## **Book Reviews**

MEDIA AND THE POLITICS OF ARCTIC CLI-MATE CHANGE. WHEN THE ICE BREAKS. Miyase Christensen, Annika E. Nilsson, Nina Wormbs (editors). 2013. New York: Palgrave Macmillan. xiv + 182 p, illustrated, hardcover. ISBN 978-1-137-26622-4. £53.00. *doi:10.1017/S0032247414000825* 

The media play an increasingly significant and complex role in people's understanding of a whole range of phenomena, including climate change. In the reviewed volume its authors intend to highlight the role of media in framing the presentday Arctic and its future and of climate change in more general terms. Throughout the volume the 2007 Arctic sea ice minimum is taken as a reference point which marked a shift in the regional political climate in the Arctic, but which also, due to intense coverage and presence in media, has had implications relevant far beyond the Arctic and global climate science and policy. To enhance our understanding of the role that media play in both the representation of climate change and in public understanding of related scientific, political and social questions the authors based their research on frameworks borrowed from media studies. The concept of 'mediatization' is used to depict the extent to which today's social processes are dependent on mass media to the point where we can no longer think of them in separation. Clearly, in such defined environment deepening our comprehension of production of media representations of climate change becomes essential.

The book consists of the introduction, six substantive chapters and a concluding one. Altogether they seek to approach the 2007 sea ice minimum from a range of different perspectives, including anthropology, history, science and technology studies, media studies, and natural sciences. At the same time media under analysis should be understood in a broader sense than merely 'coverage in newspapers, television and other venues' (page 2), though to readers like the author of this review unfamiliar with broader media studies such defined scope of inquiry may be slightly ambiguous. Yet in the further part of the introduction its authors set a clear stage for consecutive chapters and point also to constructivist understanding of science, which, in the book's context, serves as an important reminder that how we look upon science bears consequences for our ways of comprehension and assessment of scientific findings.

The first chapter by Miyase Christensen lays out a study on treatment of climate change, and the 2007 sea ice minimum in particular, in the quality press between 2003 to 2013 based on both a quantitative account and a qualitative frame analysis of articles from *The New York Times*, *The Guardian* (United Kingdom) and *Dagens Nyheter* (Sweden) from that period. Positively, the results of her study show that from 2003 onwards there has been a growing consensus in the media over scientific certainty of Arctic climate change as a bellwether for global warming. Moreover, climate change has started to be increasingly reported within broader socio-cultural and economic frames with the issues at stake being covered adequately with respect to their complexity. The chapter by Nina Wormbs deals with the satellite information systems that underlie our knowledge and understanding of sea ice measurements, and how information generated within these systems is being displayed to the wider, not merely scientific audience. The core of the chapter revolves around different images and captions used by the *Telegraph*, *The New York Times* and *National Geographic News* to illustrate the 2007 Arctic sea ice minimum, and how their choice and possible reading affected the larger conveyed message, thus our understanding of the phenomena. To this author an excerpt at the end of the chapter on the process of creation of famous Blue Marbles was the text's highlight, rightly used to stress the importance of (not) blurring of the data sources if public confidence in the underlying scientific knowledge production is to be maintained.

To some degree against the background of modern technologies of remote sensing the chapter by Sverker Sörlin and Julia Lajus offers a historical account of sea ice science, looking in particular at tropes of ice-free Arctic Ocean in the past. The authors begin with visiting the idea of an ice-free Arctic in the past to later take the reader through scientific undertakings of sea ice in the Soviet Union, by Nordic researchers, times of the cold war and the military connections the science of ice had in that period. Yet, what is perhaps the most interesting is the power of narrative which is stressed at the end of the chapter with how at present '[s]ea ice (...) seems to capture a contemporary preoccupation with global concerns with the fate of our planet' (page 83) being a nudge of alarming and often destructive power, which we seized over the planet.

The chapter by Annika E. Nilsson and Ralf Döscher reflects on translations of scientific knowledge about Arctic climate change into messages intended for policy-makers and the broad public, and the consequences of simplification that is inherently a part of such translation. In this context the authors focus on variability and change as two different ways of framing of Arctic climate change and look at their representations in major climate scientific accounts and selected Arctic-related scientific plans and assessments. Their study reveals the progressive shift in attribution of Arctic climate change to human causes, but finds as well that the issue of climate variability has been much more strongly pronounced in the scientific literature than in writings aimed at non-scientific audiences, which focused instead on clear, policy-relevant communication. The questions posed at the end of chapter point to reasons behind such state and suggest that at present also in popular accounts more focus should perhaps be paid to climate variability, which can offer us important insights into vulnerabilities of future climate change.

The chapter by Henry Huntington approaches the 2007 sea ice minimum from a perspective of coastal communities, primarily from northern Alaska, and implications, very often different than those instinctively assumed and far from being straightforward, that changes in the sea ice bring to these communities. What matters in their view is not a minimum of summer sea ice measured each year in September but distinct formation patterns that the ice in winters presently follows. By telling the story from the perspective of local populations the author reminds the reader in a powerful manner that (media) events that bring the Arctic to the world's attention are largely about interests and economic opportunities for people from outside of the Arctic. Yet, changes that the region is undergoing are by no means less important to Arctic communities to whom sea ice is an essential part of the landscape upon which their livelihoods rely. Only the reasons why these changes are so important to both groups remain distinct.

