

Notwithstanding, Hossain rightfully argues that governance shortcomings are manifold and range from procedural failures, such as inadequate implementation; via lack of inclusion of established environmental principles; to the lack of inclusion of indigenous and local peoples in the Arctic. While this may be the case, Hossain concludes that in light of the cooperative efforts under the Arctic Council it is possible to maintain a 'piecemeal' approach to resource governance without the need for a new comprehensive regime if the Council were to establish means to coordinate the different regimes and "help to identify the overlapping aspects so that better implementation of cross-sectoral resource management can be achieved" (p. 297). When presenting the four areas of the high seas where marine protected areas can be found, the chapter erroneously remarks that the "Northern Ocean" (p. 288) holds such an MPA. Of course, a Northern Ocean does not exist and what the author means to say is that in the *Southern Ocean* MPAs can be found.

The second 'polar' chapter is entitled "Climate change and the shifting international law and policy seascape for Arctic shipping" by David VanderZwaag. In this short and rather descriptive chapter the author presents the various governance initiatives taken regionally, globally and bilaterally to meet the challenges of changing environmental and economic conditions pertaining to shipping in the Arctic. At the core of the chapter stand the initiatives taken by the Arctic Council and in particular its Arctic Marine Shipping Assessment, and the briefly introduced work of the Arctic Regional Hydrographic Commission. The second focus lies on the International Maritime Organization (IMO) and the difficulties surrounding the adoption of the Polar Code. This International Code for Ships Operating in Polar Waters was adopted in 2014 and entered into force on 1 January 2017. Although the entering into force of the Polar Code marks a milestone for polar shipping, it does not address other pressing challenges, such as the regulation of grey water – sink, shower and laundry – discharged by vessels, or the ongoing agreement to disagree on the status of the Northwest Passage between the United States and Canada. Unfortunately the author does not delve into potential future prospects or provide further food for thought for resolving these challenges, the presentation of which is the main trajectory of this chapter. Also in this chapter an editorial mistake occurred: indigenous organisations are not

"Permanent Observers" (p. 302) but Permanent *Participants* in the Arctic Council.

The third 'polar' chapter, by Elizabeth Burleson and Jennifer Huang, shifts to the Antarctic and concerns 'Governance of climate change impacts on the Antarctic marine environment.' Again, large parts of the chapter are descriptive in nature and outline the prevailing governance regime in the Antarctic. But the authors provide critical food for thought and do not shy away from giving recommendations and suggestions for equipping the Antarctic Treaty System (ATS) with tools to weather the ongoing and impending environmental and economic changes in Antarctica. Most intriguingly, the authors compare the governance regimes of the Arctic, in this context the Arctic Council, and the ATS and present their views on what both regimes could learn from each other. For instance, they propose that the eight Arctic states and the fifty parties to the Antarctic Treaty could form polar coalitions in order to advance the polar agenda under the United Nations Framework Convention on Climate Change (UNFCCC). In light of the increase in Antarctic tourism, the authors recognise the potential of the Polar Code as a means for integrated polar governance. Indeed, this reviewer can only concur with the idea of approaching the polar regions comprehensively despite their obvious social, political and demographic differences. After all, as the authors underline, both polar regions play a crucial role in the Earth's climate system and should be taken centre stage in the global climate and ocean regimes.

While there are repetitions and overlaps in the volumes, and some rather minor editorial oversights, this reviewer was firmly impressed by the comprehensiveness of the presented topics and the diverse picture that is presented in this book. *Climate change impacts on ocean and coastal law* illustrates impressively how the complex environmental changes caused by climate change impact the different legal systems pertaining to the coasts and the sea in multifaceted ways. The book is therefore not only recommendable for legal scholars but also, given its background-providing nature, for scholars in other disciplines. Most notably, those doing research on, or working with, the challenges of climate change are strongly encouraged to obtain a copy of this book. (Nikolas Sellheim, Scott Polar Research Institute, University of Cambridge. Lensfield Road, Cambridge CB2 1ER, UK ([nps31@cam.ac.uk](mailto:nps31@cam.ac.uk))).

---

***Studying Arctic Fields: Cultures, Practices, and Environmental Sciences.*** R.C. Powell. 2017. Ontario: McGill-Queens University Press. 264 p, hardcover. ISBN 9780773551121. CAD 120  
doi:[10.1017/S0032247418000335](https://doi.org/10.1017/S0032247418000335)

The latest book by geographer Richard C. Powell is an ethnographic study of social practices and networks that constitute the environmental sciences in the Canadian Arctic. It is based on two seasons of ethnographic fieldwork at the Polar Continental Shelf Project (PCSP) research base in Resolute (Nunavut, Canada), as well as on extensive archival research and various interviews. The series of pictures in the book illustrates the ethnography and, together with eloquent language, nicely arouses the reader's imagination.

As Powell himself stresses, an ethnography of Arctic science is a powerful tool for understanding the constitution of scientific research in practice and allows for the capture of the heterogenous context of relations (political, historical, gendered or scientific). The polar regions have gained a large amount of attention in recent years, and consequently, within the social sciences, the focus has extended a number of studies of indigenous communities. However, the scientific research in the polar regions has been rather out of focus within the social sciences or ethnographies (although the recent publication of Geissler and Kelly (2016) is, similarly to Powell's research, focused on the significance of scientific field stations in the polar and tropical regions). In *Studying Arctic Fields* Powell certainly brings light to an important, yet rather undeveloped issue, not only for social scientists but also politics, the public and, last but not least, the environmental scientists and logistics managers themselves.

