

Pacific Circle Newsletter

3, 15 (17 July 2023)

Early Career Updates

Lisa Jardine Grant of the Royal Society

PhD candidates and early career researchers may be interested in this funding opportunity for travel in support of archival research in history of science and other interdisciplinary studies combining humanities and the natural sciences.

The Lisa Jardine grant of the Royal Society offers funding for:

- Extended research trips for UK and overseas-based researchers to use the Royal Society's own rich historical collections and related London collections (up to £8,000 available for travel and subsistence costs depending on destination and length of research, 1 - 3 months. Up to £2,000 international travel and £2,000/month subsistence).
- International travel and expenses for UK-based scholars to carry out short, exploratory archival research trips (up to £2,000 available for trips up to 1 month)
- International travel and expenses for UK-based scholars to attend conferences and networking or training events (up to £2,000 available for trips up to 1 month)

The deadline for applications is 28 September 2023, 3pm. (Please allow time for completion of references and approval by this deadline).

This round, funding is available for research taking place between Jan – Dec 2024.

The award panel will meet in November and applicants will be notified of their decision by the end of the month.

A further round will open at the end of the year accepting applications for research to take place in summer 2024 onwards.

The grant is open to researchers based in cultural organisations such as museums and archives as well as universities.

Full details, eligibility conditions and application information are available on the Royal Society website [https://urldefense.com/v3/http://bit.ly/LJRSMai;!!PvDODwIR4mBZyAb0!QY59250THBz6CYzVL_9uIn_rn9YWRjrmzdZA8o7r1134svEvFBr8kBhCB2ZpAwLZV1SvVt6boUYGw3gvWLW_oq8luC236JdRU\\$](https://urldefense.com/v3/http://bit.ly/LJRSMai;!!PvDODwIR4mBZyAb0!QY59250THBz6CYzVL_9uIn_rn9YWRjrmzdZA8o7r1134svEvFBr8kBhCB2ZpAwLZV1SvVt6boUYGw3gvWLW_oq8luC236JdRU$)

STAND (Historical Commission on Science, Technology and Diplomacy)

Early Career Research Seminars for 2023-2024

Call for Papers – Deadline: September 8, 2023

This is an open call for papers for the STAND (Commission on Science, Technology and Diplomacy) Early Career Researchers Seminar series for 2023-2024. The commission and its members examine the broad history of science, technology and diplomacy and are looking for early career researchers (both PhD students and those who have recently achieved their PhD) to present a work-in-progress paper during next year's seminar series.

We are looking for researchers who address the history of science, technology and medicine in their broad international contexts. Topics include but are not limited to: science diplomacy, international cooperation in fields related to science, technology and medicine, and the transnational circulation of technoscientific and medical knowledge, materials and expertise.

The seminars will run from October 2023 to May 2024 - dates tbc with organizers - and the usual format entails the circulation of a work-in-progress paper (research article, conference paper, thesis chapter, book chapter...) prior to the seminar itself. Then, during the seminar, a discussion and question/answer session will follow.

Please send any expressions of interest to Grigoris Panoutsopoulos (gpanouts@phs.uoa.gr) or Alice Naisbitt (alice.naisbitt@manchester.ac.uk) in an email which includes your name, short bio and a ca. 200-300 word summary of your research as it pertains to the seminar. We also encourage you to email us if you have any questions, queries or would like to be included in the mailing list for the seminars if you are not already.

Deadline: 8 September 2023.

Journal of Pacific History Inc.
Call for applications – JPH Publication Incentive grants

The Journal of Pacific History Inc. invites qualified persons to apply for a Publication Incentive grant. These competitive grants are offered to help support early career Pacific historians to prepare articles for submission to the *Journal of Pacific History*.

See <https://www.tandfonline.com/loi/cjph> for the journal's Aims and scope, Journal information, and Instructions for authors. Applicants must follow the Instructions scrupulously in preparing their article.

Qualifications

Anyone who has completed a PhD or MA since 2017 in a field relevant to Pacific history, or who is currently enrolled for a doctorate in such a field, can apply for a grant of AU\$3,000 to prepare an article for submission to peer review on a topic of relevance to the *Journal of Pacific History*.

Successful applicants will receive AU\$500 upfront; AU\$1,000 on submission through the *Journal of Pacific History* Taylor & Francis web portal, **before 30 September 2024**, of a manuscript accepted by the editors to send for peer review; and AU\$1,500 when the accepted final article is sent for production by the *Journal of Pacific History*. In the case of multiple authors, the total grant will be AU\$4,000.

Application process

Candidates should submit a recent CV, letters of support from two referees, and a proposal of up to 1,000 words **by 30 November 2023** to the Secretary of JPH Inc (bronwen.douglas@anu.edu.au).

