, trends, and issues in HPS. Recommended length for submissions: up to 500 words.

The eighth issue of *Spontaneous Generations* will appear in September 2014.

Submissions for the eighth issue should be sent no later than March 14, 2014.

For more details, please visit the journal homepage at <http://spontaneousgenerations.library.utoronto.ca>

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