Powell is inspired by the social studies of science and focuses on details in the scientific practice (pp. 19–20). His observations and notes on the emotions of scientists lead him to a rather critical standpoint, specifically in relation to actor–network theory (ANT) and Bruno Latour who, according to Powell, “reduce the importance of the human subject in the development of field science” (p. 19). By contrast, Powell focuses rather on “what the conduct of environmental science means to those who perform it” (p. 20). Powell discusses his own research practice, based on insights from Geertzian and multi-site ethnography, mostly in the *Introduction*, where (apart from delineating his aims and the topics of this book) he reflects on his position as an ethnographer in a rather isolated and small community of scientists. These reflections continue to permeate the whole book, illuminating or illustrating his analytical arguments and observations.

Throughout the book, Powell captures many interesting topics and moments within the study of scientific practice: apart from history, politics and nationalism (chapters 1 and 2), the spatial organisation of the PCSP (chapter 3), logistics (chapters 3 and 4), and relations with the Inuit (chapter 5), he also focuses on the role of emotions (chapters 6 and 7), as well as the gendered relations and other hierarchies between scientists (chapter 7).

The first two chapters (and parts of others), contextualising the existence and practice of the PCSP in inter(national) politics and history, are analytically the strongest. It is in those parts of the book where Powell’s arguments are most elaborated and the story of PCSP is vivid and heterogeneous while at the same time consistent. Based upon oral historical interviews and the conventional archival record, Powell shows how politics and nationalism have played a significant role in establishing and running the PCSP since the late 1950s.

Chapter 3 starts with the description of Powell’s arrival and his acceptance in Resolute. It promises an analysis of the spatial organisation’s significance in structuring the interactions between various people or groups of people. However, the detailed descriptions of the spatial organisation of a research station are used instead as a starting point for an analysis of logistics and the role of logistical personnel and cooks. The answer to the initial question – *how* does the spatial organisation structure the everydayness – remains rather unclear.

However, it is not only history or a merely organisational level that is influenced by politics – it is the everyday life of the scientists, from the process of applying to the PCSP, through the financial support and decisions, to the informal hierarchy between the PCSP scientists themselves. Chapter 4 partly follows the political history analysis from the first two chapters, and Powell further shows how this, together with the geographical imagination of the Arctic as a vast, harsh and adventurous area, also influences, for example, the idea(l) of a good field scientist: one that is immune to the specific environment and harsh work conditions it brings, one that is a “good Canadian” and partly (but not too) adventurous. And, once again, there is a connection to logistics, for a good field scientist is one that is competent in logistics and skilled at various sorts of manual tasks.

Following the general importance of logistics and manual skills in scientific practice, chapter 5 highlights the position of the base technical staff from Newfoundland, part of the migratory labour force arriving seasonally to Resolute. Powell focuses on the political, as well as the everyday practices by which Newfoundlanders are marginalised and disparaged by other scientists and alienated from the decision making of the PCSP.

The understanding of more general processes through emotions is what Powell gives a lot of attention to in his ethnographical studies of scientific practice. As Powell emphasises (mostly in chapters 6 and 7), reactions to success, failure and frustration, and to friendships and conflicts/tensions among scientists as part of the practice, also bring to light the motivations and values behind being a “good scientist”. Moreover, through the study of emotions, it is possible to understand the role of (inter)national politics, the structure of scientific research and its dynamics in practice. By focusing on jokes, complaints and manifested frustrations, Powell captures, for example, the friction between the political and national importance of a scientific base in the Canadian Arctic and the lack of governmental funding together with the absence of recognition for scientific work and logistics among the Canadian public.

Supplementary reflections on Powell’s research in general are further discussed in the last chapter, *Note on methodology, sources and research ethics*, which provides notes on particular difficulties in archive research and provides more detailed information about the different forms, number and time range of interviews, as well as the informed consent and anonymisation of participants.

The book is detailed and deals with a great number of topics, many of which are at times fragmented and challenging to put together. While specific chapters are supposedly dedicated to specific topics, as described above, it seems to me that at least some parts of the book might have been, in this sense, more consistent and elaborated upon in Powell’s ethnographical storytelling. With an, at times, unclear structuration of the ethnographical narrative, the reader’s expectations and understanding may be disrupted. As a geographer, Powell mostly develops arguments and theoretical suggestions in the history of geography (p. 75) or emotional geographies (p. 151), although in other chapters he takes insights from anthropology (Turner, Briggs) or gender studies (Hochschild). With the comprehensive content of this book and the detailed description of various topics and issues, Powell offers a series of other possible readings in, and raises new topics and questions for scientific (sub)disciplines such as the anthropology of labour, gender in science, science and technology studies, and the anthropology of nature or nationalism. (Eva Kotašková, Department of Sociology, Faculty of Social Sciences, Masaryk University, Joštova 4, 60200, Brno, Czech Republic ([332998@mail.muni.cz](mailto:332998@mail.muni.cz))).

## Reference

- Geissler, P.W., & Kelly, A.H. (2016). A home for science: the life and times of tropical and polar field stations. *Social Studies of Science*, 46(6), 797–808. doi: [10.1177/0306312716680767](https://doi.org/10.1177/0306312716680767)