Article proposals should include the following:

Title and 200-word abstract

Outline: rationale of the topic and a brief historiography

Timeline: to submission via the JPH online portal

Applications will be assessed by a sub-committee of the Editorial Board of the *Journal of Pacific History*. A mentor may be appointed to assist successful applicants.

Helen Gardner
Chair, JPH Inc.

Research Notes

Publication of the Online

Ferdinand von Mueller Correspondence Project

The Ferdinand von Mueller Correspondence Project (<https://vmcp.rbg.vic.gov.au/>) announces the publication of a free-to-air website with the massive surviving correspondence of the German-Australian botanist and explorer, Ferdinand von Mueller (1825-1896).

Please visit vmcp.rbg.vic.gov.au. It's a work still in progress with regular updates envisaged, but at present it amounts to about 11,500 fully-edited letters, plus supporting documentation.

Publishing and Publication Updates

Science, Technology and Society

University of Bristol Press

The Press is expanding its publishing program in We're expanding our publishing in [Science, Technology and Society](#) and would be delighted to receive enquiries from prospective authors.

For updates on publishing in this area, please sign up to "[Science Technology and Society mailing list and we will send you a free ebook copy of Slow Computing by Rob Kitchin and Alistair Fraser.](#)"

The Press is especially interested in the following areas:

- Digital economies
- Science, technology, medicine and health
- Online culture
- Technology and politics
- New directions in theory, method and methodology

If you would like to speak to our editor about your publishing ideas, please email paul.stevens@bristol.ac.uk.

New and Forthcoming Publications: Articles and Essays

Hallie R. Buckley, Melandri Vlok, Peter Petchey and Neville Ritchie, "'A Long Want:' An Archival Exploration of Scurvy in the Otago Goldfields of New Zealand," *Journal of the Royal Society of New Zealand*, 1-22.

| DOI: 10.1080/03036758.2023.2225860

Book Reviews

Deepanwita Dasgupta, *Creativity from the Periphery: Trading Zones of Scientific Exchange in Colonial India*, Pittsburgh, PA: University of Pittsburgh Press, 2021. 312 pp. \$50.00 (e-book), ISBN 978-0-8229-8802-1; \$55.00 (cloth), ISBN 978-0-8229-4656-4.

Reviewed by Animesh Chatterjee (Greenhouse Centre for Environmental Humanities at the University of Stavanger)
Published on H-Sci-Med-Tech (July, 2023)
Commissioned by Penelope K. Hardy

Outlining her arguments, Deepanwita Dasgupta writes that the purpose of *Creativity from the Periphery: Trading Zones of Scientific Exchange in Colonial India* is to examine and understand "creativity in science when it operates under various hard and marginal conditions involving challenges of resources, training, and the overall lack of a home community" (p. 7). In doing so, the author seeks to upend those historiographical and philosophical formulations that have so far remained strongly focused on, as she writes, "a set of events gathered mainly from the various locations of Euro-America, thus keeping most of our philosophical energies focused upon a few centres of science, and generally neglecting everything else that falls outside of it" (p. 17). Until recently, this meant that the attention of philosophers of science was myopically directed to what Dasgupta terms "resource-rich communities" that produce scientific knowledge while situated within the cognitive, physical, and historical location of the "centre" or "metropole" (pp. 5-6). Dasgupta's *Creativity from the Periphery* is a book about the

scientific practices and contributions of well-known yet peripheral individuals in early twentieth-century colonial India--Satyendra Nath (S. N.) Bose, C. V. Raman, Meghnad Saha, and G. N. Ramachandran--who functioned within "resource poor" systems and societies, and produced scientific knowledge despite sometimes also lying outside the categorical definition of "scientist" (p. 5).

The book is made up of two parts of four chapters each, a brief introduction, and a concise summary for conclusion. In the first part of the book, aptly titled "The Theoretical Framework," Dasgupta builds a broadly cognitive-theoretical model to capture the complex embodied practices and mental models of scientists in the periphery. She is especially interested in how they created new conceptual shifts in existing scientific practices and knowledge and, consequently, put themselves on a path to trading their knowledge and skills with their counterparts in the Western "metropolitan" (p. 85). As the author herself admits on page 16, she is not the first person to write on the theme of scientific knowledge in the context of the center and periphery. Many of the broader themes and outlines of the book will be known to those familiar with the extant historiography on science in South Asia, especially the works of Kapil Raj, who has shown how the epistemic contributions of the non-Western periphery went way beyond simply providing raw data for research in the "center"; knowledge produced in the periphery was also important to the formation of new scientific knowledge and systems (Relocating Modern Science: Circulation and the Construction of Knowledge in South Asia and Europe, 1650-1900, 2007).

