Politics of sustainability in the Arctic

A Research Agenda

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Published in:
Northern sustainabilities

Publication date:
2017

Document Version
Accepted author manuscript, peer reviewed version

Springer Polar Sciences

Gail Fondahl · Gary N. Wilson *Editors*

Northern Sustainabilities: Understanding and Addressing Change in the Circumpolar World

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Northern Sustainabilities: Understanding and Addressing Change in the Circumpolar World

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ISSN 2510-0475 ISSN 2510-0483 (electronic)
Springer Polar Sciences
ISBN 978-3-319-46148-9 ISBN 978-3-319-46150-2 (eBook)
DOI 10.1007/978-3-319-46150-2

Library of Congress Control Number: 2016961943

Printed on acid-free paper

This Springer imprint is published by Springer Nature
The registered company is Springer International Publishing AG
The registered company address is: Gewerbestrasse 11, 6330 Cham, Switzerland

Foreword

The present book – *Northern Sustainabilities: Understanding and Addressing Change in the Circumpolar World* – highlights some of the most important challenges of the present and future Arctic. The 23 chapters illustrate the complexity and diversity of Arctic social sciences. They are also very representative of the dynamic ICASS VIII Conference in Prince George 2014. This event is, and has been since the early 1990s, one of the most prominent features of the International Arctic Social Sciences Association (IASSA). More than 450 researchers gathered for meetings, presentations, and discussions. The general theme of the conference was sustainability, something an increasing awareness of present and future challenges tells us is of uttermost importance. This book is an important contribution to knowledge production and offers an improved understanding of this very complex thing called sustainability.

I do not think there is any keyword that is more prominent and frequently mentioned in the whole discussion about the Arctic than sustainability. It has turned into a guiding star and a pronounced ambition of everyone concerned with the Arctic, whoever and wherever they are. The Kiruna Declaration of the ministerial Arctic Council meeting recognizes that the environment needs to be protected as a basis for sustainable development and emphasizes economy and business innovation as crucial for the same purpose. The Arctic Council even has a working group for sustainable development that constitutes a dynamic arena for various research projects that all strive to contribute to our understanding of what sustainability is and how we can give it the best conditions to develop. The US chairmanship of the Arctic Council has pronounced efforts to take action for a sustainable development in the Arctic. Moreover, the integrated European Union policy for the Arctic that was presented in late April 2016 has in its very first sentence the statement that a safe, stable, sustainable, and prosperous Arctic is important not just for the region itself but for the European Union (EU) and for the world.

During the Arctic Frontiers conference in Tromsø in 2015, the report *Growth from the North: How Can Norway, Sweden and Finland Achieve Sustainable Growth in the Scandinavian Arctic?* was launched. It locates main drivers of growth and suggests instruments like a shared regulatory framework, human capacity,

infrastructure, and unity. This underlines the fact that sustainability is a core concept for the planning processes in the Arctic. Nevertheless, we have to conclude that there are so many different understandings and uses of sustainability. Researchers, politicians, and locals often do not mean the same thing when they talk about sustainability, and its implementation varies greatly between different levels of governance. It is, however, indisputable that sustainability will be an important field for the forthcoming arctic research. The International Conference on Arctic Research Planning III (ICARP III) has as one of three goals to improve the understanding of vulnerability and resilience of arctic environments and societies and to support sustainable development.

There is a strong correlation between knowledge and improved capacity. The scope of sustainability is extensive and its meaning disputed and sometimes blurred. I am happy to see the broad spectrum of fields into which the authors of this book lead us. Perspectives on environment, economy, politics, resources, stakeholders, indigenous peoples, institutions, gender, health, urbanization, education, and human capital are opened. We can see that there is a lot of important research that already carries out the tasks addressed by ICARP III. Some of them are present in this book. The changes that are about to come involve fundamentals, where infrastructures and legislations are included together with production of tolerance, knowledge, and trust.

The International Arctic Science Committee (IASC) has prioritized crosscutting initiatives among its working groups, and it has turned out that sustainability is a perfect match to these efforts. When natural science, technology, medicine, and social sciences and humanities meet, the shared ambition to produce research results that are relevant and valuable for a sustainable development is a starting point for the discussions.

