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The ice is melting. Ethics in the Arctic. Leif Magne Helgesen, Kim Holmén and Ole Arve Misund (editors). 2015. Bergen: Fagbokforlaget. 245 p, illustrated, hard-cover. ISBN: 978-82-450-1843-1. NOK 395.

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Ethics. Indeed not an easy issue to approach and when I laid my eyes on the title of this book with the subtitle Ethics in the Arctic I rejoiced. For ethics and morality have, at least to my knowledge, not been frequently covered in an Arctic context although it is a re-occurring yet somewhat implicit theme throughout academic and public Arctic discourse (see for example Sellheim 2016). This book is thus the first step to touch upon Arctic ethics and is the result of a collaboration between the Svalbard Church, the Norwegian Polar Institute and the University Centre in Svalbard. In other words, this book first and foremost touches upon issues directly applicable in Svalbard while, for instance, ethical issues related to Arctic indigenous populations are only implicitly covered. But, let's not forget the primary title of the book: The ice is melting. As the editors point out in the Preface, the book thus contributes to the wider discourse on climate ethics and 'the book's authors represent a range of professions within academia, management, the media, natural sciences, the church and museums' (page 7). The outcome is a non-academic book that in 19 short chapters, the latter two thirds being presented under the heading Resources and economic activities in the Arctic, covers a wide range of issues relevant for an ethics-based discussion on Arctic change.

The scope of this review does not allow to cover all aspects raised in the book's chapters, so let's just focus on a few. For instance, one of the book's merit lies in its unique way of approaching the threats faced by ivory gulls resulting from climate change and pollution. While scientifically introduced by Kim Holmén in the first chapter, the second chapter by pastor Leif Magne Helgesen is written completely from the first-person perspective in which the ivory gull 'tells its story,' so to speak. This approach moves the fate of the ivory gull from an abstract environmental problem to a directly understandable sphere of environmental degradation. The effect is the same as in other contexts: the fates of individuals are more efficient in triggering public outcry than the mere presentation of abstract numbers.

The third and title chapter of the book, *Ethics in the Arctic*, by Lægdene and others outlines the reasons why ethics are or should be such a crucial part of engagement in and with the Arctic in the age of climatic changes. Indirectly the authors touch upon the expressive powers of legal regulations (see McAdams 2015) as a tool to trigger, and a reflection of, change in the ethical setting regarding the Arctic. The issues brought forth in the chapter are not necessarily new for the Arctic scholar, but are certainly an important contribution to the public, non-academic discourse to the 'ethical Arctic'.

An interesting approach chosen by the editors is the inclusion of, for the lack of a better word, 'interviews' with five residents of Svalbard in the fifth chapter. The governor of Svalbard, a student, a PhD candidate, a Union representative and a representative of a logistics company are posed the same few questions, the answers to which reflecting common concerns as well as diverging opinions. Without further evaluation, this chapter provides important insight into the mindset of ordinary Arctic residents. Of course, no larger empirical conclusions can be drawn here in light of the small sample of the population, but this could serve as a starting point for future research. The 'interviews' with Arctic residents stand representative for the rather personal chapters that make this book an interesting and moving read before it delves into the slightly more 'neutral,' and somewhat more science-based section on Resources and economic activities in the Arctic

And indeed, the trained Arctic scholar will find much information that has been part of the academic Arctic discourse for quite some time: Arctic shipping, fishing, carbon capture and storage, and hydrocarbon exploitation. Yet, it is especially Sander's chapter on Ethical considerations related to new economic activities in the Arctic which approaches available information from a more normative angle. He thus considers the Arctic's value, leading to a brief discussion on anthropocentric, utilitarian versus biocentric, intrinsic approaches. Needless to say that given these adverse value systems it is difficult to build bridges between adversaries. Unfortunately the author does not engage in a discussion on how to build different kinds of bridges. This would be particularly relevant in the context of marine mammal hunts (see Fitzmaurice 2015). Sander also considers the 'whos' on Arctic economic development: who should the Arctic be exploited for? Who should have a say in its exploitation? Sander concludes that in light of the different interests in the Arctic, '[i]t should be a requirement that several alternative development strategies are presented' (page 137). Once again, it would have been beneficial to include the 'hows' as well.

Particularly intriguing was Bothmer's and Westengen's chapter The frozen ark dealing with the Svalbard Seed Vault, that I know surprisingly little about, but which recently gained considerable media attention once again since the first seeds needed to be withdrawn due to the Syrian civil war (Doyle 2015). The authors present an insightful overview of the practices and politics involved in establishing the Vault as well as in plant breeding itself. After having read the chapter, I can with confidence claim to have learnt a great deal on the issue, providing me with arguments for lively discussions. And here lies the book's overall merit: it is designed and presented in a way which make complex issues in the Arctic fairly easily understandable and is geared to be read by a wider public. I would even go so far as to claim that this is not a book for scholars, but rather a book for practitioners and lay persons interested in Arctic matters. Of course, especially the ethical dimension of the book is equally relevant for scholars. Yet, *The ice is melting* is not a book presenting new information *per se*, but a book to raise consciousness for the ongoing changes in the north – in the interest for the environment as well as the people of the Arctic and the world.