In the first chapter, the author aims criticisms at the field of philosophy of science and "philosophical models of science" which have, for years, only focused on well-developed centers of science and scientific protagonists (p. 17). The absence of scientific actors and knowledge from the peripheries presents significant consequences for our philosophical and psychological understandings of science. First, a lack of representation of the peripheries undermines some of the criticisms of scientific knowledge that arise from such parts of the world, especially as they question the use and benefits of such knowledge. Second, such absences also reveal silences about the new kinds of knowledge and ideas produced in the periphery and how these come to be organized and presented within the complex and shifting mainstream structures of scientific practice. A focus on peripheral

actors, especially as they gradually emerge from a state of isolation and seek to make scientific knowledge, opens up avenues to studying the hierarchies and differential levels of authority and trust that exist in scientific practice.

Introducing a fresh perspective on peripheral protagonists, Dasgupta presents a "cognitive-philosophical-historical (CPH)" framework that brings our attention to the minds and cognitive processes of these protagonists in order to showcase, as the book's title says, "creativity from the periphery" (p. 14). The second, third, and fourth chapters help answer some of the questions that Dasgupta's CPH model raises within philosophy of science. In chapter 2, she makes a forceful argument against the idea of the scientific "community" studied by philosophers of science as idyllic, with its considerable resources and well-defined social processes and practices. The social structure of science, as studied by philosophers from Thomas Kuhn (*The Structure of Scientific Revolutions*, 2nd ed., 1970) to Miriam Solomon (*Social Empiricism*, 2007) and Helen Longino (*Science as Social Knowledge: Values and Objectivity in Scientific Inquiry*, 1990), while highlighting the ways cognitive and social interactions between scientific communities influence the making of epistemologically reliable scientific knowledge, tacitly assumes that all scientific communities generally stand on a common, level ground with respect to authority and agency. There are almost no contexts within which two unequal communities with asymmetric power dynamics or biases interact with each other, and criticisms and critical engagements, which Longino considers to be transformative to science, often become dismissive in these cases. Dasgupta makes a case here for introducing her peripheral protagonists and unequal epistemic engagements to gain new insights about how scientific practices also involve peripheral scientific communities negotiating and striving for recognition and consensus for their work. She studies her peripheral protagonists on the same plane as "scientists" in the metropole by, firstly, defining "science" as a cognitive ability to solve problems through systematic and replicable frameworks and, secondly, highlighting the ability of her protagonists to build communities around these frameworks and practices, thereby opening avenues for new frameworks, practices, solutions, and communities in the future.

In the third chapter, Dasgupta uses the concept of "trading zone" to capture both these points and present her protagonists and, their approaches, practices, and communities as contributors to larger structures of knowledge and systems of science. She considers the scientific contributions of peripheral scientists as outcomes of trading zones that these actors build in order to transcend their peripheral status. The first part of the book concludes in chapter 4, which introduces the various stages through which trading zones evolve and how such processes enable peripheral researchers to build their expertise, community, and research programs that they then use to start exchanging knowledge with other communities both inside and outside their peripheral situation. These processes, the author argues, are far from straightforward, with peripheral researchers attempting to traverse the asymmetrical and epistemologically impaired landscape often being forced to alter and entirely refashion their mental models, thereby allowing for unexpected directions of creativity.

The second part of the book, titled "Four Case Studies in Peripheral Science," details the scientific pursuits of the book's four main protagonists along CPH lines that Dasgupta builds in the first part. The story of Bose's interactions with the works of Albert Einstein and other European physicists and his formulation of quantum statistics for indistinguishable particles gives the reader a sense of the gradual transformations in Bose's cognitive processes as he worked at the periphery of resource-rich metropolitan scientific programs. Bose also had to overcome the persistent inequalities in epistemic authority as a consequence of his peripherality. However, as the author shows in intricate detail in chapter 5, Bose's mathematical and statistical reasoning, which was different from established bodies of knowledge research programs, enabled him to provide new conceptual solutions to epistemological issues that scientists in the metropole struggled with, resulting in an acceptance of his works alongside Einstein's as what came to be known as Bose-Einstein statistics.

Bose's contemporary, Raman, also used the constraints placed on his cognitive processes by his peripherality to engage with the metropolitan scientific community. Dasgupta shows in chapter 7 how, in contrast to Bose's rather sporadic and chaotic yet personal contacts with metropolitan peers, Raman adopted an institutional

approach that involved building a research program in the periphery framed around research questions from an existing metropolitan research program. Nevertheless, through his research program, especially by offering solutions to research questions that perplexed several metropolitan scientific communities, Raman not only overcame limited agency and epistemological asymmetries with relation to the metropole, but also laid the foundations of a professional scientific community in India.

In chapter 6, Dasgupta tells the story of Saha, who developed a new theory of stellar spectra by combining his readings of German scientific journals and his engagement with Einstein's quantum theory of light. Through a detailed examination of Saha's crucial contributions to the emerging discipline of astrophysics that combined insights from quantum theory and physical chemistry, the author extends our gaze from science as the domain of a few specialized experts to scientific thinking and practices of diverse people. Saha, who initially worked closely with Bose, established a trading zone with the European scientific community by devising and using radically new theoretical concepts, hypotheses, equations, and scientific practices that many of his European peers were still hesitant to accept. In the process, Saha provided his European peers a core set of theoretical and analytical concepts in modern astrophysics to develop their own research questions while also making himself a part of a resource-rich community.