The Arctic is in motion, and perpetual change is what we can count on for the future too. The Arctic is also very hot, in terms of attention and in terms of degrees. Many share an ambition to make the Arctic a more secure, vibrant, and resilient place, and they see a distinct relation to global warming and climate change in this process leading out to the global community. Research has a very important role to play in this development, and the chapters in this book are excellent contributions to an increased knowledge base and give important advice on how to understand sustainability.

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Acknowledgments

Assembling an edited volume on such a diverse and complex topic certainly has its challenges and also its rewards. We would like to acknowledge Margaret Deignan at Springer Press, who suggested the idea of a volume and who patiently encouraged us to pursue the project. Molly Fredeen provided invaluable help with reviewing the manuscripts, editing those chapters written by our colleagues whose first language is not English, and providing consistent formatting throughout. Her editorial work was largely funded by a publication grant from the University of Northern British Columbia's (UNBC) Office of Research.

We owe a huge debt of gratitude to a number of individuals and organizations for their hard work in supporting the Eighth International Congress of Arctic Social Sciences (ICASS VIII), the conference at which these chapters were originally presented: the International Arctic Social Sciences Association (IASSA), Cher Mazo (IASSA Secretary, 2011–2014), the organizing committee of ICASS VIII and the conference sponsors. The generosity of the following sponsors enabled several of the contributors to this volume to attend ICASS VIII: the US National Science Foundation (NSF grants PLR #1360365 and #1338850), UNBC, the International Arctic Science Committee, the Canadian Polar Commission, the Social Sciences and Humanities Research Council of Canada, the Association of Canadian Universities for Northern Studies, the Korea Maritime Institute, the Oak Foundation, the Arctic Institute of North America, and the Arctic Research Consortium of the United States. Both the conference and this volume were greatly enriched by their ability to participate.

Each chapter was separately peer-reviewed; once complete, the entire manuscript was also peer-reviewed. We extend our sincere appreciation to all those individuals who performed this important but time-consuming and often under-acknowledged part of the scholarly process.

As scholars, both of us have been profoundly influenced by our longtime association with the University of Northern British Columbia. UNBC's mandate to serve northern communities is at the heart of our research agendas, and we are indebted to our colleagues and to the university for the support that they provided throughout this whole process.

Last, but certainly not least, we thank our respective spouses and families for all the support that they provided to us over the life of this project. We are extremely grateful to have such loving and understanding families.

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Chapter 1
Exploring Sustainabilities in the Circumpolar North

Gail Fondahl and Gary N. Wilson

Abstract 'Sustainability' is a major concern in the North, given the rapid environmental and social (including political, economic and cultural) changes the region is undergoing. Yet the definition of what sustainability is, and how it might be achieved, are still much debated. Where one is located, both geographically and socially, influences how one perceives 'sustainability'. This volume addresses various facets of northern sustainability in a variety of places across the Circumpolar North and from a variety of perspectives, thus contributing to our understandings of the multiple dimensions of sustainability in the arctic and sub-arctic regions of the world.

Keywords Sustainability • Circumpolar • Arctic • Social sciences • North

1.1 Introduction

At a "Business Dialogue" meeting convened by the Arctic Council's Sustainable Development Working group (SDWG) in the fall of 2012, the terms "sustainability" and "sustainable development" came up frequently. Participants using the term included representatives from the oil and gas, shipping, mining, fisheries, and tourism sectors, as well as from environmental non-governmental organizations. At one point Helena Omma, then Sami Council representative to and co-chair of the SDWG, asked: "What do we mean when we talk about sustainability?" She suggested that the term appeared to hold rather different meanings for the various

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G. Fondahl, G.N. Wilson (eds.), *Northern Sustainabilities: Understanding and Addressing Change in the Circumpolar World*, Springer Polar Sciences,
DOI 10.1007/978-3-319-46150-2_1

participants. “Sustainability” is indeed an elusive term, deployed frequently and with appreciably different connotations. As Ulrik Pram Gad, Uffe Jakobsen and Jeppe Strandsberg write in the first paper in Part I of this volume, “there is little agreement on what ‘sustainable’ means. For different actors (governments, indigenous peoples, NGOs, etc.) the concept implies different sets of opportunities and precautions.”

