This collection, edited by Marie Roué, Douglas Nakashima, and Igor Krupnik, focuses on ideas of Indigenous knowledge, knowledge co-production, and how those ideas intertwine in the discussion of global environmental change and its impacts on Indigenous ways of life.

In the introduction, Roué and Nakashima put forward the foundational ideas of Decolonized Knowledge Co-production (DKC). The foundational ideas include Indigenous and rural communities being more than just passive victims of global change, the need to recreate or deconstruct the current Western system of knowledge hierarchies, how those hierarchies are perpetuated, and proper methodologies to engage in DKC. The DKC methodology has several concepts which are important to it: the need to have and encourage long-term exchange and dialogue between Indigenous experts, scientific experts and governmental organizations and entities, as well as—again—the need to recognize Indigenous knowledge systems on a similar level to how we view scientific knowledge, without the impact of hierarchy. We see all the themes above throughout each work in this collection. This introduction leads us to understand that the goal of the work is to provide examples of the DKC methodology through case studies, while also providing a platform for Indigenous voices and recognition of the immense challenges that impact the process of Indigenous resilience in the face of global and climate changes.

Past the introduction, the book is divided into three parts, and it is in these divisions that the goals of the work come together. Part I is entitled ‘From Practice to Principles: Methods and Challenges for Decolonized Knowledge Co-production’, and focuses on research and projects in
the Arctic and Subarctic regions which showcase co-production processes. Part II is entitled ‘Indigenous Perspectives on Environmental Change’, and highlights Indigenous voices and perspectives on climate change, and how the effects of climate change have brought on dramatic changes to culture and daily lives. Part III is entitled ‘Global Change and Indigenous Responses’, and focuses on how both climate and global change dramatically impact the ability for Indigenous peoples, their cultures, and their ways of life to remain unchanged.

It is easy to see the focus of the first section of the book through the selected works. The process by which collaboration becomes co-production is emphasized by Huntington et al. in the first work, and indeed the necessity of the change is highlighted as well. This leads into the next two works, where both Eicken et al. and Druckenmiller share a focus on the idea that not only is co-produced knowledge important, but sometimes it is necessary to enable the gathering of certain kinds of data which cannot be easily acquired through other means—in both cases knowledge of ice formation and movement. As well, Druckenmiller emphasizes to a greater degree the opportunity for mutual benefit which can accompany knowledge co-production. The fourth work of the section has a different focus, as Krupnik engages with the necessity of language survival for Indigenous peoples. This idea is one which runs through many other chapters in the book, and Krupnik’s comprehensive evaluation of the importance of language in this chapter allows us to better understand the role of language in its many faceted uses as not just an academic resource, but as a tool of resilience for Indigenous peoples. The editors turn the discussion back to what is now a familiar concept, as Roué et al. discuss the benefits to co-productive practices and the factors which stymie their implementation. First, they discuss the benefits of co-production by examining changes made to government programs because of co-produced knowledge and showcase the foundation for a potential co-management process in Swedish forest management. Then, Roué et al. discuss the problems that bar the way to co-management, more specifically the difficulty that Indigenous peoples—or even Indigenous knowledges—have in interacting with government organizations. Routier et al. draws to a close the first part of the book, discussing a perfect example of the co-production process in the development of lichen dispersal and regrowth procedures. It is no coincidence that the editors have placed this work after Roué et al. This chapter focuses on the difficulties in implementing co-production and co-management between Indigenous populations and governmental entities due to economic, political, and ontological differences—a theme that connects much of the book and one that is also explicitly featured in Roué et al.
The second section, focusing on Indigenous perspectives on global and climate change engages with this focus in two ways. First, Hindou Oumarou Ibrahim details the major advances secured for Indigenous rights at the 2015 and 2016 Meetings of the Conference of Parties to the United Nations Framework Convention on Climate Change in Paris and Marrakech respectively. Then, the reader is exposed to three different Indigenous perspectives detailing the impacts of global and climate change on their culture and their ways of life. The Fijian perspective, told by Tikoidelaimakotu Tuimoce Fuluna, focuses on traditional canoe building and racing practices as a means of maintaining their culture in the face of encroaching climate change, while also acknowledging the losses already present in their culture—the loss of traditional modes of weather prediction as an example—and those which are still likely to come. Anders Henriksen Bongo then provides a Sámi perspective, exploring how temperature increases and economic pressures impact their traditional herding lifestyle, killing herds and fomenting social friction between herding families. Lastly, Hanafi Amiro Dicke, an Indigenous Sahel herder, shares their perspective on how global and climate changes have impacted their traditional way of life, while also locking them into it. They note the incredibly damaging situation where climate change forces herders into transhumance if they wish to maintain their traditional lifestyle, while global change economically pressures them to choose between herding and educating their children.

