Book Review

FUTURE ARCTIC. FIELD NOTES FROM A WORLD ON THE EDGE. Edward Struzik. 2015. Washington: Island Press. 215 p, illustrated, hardcover. ISBN 978-1-61091-440-6. \$27.00.

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The future of the Arctic... that is of course a topic which many a researcher and scientist deal with. In the end, all research conducted in, on, for and with the Arctic aims exactly at this particular question: what does the future of the Arctic look like? And the subtext to this question asks: how do human beings manage to cope with this future?

Struzik's book is another contribution to the popularised discourse on the Arctic and should be mentioned in line with Anderson's After the ice (Anderson 2009), Emmerson's The future history of the Arctic (Emmerson 2010) and the German work Der neue Norden (Hannemann 2010). Future Arctic can therefore not be used as a scientific reference and is merely based on the author's personal experiences, as the sub-title implies, and interviews. One must furthermore bear in mind that is a book which was written by a journalist as the chapter's headline-like titles show. Consequently, some of the wording used in the volume – for example 'Canada, the United States, Russia and Denmark are also frantically mapping vast, unclaimed regions of the Arctic in hopes of adding territory instead of selling it off or neglecting it as they once did' (page 23) – and, as will be shown later, the information in this book should be used with care.

In eleven chapters Struzik engages on a journey primarily in the North American Arctic and sub-Arctic. Not surprisingly, environmental change is the key concern of the author in his book. While in the first chapter the reader gets a better understanding of environmental changes in the history of the Arctic, already chapter 2 delves into the directly human-induced changes in the Peace-Athabasca delta and the effects of damming and the Alberta tar sands on socio-ecological stability in the region. Paraphrased and directly cited interviews with locals constitute the main core of this chapter.

Chapter 3 deals with environmental changes and the unforgiving environment of the high Arctic. The Arctic Ocean is named a 'sleeping giant' (page 43) that is waking up, because of the implications of the changes in the Arctic for both the region itself and the global climatic and environmental systems. However, especially in the Arctic the changes in the environment are drastic and, as in the previous chapters, Struzik draws from personal experiences of locals as well as experts' assessments on these changes.

Contrary to its predecessor which focuses on the changes in animal dispersion and migratory patterns, chapter 4, *Stormy Arctic. The new normal*, highlights the changes in the weather of the Arctic, based on the cyclone of the year 2000 in Alaska and northern Canada, which was, up to 2012 when another major cyclone hit the Arctic, the strongest ever in recorded Arctic history. Struzik notes that 'such storms are bound to become more common as sea levels rise, storms pick up steam, and the western Arctic continues, literally, to sink' (page 63). Indeed,

also the Arctic Climate Impact Assessment (ACIA 2004) has raised these concerns and it is especially local people that have to bear the consequences of these particular characteristics of Arctic change. In a moving account Struzik depicts individual impacts on traditional livelihoods as well as the problems pertaining to continuing research on this and other matters in the Arctic due to funding shortages and the inertia of governments to take concrete action. This leads the author to conclude this chapter by saying: 'Time to do something, of course, is running out. Rapidly unfolding events in the Arctic will soon overwhelm the ability of decision makers to do anything meaningful about rising sea levels, coastal erosion and powerful storms [...]' (page 73).

Chapter 5, *The Arctic melting pot*, this reviewer found truly interesting! The chapter deals with a rather unknown phenomenon to the public: hybridisation, describing the interbreeding of two different species. In this case Struzik describes the rare phenomenon of hybridisation of grizzly and polar bears as well as trout in Great Bear Lake, Canada. In a way one could indeed consider this interbreeding as, as this reviewer would call it, evolution at work since, now paraphrasing Struzik, it could either contribute to generating more resilient species or making the hybrid species more prone to disease, environmental changes or infertility (page 81). Indeed, with changing animal populations due to climatic changes hybridisation in the Arctic is likely to increase with possible dangers also to humans as new species also bring new diseases.

Polar bears are the main protagonists of chapter 6 and are Lords of the Arctic no more. Indeed, this chapter provides an interesting overview of the past and current status of the polar bear with regard to its population(s) as well as scientific, political and legal responses to (potentially) dwindling numbers. The popular angle of this book particularly stands out here as, at least since Al Gore's movie An inconvenient truth, polar bears are the emblem of global warming. A second charismatic species of the Arctic, the caribou, is covered in chapter 7, Caribou at the crossroads. Once again the dramatic changes in the environment in combination with the effects of overhunting, especially in North America, affect a key species of the Arctic ecosystem. However, declines in caribou and reindeer population, Struzik notes, appear to be a circumpolar pattern (page 112). Here, at the latest, the complete absence of scientific data other than those by paraphrased scientists becomes an issue as there is no way to confirm Struzik's claims. For example, with regard to caribou, the International Union for the Conservation of Nature (IUCN) lists Rangifer tarandus under 'Least concern' and notes that its overall population is stable (Henttonen and Tikhonov 2008). This is not to say, however, that Struzik is incorrect. It rather points to the downsides of not having included any further reading materials, for example in a separate section at the end

The changes in populations of Arctic birds are covered in the eighth chapter of the book titled *Paradise lost*. Public interest may especially shift towards the section in which Struzik describes the role of climate change and diseases that may decimate the bird populations as germs are increasingly capable of surviving Arctic winters. Here Struzik misses an

opportunity to shift towards the micro level of Arctic species, namely those at the very low levels of the Arctic food web. Those species, such as zoo plankton in the sea ice or key plant species such as lichens, are ones without which the Arctic ecosystem would be unlikely to survive in the future.