Yet if “sustainability” has become a buzzword deployed by various actors for various ends, it has also become a major concern in the North over the past several decades (Petrov et al. 2016). The North – the arctic and subarctic regions of the Earth – is experiencing change, both environmental and social, at a rate that is exceeding that of more southerly latitudes and accelerating at an unprecedented pace. Concomitantly, the North is ever more intimately interlinked with more southerly areas. Our understandings of those linkages and their significance to a whole range of socio-ecological changes are embryonic and constantly evolving. Moreover, changes in ice and snow regimes, the depopulation of small villages, urbanization, immigration, language loss, and cultural transformations have both local and global dimensions. To what extent do these and other transformations encourage or erode sustainability? Indeed, what does sustainability in the North look like? What are its drivers and barriers? How might it be most effectively pursued and achieved?

Where one is located – both geographically and socially – matters in terms of some of the most pressing issues of sustainability in the North today, be they social, economic, or environmental. This book tackles various facets of northern sustainability in a variety of places (Fig. 1.1) and from a variety of perspectives. The authors include social scientists – anthropologists, economists, geographers, and political scientists, and humanities scholars – artists, historians and linguists. Many reside in the North. Attending to place, the authors explore local conceptualizations and understandings of sustainability, local challenges to sustainability, and local pathways to pursuing more sustainable development. Thus, rather than attempting to answer the question ‘what is sustainability in the North’, this book contributes to our understandings of the multiple dimensions of sustainability in the arctic and sub-arctic regions of our world.

1.2 Genesis of This Volume

It was in part Helena Omma’s comment that inspired our choice of “Northern Sustainabilities” for the theme of the Eighth International Congress of Arctic Social Sciences (ICASS VIII), from which the contributions to this volume originate. ICASS is the triennial congress of the International Arctic Social Sciences Association (IASSA), the premier organization dedicated to social sciences and humanities research in the Arctic and Subarctic. The first Congress was held in 1992 in Montreal, Canada; since then it has been convened in Rovaniemi, Copenhagen, Quebec City, Fairbanks, Nuuk and Akureryi. In 2014, ICASS VIII was held on the main campus of the University of Northern British Columbia, in Prince George, Canada. Some 470 attendees presented 411 papers as well as 38

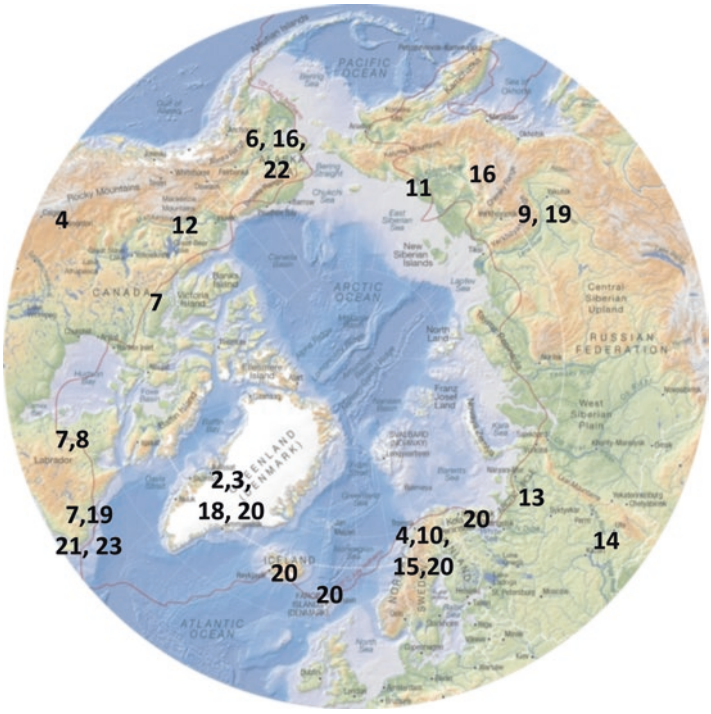

Fig. 1.1 Approximate location of places examined in the chapters of this volume (Basemap produced by Philippe Rekacewicz, UNEP/GRID-Arendal. Used with permission)

posters, in 110 different sessions. While the Congress entertained a diversity of sessions and papers that reached far beyond the conference theme, many scholars offered papers on sustainability in the North. Collectively, these papers spanned a wide variety of topics, places, and approaches.