Finally, in chapter 8, Dasgupta takes us to postindependence India and the story of Ramachandran and his process of discovering the structure of collagen. In contrast to Bose or Raman, who began their scientific careers by building research programs based on critical readings of European scientific journals, Ramachandran was mentored, first in Bangalore and then in Cambridge, by recognized scientists. Ramachandran's initial interactions with the metropole were also adversarial, involving conflicts in structural biology with the findings of Alexander Rich and Francis Crick. However, his discovery of the triple-helix structure of collagen, the author argues, was a case of a peripheral scientist establishing himself as an expert against his metropolitan peers, which eventually set the foundations for future studies on nuclear magnetic resonance in India.

Overall, in looking at the scientific practices and innovations of peripheral protagonists through the cognitive- philosophical-

historical analytical framework, Dasgupta

shows us how the peripheries were often productive places of scientific inquiry and produced new ideas and knowledge not just for the metropolitan centers of scientific practice, but also for their own pursuits of building scientific networks and institutions.

Dasgupta very skillfully goes into great detail and places the reader in the same physical and mental spaces as Bose, Raman, Saha, and Ramachandran as they work through some of the most complex scientific problems of their time. The only complaint I had with the book, however, was with the editorial choice of splitting the book into two sections. The first section and its four chapters occasionally become quite repetitive in making similar arguments for Dasgupta's CPH model of analysis. Merging the four chapters would have ameliorated some of these repetitions and allowed the reader to quickly traverse the dense theoretical frameworks to the chapters in the second section that form the core substance of the book. Similarly, given how crucial the scientific protagonists discussed in the latter chapters were to peripheral science, they are portrayed almost as lone geniuses, without much attention to the networks within the periphery through which they attained the knowledge and skills required to solve the scientific issues at hand. The very fact that Dasgupta tells her protagonists' stories primarily on the basis of their cognitive processes means that, in spite of some personal and institutional contexts, the book inevitably misses out on placing the peripheral scientists within the larger social, cultural, and political environments where they lived and worked. Such an approach might have enriched and complicated not just the CPH framework, but also our understanding of the ideas, institutions, practices, networks, and individuals central to the very definition of scientific "creativity from the periphery."

Creativity from the Periphery is, nevertheless, a valuable addition to the history and philosophy of science. While it focuses solely on individuals from colonial and postcolonial India, Dasgupta's novel approach can be adopted and extended to case studies on creativity from other peripheral contexts. Towards the end of the introduction, Dasgupta writes about the intended audience of the book. The book is written with philosophers and historians of science in mind, but it will be useful to more than just scholars and academics. Dasgupta hopes that it will also interest both the general reader and, she adds, "the generations of creative young researchers who are now at

work in various emerging contexts of science" (p. 10). I, too, hope that wider audiences read this excellent book, and believe it will greatly benefit those working in the development and administration of science policies not just in what the book terms as "the periphery," but also globally.

Citation: Animesh Chatterjee. Review of Dasgupta, Deepanwita, *_Creativity from the Periphery: Trading Zones of Scientific Exchange in Colonial India_*. H-Sci-Med-Tech, H-Net Reviews. July, 2023.

URL: [https://urldefense.com/v3/https://www.h-net.org/reviews/showrev.php?id=57753;!!PvDODwIR4mBZyAb0!SZ8r6A5NI8ccCMYJCRDbp-Ckfj6lgOqUeztapLnlj9JrL4ntsDbzQouU1ilh9_R9GCdB0Fm6vOUnlqhep8UYzQ\\$](https://urldefense.com/v3/https://www.h-net.org/reviews/showrev.php?id=57753;!!PvDODwIR4mBZyAb0!SZ8r6A5NI8ccCMYJCRDbp-Ckfj6lgOqUeztapLnlj9JrL4ntsDbzQouU1ilh9_R9GCdB0Fm6vOUnlqhep8UYzQ$)

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Yan Gao. *Yangzi Waters: Transforming the Water Regime of the Jiangnan Plain in Late Imperial China*, *China Studies*, 44. Leiden: Brill, 2022. xviii + 271 US\$146.00 (cloth), ISBN 978-90-04-50527-8.