Given that this is a popular account of the Arctic, Struzik also presents the role of the (North American) Arctic in oil exploration by showing some data on oil companies' investments into research on the exploitability of the Arctic. Touching upon spill disasters such as *Exxon Valdez* and to some extent *Deepwater Horizon*, the dangers of hydrocarbon exploitation in the vulnerable Arctic environment are underlined.

With the last chapter, The need for an Arctic treaty, Struzik indeed shows that he is a journalist with too little consideration for the academic discourse on the issue. This chapter alone would require an entire review to deal with and to engage in a discussion on the claims brought forth therein. Although the author is aware of the complexity of Arctic geopolitics, the section is presented in a way which feeds into the media frenzy of Arctic developments: in essence, states lay claim to Arctic regions in order to exploit the region's resources at all costs. This is certainly a very neorealist approach and it appears difficult to reconcile this with ongoing Arctic cooperative structures, not only on the highest diplomatic level. Although Struzik presents different views on an Arctic treaty, based on, as it seems also rather dated, research conducted on the issue by Oran Young or Timo Koivurova, for example, he himself is in favour of 'either a treaty or an overarching form of international agreements' (page 179). The legal implications of this in light of already existing international law are not further elaborated upon. Also, both in politics and academia the idea of an Arctic treaty has been discarded.

While engaging in the discussion surrounding an Arctic treaty, at least two serious errors occur in the text, either because

of sloppiness or because of a lack of knowledge. Either way, the gravity of these errors impair the integrity of the book. Firstly, it was not the 'United States and Norway [that] settled a boundary dispute in the maritime region of Svalbard' (page 172, 173), but Russia and Norway that resolved their boundary dispute in the Barents Sea. Secondly, Struzik claims that 'Finland and Sweden are now part of NATO' (page 180). This is simply incorrect. The two countries are *not* part of NATO.

While the book is written in a well-understandable way and holds a wealth of information on the Arctic, especially in light of the chapter on the Arctic treaty and the seriousness of the errors, also other data, which this reviewer is not an expert in, becomes less reliable. One might certainly get an idea of the changes in the Arctic, but this reviewer finds it imperative to consult other sources before relying on the information provided in this volume. (Nikolas Sellheim, Faculty of Law, University of Lapland, PO Box 122, 96101 Rovaniemi, Finland (nikolas.sellheim@ulapland.fi)).

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THE POLITICS OF ARCTIC SOVEREIGNTY: OIL, ICE AND INUIT GOVERNANCE. Jessica M. Shadian. 2014. Routledge: Oxon. 252 p, hardcover. ISBN 978-0-415-64035-0. \$140.

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In 2007, the planting of a titanium flag by a Russian expedition on the North Pole ignited a fierce public debate about Arctic sovereignty. In *The politics of Arctic sovereignty* Jessica Shadian delivers a critical contribution to inform these discussions from the perspective of some of the Arctic main historical occupants. Building on a thorough study of more than four decades of political agency of the Inuit in Alaska, Canada and Greenland, the author highlights how the colonization process in the Arctic and the imposition of the Westphalian political system provided the incentive for Inuit to organize themselves politically, a process that will ultimately result in the affirmation of an alternative conception of sovereignty.

Shadian structures her exposé in three main parts in which each of the ten chapters provide a specific chronological or thematic contribution towards the overall objective of her book. The interest of the book is strengthened by the insertion of long quotes from some of the main actors of these developments, providing direct access to the perspectives of those that contributed most to the establishment of the Inuit Circumpolar Council (ICC).

The book opens with a short review of the key theoretical concepts discussed in the next chapters. In particular, the author introduces the notion of *polities*, which provides an alternative to the concept of Westphalian sovereignty, enabling to look beyond the artificially strong divide of international actors between the categories of sovereign states and non-governmental organizations.

The first part of the book – 'Constructing Westphalia' – describes the historical context in which the Inuit polity emerged. The second chapter discusses the colonization by the Europeans of Canada, Alaska and Greenland. This progressive process is relevant for the rest of the discussion as it explains how the Arctic came to be framed within the Westphalian political system.

Shadian then addresses how, in the context of the new political geography resulting from Arctic colonization, the nation-building processes at play in each of these three territories impacted the emergence of Inuit polities. Despite their differences, the strategies of Washington, Ottawa and Copenhagen led to somewhat comparable results across the Arctic. The import of the Westphalian system by Southerners into the Arctic led to the construction of a new circumpolar Inuit polity that would later progressively question the notion of sovereignty imposed through colonization.

The second part of the book, 'Expanding the boundaries of Westphalia', constitutes the most important section of the