From these rich and diverse conference presentations, we solicited but a small sample to publish in this volume. We intentionally asked the authors to produce manuscripts that were somewhat shorter than the average journal article or chapter, in order to include a greater number and variety of papers. We strove to include papers that would offer wide topical and geographic representation, from a diversity of authors in terms of nationality, place of employment, disciplinary background and career stage. This volume includes articles on topics ranging from sustainable security to sustainable art, from gendered responses to climate change to barriers to sustainable health promotion, and from sustainability and corporate social responsibility to sustainably conducting research in the North. The chapters touch on most countries and regions within the Circumpolar North (Fig. 1.1). In addition to representing many disciplines, as noted above, the authors also come from across the Circumpolar North, as well as from non-arctic states. Among them are academics (ranging from PhD students and post-doctoral fellows to Full Professors), representatives of local and regional governments, and community researchers. Several of the authors are

indigenous northerners. As is common with edited volumes, a few of the authors who we had asked to participate found that they could not complete their contributions. This resulted in gaps in coverage, both in terms of authors' nationalities and the geographic scope of the book. That said, we feel that this volume is broadly representative of the peoples and places of the circumpolar North.

In exploring the experiences of a diverse set of regions and communities around the circumpolar North, this volume underscores that northern regions and communities have their own unique histories and problems, a reality that has set them on different trajectories in terms of development. Indeed, as the title suggests, there are numerous sustainabilities – and numerous norths.

1.3 Chapter Overview

The chapters that comprise this volume address issues of cultural, economic, environmental, political and social sustainability in the Circumpolar North. Indeed, most examine more than one dimension of sustainability, underscoring the interrelated and interdependent nature of different types of sustainability. The authors do so by exploring the experiences of a diverse set of communities and regions around the Circumpolar North.

Given the overlapping nature of this topic, we have organized the chapters of this collection into three sections:

- Conceptualizing and Measuring Northern Sustainability;
- Challenges to Northern Sustainability; and
- Advancing Northern Sustainability.

Each section emphasizes a different dimension of sustainability and, in doing so, makes an important contribution to our conceptual, analytical and applied understandings of this term. Several of the chapters could have been assigned to more than one of the sections, a fact that underscores the interconnectedness of this volume's contributions.

1.3.1 Conceptualizing and Measuring Northern Sustainability

A common theme in this first set of chapters is the question of how sustainability is understood, conceptualized, defined, packaged and repackaged, and measured. The section starts with a discussion of how the Arctic, as a discrete world region, shapes discourses of sustainability, as well as how the concept shifts in meaning both among the regions and communities that constitute the Arctic and across scales. Ulrik Pram Gad, Uffe Jakobsen and Jeppe Strandsbjerg describe understandings of 'sustainability'; then, to illustrate their assertions, they examine the shifting politics of sustainability in Greenland as it moves towards increasing autonomy and

sovereignty. In doing so, they propose a research agenda for examining the concept of sustainability in the Arctic.

Lill Rastad Bjørst continues the discussion by examining the specific question of how the concept of sustainability threads through the political debate regarding the future of uranium mining in Greenland. Assertions regarding the necessity of mining uranium for Greenland's economic sustainability collide with fears regarding the threats that mining poses to its environmental sustainability. The particular reconceptualization of sustainability and associated policy shift seen in Greenland is representative of developments played out around the North that require trade-offs among cultural, economic, environmental and social sustainability. Bjørst also underscores the agency of Greenlanders in co-producing, together with industry, a receptive environment for mining uranium, in part by reframing sustainability discourses to emphasize economic sustainability as the most critical policy goal.

Gunhild Hoogensen Gjørv continues the discussion of resource development by exploring the tensions between conceptions of economic, environmental and energy security in northern Canada and Norway. Focusing specifically on development in the Alberta oil sands and offshore oil and gas projects off the coast of Norway, Hoogensen Gjørv shows how hydrocarbon development in these sub-arctic and arctic regions has been pitched as an "ethical" alternative to other less-environmentally and politically acceptable forms of resource development.

While critical discourses of security have elevated 'soft' securities to the limelight in terms of sustainable development (e.g., Huebert et al. 2012; Hoogensen et al. 2014), approaching traditional security studies through the lens of sustainability has yet to receive much attention by scholars of the Circumpolar North. Michal Łuszczuk engages with such an approach, exploring how it might inform our understandings of the arctic security environment and military cooperation among arctic states.