The last chapter of the book by Dag Avango and Per Högselius outlines a historical review of energy developments and trends in the Arctic and in this respect investigates energy explorers' encounters with sea ice, both in their practical terms as well in rhetorical means. The authors begin by pointing to the fact that at the time of the 2007 sea-ice minimum, which sparked a worldwide interest in Arctic riches, the exploration of the region's coal, oil and gas reserves has been in place already for more than a century. Against this background they argue that a dynamic expansion of energy exploitation in the Arctic 'would have continued even if global warming had not occurred' (page 128). After this introduction the chapter, by far the lengthiest in the entire volume, takes a relevant historical perspective to sustain these claims. However, to this reviewer's dismay, with all the detailed accounts of various technological developments and industrial innovations, the text too marginally touches upon climate change representations in the media.

As a whole Media and the politics of Arctic climate change. When the ice breaks is a highly informative, engaging and pleasurable read. It is a volume commendable to a broad audience, ranging from scholars, policy-makers, to journalists and informed public willing to deepen their understanding not only of effects of media on society's approach towards climate change, but also of historical accounts behind sea ice science and resource exploitation in the region, varying perceptions of local communities vis-à-vis thawing sea ice, and translations of scientific knowledge about Arctic climate change into mainstream messages for decision-makers. In this respect however the title of the volume is perhaps slightly misleading as it may suggest to a reader more a stringent focus on the modern media and representation of climate change in the Arctic therein. Moreover, in light of the influence of tabloid press and television and growing impacts of web-based and social media their inclusion into the scope of presented analysis would be probably of benefit, to consider in greater depth also larger media trends than only those related to quality press. At the same time this should not necessarily be understood as criticism, but rather as an indication of areas for future research. Overall, the book provides a very good, broad and interesting overview of various dimensions and narratives of Arctic climate change, and the multidisciplinary approach it takes is one of the greatest assets of this recommended volume. (Malgorzata Smieszek, Arctic Centre, University of Lapland, PO Box 122, 96101 Rovaniemi, Finland (malgorzata@smieszek@ulapland.fi)).

**CULTURAL ENCOUNTERS** CAPE AT FAREWELL: THE EAST GREENLANDIC **IMMIGRANTS AND THE GERMAN MORAVIAN** MISSION IN THE 19th CENTURY. Einar Lund Jensen, Kristine Raahauge and Hans Christian Gulløv. 2011. Copenhagen: Museum Tusculanum Press, University of Copenhagen. 339 p, illustrated, hardcover. ISBN 978-87-635-3165-8 (Monographs on Greenland 348). DKK298, US\$52, €40. doi:10.1017/S003224741400093X

This review starts on a somewhat unusual note. Readers will observe that the publication date for this book is as far back as 2011. Volumes selected by the Editor of this journal for review are normally culled from publishers' catalogues, personal acquaintance, or suggestions from colleagues in the general polar community. But this book was missed and fell through Polar Record's fairly effective, but obviously not infallible, processes. The Editor only became aware of its existence in July 2014 when he saw a copy in the small bookshop attached to the museum in Nanortalik in Greenland situated in the very heartland of the events described in the book. He picked it up and became so absorbed in reading it that he had to rush in order not to be marooned on the departure of his ship. That is not to insinuate that that would have been a terrible fate; Nanortalik is, after all, one of the most agreeable northern communities, the weather looked set fair but.... So an apology is due to the readership of Polar Record and especially to the authors because this is simply a superb volume and one that it would have been a matter for shame not to notice.

The genesis of the book was a research project adopted by the Greenland Research Centre of the National Museum essentially on the meeting of immigrating east Greenlanders, 'who literally stepped out of the mists of prehistory', with the people of the Europeanised settlements in the colonised west Greenland. The project, while mostly archive based, included interviews with the now living descendants of the immigrant east Greenlanders 'with the aim of casting light on the relationship between history and memory' (page 9). Archaeological investigations were also carried out in order to illuminate the prehistory of the present Greenlanders, now known as the Thule culture. But of course the main group of Europeans met by the incomers were the, by then well established, Moravian missionaries and much detail is provided concerning the origin and operations of this very interesting group. There is also note of the Greenlandic objects that were transported back by Moravians to their headquarters at Herrnhut in Saxony.

The book starts with a general introduction to the Cape Farewell area, *Nunap Isua*, 'the country's end', in which the latitude (lower than 60°N) is noted as is the high level of precipitation. Despite this the climate is resolutely sub-Arctic because the east Greenland current carries much sea ice and many bergs around the cape thus cooling the sea. Also the inland ice reaches to the coast immediately to the north and that cools the land. But even this early in the book the reader is immediately distracted from the text by the quite magnificent illustrations in colour that are generously distributed and flipping over the pages it is clear that the authors have continued this policy throughout. In the first few pages are an excellent coloured map of the area together with a superb coloured photograph of the entrance to Torsukattak, the sound leading towards Nanortalik, and a