secessionist parties disagreed over whether or not to join the EC as part of the Danish realm and only de Gaulle's veto against EC expansion in 1963 prevented the Faroese parliament from a final vote. With the adoption of the EC's Common Fisheries Policy (CFP) in 1970 the outcome of the consideration process was in unison against EC membership, irrespective of the unionist or secessionist stance of the Faroese parties. However, although membership was based on the Faroese themselves, 'they could never fully free themselves from the reality of postcolonial politics' (page 236).

Also Körber's article on the history, socio-cultural and political environment of the Greenlandic flag constitutes a significant contribution to Arctic political literature making the importance of the flag as a means for self-identification ever more understandable. She further engages in a short, but powerful discussion on the mapping and naming of places in Greenland and links these issues with cultural production in film and performance. Once again, the political dimension of flag-creation and mapping especially in a postcolonial region cannot be underemphasised.

The information provided and approaches applied in this volume are stunning and only minor things, such as some typos, can be taken issue with which however do not challenge the integrity of this volume. For example, I would consider it debatable whether Britain and the United States 'occupied' the Faroes and Iceland respectively (page 11 and 12). Also Körber's translation of the term 'Qallunaat Nunaat' which she translates into 'Land of the Danes' (page 374) is certainly true in a Greenlandic context, but would on a circumpolar scale be translated into 'Land of the non-Inuit'.

TRANSFORMATION OF THE NATURAL ENVIR-ONMENT IN WESTERN SØRKAPP LAND (SPITS-BERGEN) SINCE THE 1980s. Ziaja Wiesław (editor). 2012. New York: Jagiellonian/Columbia University Press. 95 p, softcover, illustrated. ISBN 978-8-323332-312. £34.50.

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This slim volume (92 pages) reports on approximately 25 years of landscape change in Sørkapp Land, the southern peninsula of Spitsbergen, the largest island of the Svalbard Archipelago. Field research was conducted by a team of Polish scientists from Jagiellonian University, the legacy of an initial visit to the region by physical geographer Zdzislaw Czeppe during the International Geophysical Year 1957–1958. His interest in the research potential of the area was piqued, which led to a series of interdisciplinary summer expeditions beginning in 1980. The emphasis was on mapping abiotic and biotic features at a large scale (1:25 000 – 1:50 000). This resulted in a baseline of spatially detailed data that another team was able to repeat in an effort to detect change after another quarter century had passed. The 2008 team included two members of the original expeditions in the early 1980's.

The *Introduction* briefly outlines the Polish team's interest and timeline of activities. The slightly longer sub-section *Study area* gives a concise overview of the peninsula's geography, Pleistocene natural history and rationale for establishing baseline studies here, namely relatively easy access. The rest of the book consists of four sections: *Methods and materials*,

In conclusion, *The postcolonial North Atlantic* is an outstanding book that fills a gap in Arctic literature. While tilting towards the cultural and literary studies, lawyers, political scientists and students of International Relations are advised to make use of the multifaceted information provided in this volume. Especially the latter two will find themselves confronted with analyses of political processes that go beyond traditional methodologies. The editors have very convincingly succeeded in shedding new light on and creating new approaches for studies of the (sub-)Arctic. (Nikolas Sellheim, Faculty of Law, University of Lapland, PO Box 122, 96101 Rovaniemi, Finland (nikolas.sellheim@ulapland.fi).)

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Components of natural environment, Environmental and landscape changes, and Conclusions and prognosis for environmental change. The second section comprises nearly half of the total text (38 pages) and describes abiotic features: bedrock, climate, glaciation, terrain relief and waters. Landscape units were first mapped utilising panchromatic air photos from 1961. Later infrared photos, digital elevation models and high-resolution satellite imagery (SPOT, ASTER), from 1990 onward, were used to track changes in land cover, including glacial surface area and elevation. 28 vegetation units were mapped based on relevés (a unit of plant community or vegetation analysis in the European phytosociological tradition) using the Braun-Blanquet method, but phytosociological tables of the floristics are not included. The detected changes in landscapes, glacier elevation and vegetation are presented in a set of six maps (scale $1:50\ 000 - 1:75\ 000$

The latter half of the book is devoted to describing the changes detected and putting them into context. Average winter air temperatures have warmed by *circa* 2°C over a 20-year period from the decade 1980–1989 to the decade ending in 2009. Not surprisingly, the mass balance of glaciers has generally decreased and they have receded in extent. Another factor, which the authors emphasise, is the rapid growth of the reindeer population in the 1990s. The reason given is the establishment of South Spitsbergen National Park in 1973 and a cessation of hunting activities. As of 2008, grazing and trampling by some 170 reindeer was considered a 'new geomorphic feature affecting large areas of western Sørkapp Land' (page 64). No figure is given for the amount of surface area affected, but the photo in Fig. 21 (page 66) showing 'destruction' of small sand

dunes makes the overall impact within the landscape appear to be rather small.