Reviewed by Ruth A. Mostern (University of Pittsburgh)
Published on H-Water (July, 2023)
Commissioned by Daniella McCahey

Yan Gao's *_Yangzi Waters: Transforming the Water Regime of the Jiangnan Plain in Late Imperial China_* is an important work of early modern water history that combines excellent research, a novel topic, an original theoretical framework, and a striking narrative. Two elements make it unique among works on water history. First, it is about agriculture and other modes of subsistence in a wetland region, a poorly drained locale where residents learned to practice "amphibious living" (p. 36) on a "hydraulic periphery" (p. 1). Landscapes like these rarely feature in water history literature. Gao vividly describes how water management regimes and struggles for livelihood were adapted to seasonal variations in the division between wet, marshy, and dry terrain; and between cultivatable and uncultivable land. On the Jiangnan Plain, a region at the confluence of the Han and Yangzi Rivers in central Hubei, the varying annual intensity of the East Asian Monsoon and its cycles of wet and

dry conditions could transform vulnerable people from farmers into raft-dwelling foragers, or vice versa, as could small adjustments to levees, canals, and the policies and practices by which they were maintained. Gao does a terrific job explaining how fluid this environment was--both literally and metaphorically--and how that characteristic shaped the history of the region's water regime.

Yangzi Waters is, moreover, among the best water history books I have ever read when it comes to adjudicating and integrating the relationship between those aspects of water infrastructure development and management that were motivated by large-scale state power, and those that were dictated by local self-governance. At the beginning of her introduction, Gao juxtaposes two iconic water narratives against one another. She notes that there may be ample room to reconcile Clifford Geertz's work on community management of Balinese water temples and Karl Wittfogel's despotic hydraulic state, each one accounting for some aspect of a given water story (p. 3). In addition, she offers Peter Perdue's model of diverse possible modes of state control in water management arrayed along continua from small to large and from state-controlled to autonomous.

The point is that modes of political economy in water management may vary from place to place, and they may shift over time. Gao argues persuasively that in the Jiangnan Plain over the course of the Qing regime (1644-1911), there was a transition away from preponderant state control of water at the beginning of the era and toward more local control of water (p. 3). Particularly for readers who are not experts in Chinese history, the book offers a refreshing, even unsettling, counterpoint to the stereotype that early modern environmental history is always a narrative about the increasing power of the state over people and nature.

The first chapter of *Yangzi Water* focuses on the environmental setting of the Jiangnan Plain, especially in the context of wet rice agriculture, which requires precise amounts of water to be drained in and out of fields at very specific times of year. Gao introduces the central nonhuman agents of her story: polders (*yuan*), embanked fields claimed from marshland, enclosed by levees, with water levels controlled by sluice gates. "Organic machines" in Richard White's sense, as Gao points out, polders were difficult to maintain in working order and intractable to many forms of management. Thus, on

the Jiangnan Plain, she argues, requirements for building and managing polders and for regulating access to them animated a social structure built around cooperation. With state incentives, land enclosed in polders on the Jiangnan Plain expanded rapidly from the mid-1600s to the mid-1700s. Private polder construction continued through the early decades of the 1800s before the water system deteriorated under pressures from erosion and rebellion in the 1800s.

Yangzi Waters is an exceptional book when it comes to understanding "community dynamism" (p. 234) in Jiangnan Plain water management. However, Gao does not explore the dynamics of power or exploitation within that community. Though she refers to poverty and to the denigration of poor, landless, and mobile denizens of the plain, she does not describe how polder construction and management exploited such households for backbreaking and dangerous work, how their access to land and livelihood may have been constrained, or how property owners, wealthy people, politically connected gentry, and others set the terms of polder construction and access to water and farmland, as they surely must have done. This is an important part of the story, especially given the efflorescence of mass uprisings in the region starting in the nineteenth century.

The rest of the book is chronological, and it emphasizes two major themes in addition to polder management. One area of focus is the changing activism of the Qing state. The Jiangnan Plain was peripheral to centers of imperial wealth and power even as it held a strategic position for connecting north and south China in its western regions. The other topic is demographic history. Almost in passing, Gao points out (p. 117) that the Jiangnan Plain population increased by ten times from the early seventeenth century to the mid-eighteenth century: a full order of magnitude! Although her narrative does not ignore population growth, I wish that she had emphasized it more strongly.

By the end of the eighteenth century, population pressure pushed deforestation and swidden maize farming into the mountains overlooking the polders, which in turn caused erosion that, along with intentional wetland drainage, transformed the topography of the plain. On the Jiangnan Plain, as elsewhere in late Qing China, desperate and landless households mounted massive rebellions. In keeping with many narratives of Qing history, the

first half of the book traces a story of growth and flourishing, and the second describes a descent into crisis. Population history is essential to that story.

The story begins with Qing founding following the seventeenth-century climate crisis, which (along with civil war and rebellion) had depopulated the Jiangnan Plain. The Qing regime secured the plain and promoted wetland drainage and polder construction. The court also attempted to maintain warhorse pasturage there in support of a large garrison situated amidst the wetlands, floodplains, lakes, and riverbeds of Jiangnan. The venture failed when Qing officers discovered that horses could not survive on the saline grass that grew in the region, and as rising populations put pressure on potential farmland. Rebellion, dispute over scarce land, and environmental crisis, punctuated with episodes of local gentry activism, followed in the wake of peak polder expansion in the early nineteenth century.