Generally, therefore, *The ice is melting* should be part of any class that provides introductory information on the Arctic. It furthermore serves as a great present for the Arctic-interested relative or as preparatory literature for a trip up north. This book is personal on many levels and should result in individual perception changes through knowledge acquisition. The editors have without a doubt succeeded in creating an important outreach tool addressing Arctic change. (Nikolas Sellheim, Faculty of Law, Univer-

sity of Lapland, PO Box 122, 96101 Rovaniemi, Finland (nikolas.sellheim@ulapland.fi)).

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25 years of international Arctic research cooperation. IASC after 25 years. Odd Rogne, Volker Rachold, Louwrens Hacquebord and Robert Corell (editors). 2015. International Arctic Science Committee. 127p, hard-cover, illustrated. ISBN: 978-3-9813637-7-7. Free of charge (online).

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International scientific collaboration has been a part of Arctic exploration since times of the first International Polar Year (IPY) organized in the end of the 19th century (1882-1883). More than 120 years and three IPYs later primary reasons for scientists coming together and coordinating their efforts for joint polar research endeavors remain largely the same as in times of the first IPY: heightened expenses and grand challenges related to conduct of scientific research and observations in the high latitudes. Arguably, with the rapid change unfolding today throughout the Arctic and the global implications of largely unprecedented physical and ecological transformations in the region, enhanced scientific understanding of the causes and consequences of Arctic sea ice loss becomes a task of even greater importance than previously. However, the significance of science collaboration goes far beyond the domain of pure research - in particular in the Arctic it has played a key role in shaping environmental and political regimes for the region, from the Arctic Environmental Protection Strategy (AEPS) to its successor, the Arctic Council (AC).

The International Arctic Science Committee (IASC) is a non-governmental international scientific organization founded in 1990 'to encourage and facilitate cooperation in all aspects of Arctic research, in all countries engaged in Arctic research and in all areas of the Arctic region' (IASC Handbook 1994: 3). Over the past 25 years IASC has evolved into a leading international science entity focused on the North and presently encompasses national scientific organizations from 23 countries involved in research in and on the Arctic. On the occasion of its 25th anniversary IASC published a book, which together with the dedicated website and additional materials (a short movie and selected historical documents) available upon it, compiles the body's history and development. The book, published as the special issue of IASC bulletin, consists of six parts, further divided into numerous sub-sections. They deal respectively with the development of IASC; its initiatives; the contributions of former IASC Presidents; cooperation with other organizations,

the Secretariat and the lessons learned throughout the process of IASC evolution. The volume ends with a series of useful appendices practically collecting information on IASC's National Adhering Bodies, its Council and Regional Board members, projects, networks and Working Groups in one place.

In view of this reviewer some of the most interesting parts in the volume (parts 1.1 and 1.2) relate to the very early days of formation of IASC, when the idea for setting up an international body for coordination of scientific research in the Arctic germinated in the late days of cold war and well before the Finnish initiative for the AEPS came. The accounts of Odd Rogne and Louwrens Hacquebord offer a fascinating picture of what it took to develop the concept from informal discussion held aside the Scientific Committee for Antarctic Research (SCAR) meeting in 1986 in San Diego to the founding meeting of the International Arctic Science Committee in Resolute Bay, Canada in August 1990. Despite IASC being a non-governmental organization, the realities of the cold war divisions and the challenges related to bringing together partners from the Soviet Union and Western states made the process that led to creation of IASC very much politicized, with representatives of national governments - both from Arctic and non-Arctic nations - playing a central role in it (Young 1992: 40-41, draft in Keskitalo 2004). Those delving into questions of present Arctic governance, in particular into the much discussed issues of engaging non-Arctic actors as Observers to the Arctic Council, may also find intriguing in stories of Rogne and Hacquebord about how much time and attention the very same questions of inclusion and involvement of non-Arctic states caught in the negotiation process of IASC.

Parts 1.3 and 1.4 as well subsequent chapters in the book cover in detail evolution that IASC went through over the last 25 years following the consecutive rounds of its reviews. Chapter 2 presents some of the most important IASC initiatives, among them the International Science Initiative in the Russian Arctic (ISIRA), the Forum of Arctic Research Operators (FARO), the Sustaining Arctic Observing Networks (SAON) project endorsed jointly with the Arctic Council, series of International Conferences on Arctic Research Planning (ICARPs), the contributions of IASC to the fourth IPY (2007–2008) and the development of the Arctic Science Summit Week (ASSW), which today constitutes the largest annual gathering of Arctic science organizations and scientists working on the region. This section would not, however, be complete without the story of the Arctic Climate Impact Assessment (ACIA), written in the