A similar bias colours the text on plant communities (page 75-81), where observed shifts in vegetation cover and composition attributed to reindeer over the past 25 years are described using terms like 'destruction' and 'destroyed.' Whenever reindeer are present they undeniably affect vegetation cover, yet their populations in the high Arctic have waxed and waned throughout the Holocene without human intervention (Klein 1999). The valuing of inactive versus active sand dunes and certain vegetation types (that is those rich in fruticose lichens) over others in the context of a growing population of reindeer is highly subjective. On the Nordic mainland, the politics of reindeer management are fierce, and it has rightly been pointed out that the impacts of grazing (and associated trampling) vary, sometimes starkly, in the eye of the beholder (Mysterud 2006; van der Wal 2006). Given the book's strong focus on recent climate warming as an overarching driver of landscape change, it would have been useful to include some reference to the potential influence of climate, or lack thereof, on reindeer population dynamics (see for example Tyler 2010).

The authors conclude with very short assessments of *Landscape development* and *Vegetation changes*, less than one page each. It is assumed that progressive warming will lead to the retreat and eventual disappearance of several glacier tongues. The message on vegetation is a bit more muddled, partly because of the strong bias against reindeer cited above. However, the authors also presume an 'increase of graminoids in the coming

years' (page 87) based on the literature. This is curious since the section on changes in plant communities since 2008 hardly mentions changes among graminoids at all.

The authors do not declare the intended audience of the book. It is probably most useful as an example of how older, carefully collected datasets on high Arctic land cover can be made relevant for the 21st century. The techniques involved can readily be learned and applied by undergraduates in geography interested in glacial and periglacial geomorphology. However, students of ecology should look elsewhere for understanding contemporary drivers of reindeer population dynamics and their implications for vegetation changes. (Bruce C. Forbes, Arctic Centre, University of Lapland, PO Box 122, 96101 Rovaniemi, Finland (bforbes@ulapland.fi)).

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ARKTYKA NA POCZĄTKU XXI WIEKU. MIĘDZY WSPÓŁPRACĄ A RYWALIZACJĄ [THE ARCTIC IN THE BEGINNING OF 21ST CENTURY. BETWEEN COOPERATION AND RIVALRY]. Michał Łuszczuk (editor). 2013. Lublin: Wydawnictwo Uniwersytetu Marii-Curie Skłodowskiej. 586 p, illustrated, softcover. ISBN 978-83-7784-311-6. PLN 50.40.

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Poland has a well established presence in the polar regions (Graczyk 2012; Łuszczuk 2013). Its legal ties include being a party to the Svalbard Treaty from 1931 and since 1977 acting as a Consultative Party to the Antarctic Treaty, which it joined in 1961. Poland belonged also, along with Germany and the United Kingdom, to a narrow group of non-Arctic states invited to observe the inception of the Arctic Environmental Protection Strategy (AEPS) in 1991. It was an accredited observer to the AEPS throughout its duration and has become observer to the Arctic Council at the time of its formation in 1996. In addition, the country holds observer status to the Barents-Euro Arctic Council (BEAC). Nonetheless, grounds for this political involvement in the polar regions lie primarily in the interests of the Polish scientific community, in particular in biology and earth sciences. Polish social scientists have become more interested in the Arctic only relatively recently and this volume is the first major publication on the topic. It is held in its entirety in Polish language but includes also an English translation of the introduction to the volume, which not only offers a review of the book's structure, but also provides an interesting and informative sketch of Polish political engagement and approaches towards the Arctic.

Overall, the volume consists of twenty-seven articles, divided into three main parts. The first section treats primarily the legal arrangements applicable to the Arctic, with some chapters focused also on economic and military aspects of developments in the region. The second part of the volume concentrates on institutional structures for cooperation in the north and the role of the indigenous peoples therein. Finally, the third part collects contributions on policies of selected, both Arctic and non-Arctic, states and entities vis-à-vis the Arctic. The volume thus intends to cover a broad range of issues related to the Arctic. In order to familiarise the reader with the Arctic (legal) framework the book introduces first general aspects of Arctic law while then moving on towards more specific matters. As laid out in the introduction, the key objective of the volume is to map the extent to which the Arctic region in the first decades of the 21st century can be perceived as an area of cooperation, alongside certain, simultaneously occurring elements of rivalry and to evaluate the importance of these developments on the regional and global scale.

The first twelve chapters deal largely with the legal instruments relevant to the Arctic, in the logical order starting from the United Nations Convention on the Law of the Sea (UNCLOS) and its provisions regulating Arctic states' sovereignty in Arctic waters. Next, a very detailed account relating to continental shelf issues in the Arctic and the role of the Commission on the Limits of the Continental Shelf (CLCS) in establishing UNCLOS parties' rights to their continental shelf extending beyond national jurisdiction is given. The part continues with shipping in the Arctic in the light of international law, economic aspects of Arctic development, discourse of Polish media on the