In short, this excellent book has much to recommend to water historians, who should be inspired by its success in troubling river history narratives that draw simple boundaries between wet and dry terrain and between the state and local residents.

Citation: Ruth A. Mostern. Review of Gao, Yan, *Yangzi Waters: Transforming the Water Regime of the Jiangnan Plain in Late Imperial China*. H-Water, H-Net Reviews. July, 2023.

URL: [https://urldefense.com/v3/_https://www.h-net.org/reviews/showrev.php?id=59321_";!!PvDODwIR4mBZyAb0!W8xLCooc_3F3ouu6pZMnC6ofgKpmMIM9BvpcfoiHxFT-6TKfDn-86Ay277mv93BensYlhP_dzVvFpLUXQaFDsA\\$](https://urldefense.com/v3/_https://www.h-net.org/reviews/showrev.php?id=59321_)

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Livia Monnet, *Toxic Immanence: Decolonizing Nuclear Legacies and Futures*, Montreal: McGill-Queen's University Press, 2022. 472 pp. US\$95.00 (cloth), ISBN 978-0-228-01136-1.

Reviewed by Raina Bhagat (Northwestern University)

Published on H-Environment (July 2023)

Commissioned by Daniella McCahey

Toxic Immanence: Decolonizing Nuclear Legacies and Futures is an edited collection with an ambitious scope, making impressive strides across both disciplines and genres to sketch out numerous paths toward the unequivocal need for the abolition of nuclear technologies. In the wake of the Fukushima Daiichi Nuclear Power Plant disaster of March 11, 2011, how can we construct "decolonizing pedagogies of the nuclear" (p. 6)? Working toward the construction of the nuclear energy and environmental humanities, *Toxic Immanence* explicitly states its desire to create decolonial pedagogies with the power to shape how nuclear discourses are taught in a world that is decidedly not post-nuclear. The collection features academic essays from a range of disciplines, as well as a section devoted to creative work in the form of poetry and photography.

As the first major collection of scholarship on nuclear energy humanities, *Toxic Immanence* provides a comprehensive overview of the field of nuclear energy humanities, while bringing together the chief achievements made by monographs in the field across disciplines. In the text's introduction, Livia Monnet defines toxic immanence as "the embodied experience of living with, (re)thinking and contesting, and offering resilience under the contaminated, increasingly unlivable conditions created by extractive neocolonial capitalism" (p. 12). With contributions from known scholars in the field, such as Joseph Masco (*The Nuclear Borderlands: The Manhattan Project in Post-Cold War New Mexico* [2006]), Thomas LaMarre (*The Anime Ecology: A Genealogy of Television, Animation, and Game Media* [2018]), and Jessica Hurley (*Infrastructures of Apocalypse: American Literature and the Nuclear Complex* [2020]), as well as early career scholars still finishing their PhDs, the collection truly underlines the formative and metamorphic state of the field. This immanence is explored under different theoretical formulations, from Sharae Deckard's "enduring nuclear" in chapter 1 to Michelle Murphy's

"alterlife," discussed in the introduction and across multiple chapters (p. 12). The interdisciplinary range of the collection allows Masco's study on seismic politics in US nuclear policy in chapter 5 to coexist harmoniously in the same section as a genre-bending "atomic opera" following the extraction of uranium by Indigenous groups in Canada to power nuclear weapons in the United States in chapter 8, by Juliet Palmer, Julie Salverson, and Peter C. Van Wyck. The collection has something to offer for scholars of every subject from literature to archaeology, to anthropology and visual culture. Additionally, *Toxic Immanence* succeeds in exploring the dangers and implications of nuclear power not simply from the radiation it produces but also from the impact of the blast and the heat and from the underlying processes that produce it, including uranium extraction, nuclear testing, and military expansion.

One of the struggles of a collection as broad in scope as *Toxic Immanence* is arranging its many moving pieces into a logical sequence, and this is where the collection could have taken the opportunity to really showcase the eclectic nature of nuclear writings. A notable imbalance between large sections on Cold War imaginaries and sparse pickings on nuclear archaeologies and heritages could have been remedied by interspersing the artistic contributions relegated to the back of the book, between chapters, similar to the organization of the 2017 collection *Energy Humanities: An Anthology* (edited by Imre Szeman and Dominic Boyer). For instance, a piece like CHamoru (Chamorro) poet Craig Santos Perez's multipart "Nuclear Family: A Poem" in chapter 16 could have been a particularly hard-hitting inclusion following criticism on nuclear aesthetics in irradiated peoples from northeastern Kazakhstan and Indigenous Australia. Additionally, because of its strong focus on nuclear power, *Toxic Immanence* might not be well suited to the scholar looking for an overview of energy humanities trends.