How do we actually measure sustainability? In a rapidly changing North, Matthew Berman, Gary Kofinas and Shauna BurnSilver argue that achieving sustainability requires adaptive capacity and, in some cases, transformative capacity. These capacities can be seen as forms of capital that communities can draw upon to tackle vulnerability to external drivers. Can their role in reducing vulnerability be measured? Using a case study of rising fuel prices in two Alaskan villages, the authors review the challenges to performing such measures in the context of the rural North.

Fate control – the ability to determine one's future – and its relationship to local sustainable development have recently received increased attention (Dahl et al. 2010; Ozkan and Schott 2013; Kimmel 2014). Umut Riza Ozkan and Stephan Schott review political and fiscal indicators as measures of self-determination for the three Inuit dominated areas of the Canadian North – Nunavut, Nunavik and Nunatsiavut – noting that financial dependence limits the ability of these regional governments to truly self-govern. Caroline Hervé looks specifically at the political organizations of Nunavik, and how Inuit in that region conceptualize and develop their relations with these organizations as a means of interacting productively and equitably with the Quebec provincial and Canadian federal governments. Like

Bjørst, she underscores the agency of local residents – in this case, describing how the Nunavimmiut have established a productive level of political autonomy within the non-Indigenous political structures in which Nunavik is embedded.

1.3.2 Challenges to Sustainability in the North

Globalization and climate change are powerful external forces that present significant challenges to the sustainable development of the world's northern regions (AHDR-II 2014). The challenges associated with globalization include increasing migrations of peoples, the spread of technologies and ideas to and from the North, demands from the South for a multitude of arctic resources, cultural erosion, competing political processes such as devolution and centralization, and many other social forces. Climate change compounds many of these challenges by modifying access to resources, and threatening the viability of traditional activities and the stability of infrastructure. The chapters in the second section of this volume illustrate specific challenges to achieving sustainability in the face of both climate change and globalization.

Climate change is the focus of two chapters, by Liliia Vinokurova and by Ingrid Bay-Larsen and Grete Hovelsrud. Vinokurova considers the gendered dimensions of climate change in northern Russia by examining evaluations of, and responses to, flooding in rural parts of Sakha Republic (Yakutia). Men and women are anxious about different outcomes of climate change: men cite the loss of traditional occupations as the greatest concern, while women focus mainly on issues of health and safety. Differences according to age are also noted. Such differences will likely affect the adaptive capacities of particular communities and groups of people.

Bay-Larsen and Hovelsrud seek to address the question of *when* adaptive capacity is activated in the face of change. Thus far, research has focused mainly on the factors that determine adaptive capacity, with relatively little attention paid to the questions of whether and under what circumstances such adaptive capacity is deployed. In examining fishing communities in northern Norway, they found that fishers do not perceive anthropogenic climate change as a threat: narratives of self-reliance, extensive knowledge about the marine environment, professional competency and independence diminish their concerns about climate change. Policy-makers attempting to address climate change need to be aware of such differing perceptions, and recognize that failure to acknowledge them could negatively affect the adaptive capacity of northern regions and communities. Likewise, as Vinokurova reminds us, they need to be aware of gendered and generational divergences that may affect individuals' engagement with adaptive actions.

Lena Sidorova, Jenanne Ferguson and Laur Vallikivi consider cultural sustainability through an examination of the linguistic landscape in a settlement in the northeastern corner of Sakha Republic (Yakutia). While the area is home to a variety of indigenous peoples (Chukchi, Yukaghir and Eveny), the authors note the absence of indigenous languages in the linguistic landscape of the town of Chersky.

Signs include Russian, Sakha and even English, but those portraying indigenous peoples are 'mute'. The absence of indigenous languages in the urban landscape mirrors a hierarchy of language valuation that contributes to their continued erosion.