The third section, focusing on the difficulties faced by Indigenous communities in maintaining their traditional ways of life is split into five chapters. Salick begins this section, examining both global and environmental factors affecting the Himalayan Indigenous peoples and their way of life. Salick notes how rising temperatures drive traditional herd- ers further up the mountains and economic pressures pull Indigenous individuals away from tradition, and in some cases away from their own economic agency. The editors return us to the subject of reindeer herding—this time in Arctic Russia—as Forbes et al. exposes us to the widespread damage inflicted on Nenet ways of life by rising temperatures. As herds of reindeer die in massive numbers, scientific climate analysis is combined with Indigenous perspectives to create the potential for Nenet ways of life to continue while avoiding or mitigating herd death. The editors then move the discussion to changes in agricultural practices in Central Amazonia noted by Steward et al. These changes are set in motion by the increasing occurrence and severity of flood events which is only exacerbated by the limited action taken by policy makers. In their choice to place Steward et al. here, we are reintroduced to the idea that governments may act as an entity stymieing Indigenous resilience—in this case working alongside the climate change pushing the
Amazonian Indigenous population from their farmlands. Through the work by Fernández-Llamazares and Cabeza on storytelling as a means of coping with climate change, we return to the throughline of language that comes up in nearly every chapter in the book. Language is a critical force in the conception and ability of co-production, as Indigenous terminology can be valuable, for example, in the reconstruction of oral histories—some of which provide information that cannot be retrieved without the preservation of the Indigenous lexicon—as noted by Krupnik. As we are shown by Fernández-Llamazares and Cabeza, the oral traditions that accompany the language are equally as important and can shape social responses, such as overcoming the epistemological gap between different knowledge systems and enabling more productive co-production practices. Burman then touches on another key concept to the functionality of co-production, that is the coloniality of reality. Burman emphasizes that it is important for those studying and interacting with Indigenous concepts to acknowledge Indigenous ways of knowing and ways of viewing/interacting with the world as ‘real’. As mentioned earlier on, this is an excellent example of how we can push to dismantle the knowledge hierarchy and have Indigenous knowledges finally existing on the same level as other ‘modern’ Western ways of knowing.

Finally, Krupnik’s epilogue of the book provides an excellent summary of the ideas discussed and lays out how DKC may develop further in the future. Furthermore, Krupnik continues the discussion on the global inequalities present which restrict Indigenous knowledge acceptance. The epilogue concludes by leaving the reader with the tools to engage in DKC, and a challenge to do so.

Overall, the writing styles of the collected works are accessible to a wide audience. The skilled editing of Roué, Nakashima, and Krupnik enables us to easily locate and understand the key themes and ideas that are present, both in Indigenous perspectives and in co-production practices. Furthermore, they successfully emphasized the focuses laid out in the introduction. That said, the second section of the work which focused on Indigenous perspectives was not as smooth as I would’ve liked. The inclusion of Ibrahim, while certainly interesting did not seem to fit with the rest of the section. The section may have been better served by moving Ibrahim’s work to a different location—perhaps the introductory or conclusory sections—and including another Indigenous perspective on climate change. As well, the second and third sections display a diversity in perspective that is not present in the first section. Expanding the diversity of works in the first section may have helped the sections to flow together better. Regardless, this work will still doubtless act as an incredible resource for anyone interested in Indigenous
knowledge, Indigenous climate perspectives, Indigenous resilience, and the methods by which scholars can decolonize Indigenous knowledge through co-production.