What is perhaps most striking in this collection, however, is its commitment to following through with the implications of nuclear development targeted in every chapter. As Monnet points out early in the text, "The development and expansion of nuclear technologies depended on the appropriation and exploitation of resources in outlying or internal colonies" (p. 6). The recognition of the implicit violence done unto marginalized communities and responsibility for said violence is welcome in an age where bridging

the gap between scholarship and activism has never been more important, as human rights are openly attacked across the globe. By adopting a pedagogical focus, *Toxic Immanence* turns the focus of nuclear studies to questions of public-facing scholarship, environmental justice, and Indigenous sovereignty. Furthermore, the collection makes a vital bridge to discussions on climate change, further bolstering the urgency of the nuclear energy humanities. This urgency is underscored not only by solid countering to the "green" aspirations of nuclear power but also by developing the connections between the processes of nuclear development and natural disasters thereby aggravated, including post-meltdown forest fires and radioactive acid rain from contaminated glaciers. All in all, *Toxic Immanence* succeeds in setting the contours for a precise sector of study, while also bridging it to the well-established academic disciplines of environmental humanities, gender and sexuality studies, and critical Anthropocene studies, to name only a few.

Citation: Raina Bhagat. Review of Monnet, Livia, *Toxic Immanence: Decolonizing Nuclear Legacies and Futures*. H-Environment, H-Net Reviews. July 2023.

Fellowships

Journalist Fellowships

Max Planck Institute for the History of Science, Berlin

The Max Planck Institute for the History of Science in Berlin is excited to offer **journalist residencies in the history, philosophy, and sociology of science** in 2024.

This fellowship presents the opportunity for journalists in all forms of media around the world to gain insight into the work of an international research institute. During the fellowship journalists explore current research in the history, philosophy, and sociology of science; network and engage with academic researchers; and carry out a research project on a relevant topic of their choice. Journalists-in-Residence receive an honorarium of €3,000 per month (for up to two months).

We invite applications from journalists seeking to utilize the history, philosophy, and sociology of science in their reporting, and with a particular interest in exploring the value of these disciplines for public discourse around contemporary social issues. Applications from all formats of journalism (print, audio, video, radio, online, multimedia, data, etc.) are welcomed. The deadline for applying is August 14, 2023.

Further details, including the application portal, can be found on our website: <https://www.mpiwg-berlin.mpg.de/job-position/guest-residencies-journalists-history-philosophy-sociology-science-2024>

Conferences and Meetings

Beyond the Ocean's Depths: Revisiting the *Challenger* Expedition (1872-1876)

7 November 2023

National Maritime Museum, Greenwich, London

CALL FOR PAPERS DEADLINE: 31 July 2023

This event is in part sponsored by the Department of Science and Technology Studies at University College London.

Revisiting the *Challenger* Expedition (1872-1876)

With the environmental threat of global warming, rising seas and biodiversity loss, knowledge of the ocean is more important than ever. The *Challenger* Expedition, named after the British Royal Navy vessel HMS *Challenger* which circumnavigated the globe from 1872 to 1876 with the aim to explore the deep sea, has been celebrated as a foundational moment in the history of modern oceanography.

Data and specimens obtained from the expedition are actively studied by scientists today and provide a historical benchmark for climate change and species distribution. Meanwhile, historians are increasingly calling for the voyage's imperial context to be recognised and are bringing attention to people and places that have previously been given little attention in the expedition's historiography. How do we tell more inclusive and holistic histories of *Challenger*, while engaging with its scientific importance today? Looking forwards, what can we learn from the past while considering the future of ocean science?

On 7 November 2023, 'Beyond the Ocean's Depths' shall provide a welcoming interdisciplinary forum for historians, scientists, coastal and island communities, and museum curators to share ideas and their work. The day will bring together a variety of perspectives, knowledges,

specialisms and resources. Papers are encouraged on a range of topics related to *Challenger*, 19th-century ocean science and voyages of exploration in a broad sense.

Conference themes include:

- The use of *Challenger* materials in modern scientific research
- *Challenger*-related materials in museum collections
- Public engagement and education
- Colonial legacies
- Untold histories
- Local knowledges and expertise
- Links between oceanography past, present and future

This one-day conference will be held in person at the National Maritime Museum, Greenwich and online. It will consist of four panels, each consisting of three 15-minute papers and a Q&A, and a guided visit to the Caird Library to view *Challenger* archives, photographs and ship plans. We will also have a keynote talk and time to view relevant gallery spaces.

How to submit

Please send abstracts of 150 words for a 15-minute paper, presentation or creative provocation, along with a biography of no more than 100 words to research@rmg.co.uk by 5:00pm on Monday 31 July. Participation is free for speakers, including lunch and refreshments. Limited travel funds are available for UK travel; please indicate if you would like to be considered.

The workshop will be wheelchair accessible with lift access, and the lecture theatre is fitted with a hearing loop. It will also be possible to give presentations remotely, and we anticipate that overseas submissions will be delivered online (unless rail travel to the UK is available). This is to support the Museum's ambitions to be carbon emissions conscious. The workshop language is English. If you have any queries, please contact the organisers at research@rmg.co.uk. We particularly encourage submissions from speakers with lived experience, Early Career Researchers, independent scholars, and scholars from underrepresented institutions and countries. We look forward to receiving your submissions and anticipate confirming successful papers by mid-August.

Conference webpage:

<https://www.rmg.co.uk/whats-on/national-maritime-museum/challenger-conference>

11th Conference of the European Society for the History of Science

Pompeu Fabra University, Barcelona

4-7 September 2024

The website of the conference is now online: <http://eventum.upf.edu/go/eshs24>

The call for symposia will open on October 1

First International Conference of the Histories of *Upcoming*

Anthropologies: Doing Histories, Imagining Futures

Hosted by the University of Pisa, Italy

The History of Anthropology Network (HOAN) of the European Association for Social Anthropology is happy to announce a call for papers for the First International Conference of the Histories of Anthropologies, Doing Histories, Imagining Futures.

The event will be held on-line between 4-7 December 2023 and it is collaboratively organised by key stakeholders in our field to discuss methodological, theoretical, pedagogical, and ethical aspects of the histories of anthropologies.

Please browse the Conference Website and Panels to discover more!

<https://hoaic.cfs.unipi.it/>

<https://hoaic.cfs.unipi.it/panels/>

The call for papers will close on June 30, 2023. Notifications of accepted papers will be sent by July 15, 2023.

<https://hoaic.cfs.unipi.it/call-for-papers/>

This is an exciting opportunity for everyone working in the field of history of anthropology to gather and learn from each other and set new directions for the field. You are warmly invited to join us and submit a paper proposal.

The panels are:

Panel 1: Doing Histories of Anthropologies. Theories, Methodologies, Practices

Panel 2: Disciplinary Histories and Archives in Anthropology, Folklore, and Oral History: Actors, Formats, and Mediality in Knowledge Production

Panel 3: Historicizing Anachronistic Motives

Panel 4: History's Lessons: Uses of the History of Anthropology

Panel 5: Pushed out, excluded and forgotten? Recovering anthropologists, ethnologists, and folklorists for the history of our discipline

Panel 6: Approaching the Present through Anthropology's Past

Panel 7: Regional Anthropologies, Colonial and Postcolonial Histories

Panel 8: Missing Others. Eluded Encounters and Hidden Contributions within the History of Anthropology

Inventing the Human

Conference, conversations, provocations, roundtables, and exhibition

30th November to 2nd December 2023

University of Melbourne (f2f and virtual)

Call for Papers

This interdisciplinary and hybrid conference sets out to place the (liberal-humanist) subject dispatched by posthumanism inside the much larger field of Enlightenment/Romantic thought on this topic—a field that, on the one hand, is no longer imagined as beginning and ending in Europe and, on the other hand, is always already in dialogue or conflict with non-European traditions, understandings, and discourses of the human. We take as our key themes the pasts, futures, and varieties of reason, imagination, liberty, and the body—terms crucial to modern understandings of the human. But we do this in order to ask, in a world where Europe is merely one centre among many, what of this legacy can be dispatched? What can be revised or extended by other traditions? What in the world's multiple humanities might open new possibilities for the future? And what does our answer to these questions mean for the methods, roles, and organising categories of the Humanities?

Confirmed Keynote Speakers / Provocateurs:

[Genevieve Bell](#), Director of the School of Cybernetics; Director of the 3A Institute (3Ai); Florence Violet McKenzie Chair at the Australian National University; a Vice President and a Senior Fellow at Intel Corporation.

[James Q. Davies](#), Professor of Music, University of California, Berkeley.

[Amanda Jo Goldstein](#), Associate Professor, English Faculty, University of California, Berkeley.

[Wantari 'Wanta' Pawu](#), Warlpiri Elder; and Professorial Fellow in Indigenous Studies, University of Melbourne, University of Melbourne.

[Delia Lin](#), Associate Professor, Chinese Studies, University of Melbourne.

[Sujit Sivasundaram](#), Professor of World History, University of Cambridge.

Topics include:

- Enlightenment-Romanticism and/or its legacies and the invention of the Human
- Indigenous, Asian, Southern Hemisphere traditions and knowledges about the human
- Re-inventing the human (or why developing an understanding of plural humanity matters)
- The pasts, futures, and/or varieties of
 - reason / critique • imagination / creativity • knowledge • literary arts / performing arts / visual arts • cosmopolitanism / worldliness • religion / faith / the secular / the post secular • the body • place • tradition

--- or topics not included in this list important for a particular tradition on the human.
- Life writing / Writing about the human
- Ability / disability / differently abled
- Gender / transgender / non-binary