Sustainable health is the focus of two chapters in this section, albeit in markedly different ways. Audrey Giles, Lauren Brooks-Cleator and Catherine Glass consider the obstacles to sustainable health promotion and injury prevention in the Northwest Territories. In addition to financial issues and staffing, program content and delivery are identified as barriers that need to be considered in future health promotion planning. Rémy Rouillard interrogates ideas about adaptations to the arctic environment within both popular and scientific discourses, through an examination of two groups of ethnic Russian oil-workers in Nenets Autonomous *Okrug* (district) in northwestern Russia: those who came north a generation ago and those who have arrived in the past 15 years. Rouillard's work also brings to the fore ideas regarding issues of economic sustainability for extractive industries, especially in relation to labour availability and mobility.

Looking at extractive industries from another angle, Emma Wilson documents the local and corporate understandings of social license and social responsibility, through an examination of the oil industry in Komi Republic in northern Russia. Local understandings of corporate social responsibility diverge from those of the corporations, even when these corporations claim, and are seen, to be socially responsible, according global sustainability standards. Wilson argues for the need to involve local people in (re)defining what social license entails in northern development projects. Toril Ringholm also considers the interactions between a multinational resource corporation and local communities, through a study of the development of the Goliat oilfield off the coast of northern Norway. She explores the efforts of municipal governments to ensure local benefits from the development through evocations of social license. From her interviews Ringholm deduces a process of mutual learning and the building of trust between local officials and company representatives, a trust lacking in the Komi case that Wilson describes.

This section ends with a consideration of the role of human capital as a factor in sustainable development in the North. Andrey Petrov connects the development of human capacity to the evolution of creative capital and the knowledge economy. He argues that these elements provide an important means of sustainable economic diversification that will allow northern regions and communities to move away from an over-reliance on non-renewable resources.

1.3.3 Advancing Sustainability in the North

The chapters in the third section of this volume focus on manifold ways of advancing the sustainability of the North. The first two chapters address the performance of sustainable research in the North. Stacy Rasmus and Olga Ulturgasheva advocate a new methodological approach to research, that of peer observation. As indigenous

scholars from the USA and the Russian Federation working together in northern indigenous communities in each of these countries, they consider how identities inscribed on them by community members affected their research experiences and relations. Observing each other's reactions and reflecting together on their responses, they argue, encourages them to consider how their research positions are negotiated within the communities where they conduct research and how their identities, both performed *and* ascribed, affect their research outcomes. In her chapter on "Building Relationships in the Arctic", Heather Gordon, another indigenous scholar, continues the discussion about sustainable research relations by relating her experiences working with Greenlandic Inuit. She identifies trust as paramount, and describes the actions scientists need to take to build and sustain trust when working with indigenous communities.

Susan Crate offers a framework for pursuing research with rural communities to explore rural sustainability, based on her extensive work in Sakha Republic (Yakutia) and in Nunatsiavut, in Labrador, Canada. Research in the two regions demonstrated the efficacy of two innovative tools for building community sustainability: a knowledge exchange process and an on-line atlas project. Crate also underscores that the forces of economic globalization that threaten local subsistence activities and cause the outmigration of youth from rural communities in both regions are considered by locals to be more serious threats than those posed by climate change.

Distinctly less attention has been paid to urban environments and urban sustainability in the circumpolar North, than to rural areas, although the majority of the region's population is urban (AHDR 2014). Turning to arctic urban environments, Ryan Weber, Rasmus Ole Rasmussen, Lyudmila Zalkind, Anna Karlsdottir, Sámal Johansen, Jukka Terräs and Kjell Nilsson discuss land use planning as a tool for sustainable development. Examining six urban areas in Faroe Islands, Finland, Greenland, Iceland, Russia and Sweden, they note key common issues affecting the desire of northern urban residents to have easy access to nature, and the role that complex governance structures play in enabling such access.

Cultural sustainability is the focus of the chapter by Ashlee Cunsolo, Inez Shiwak, Michele Wood and the *IlikKuset-Ilingannet Team* from Nunatsiavut. They describe a youth mentorship program in the region, developed to promote cultural resilience to a changing physical and social environment. In her chapter, Herminia Din discusses a different sort of cultural program, one focused on sustainable art. Her work, which involves students and faculty at the University of Alaska–Anchorage and the University of the Arctic's Thematic Network on Arctic Sustainable Art and Design, encourages students to think about environmental conservation through artistic activities.

ICASS VIII hosted three plenary panels on Northern Sustainabilities, chosen through a competitive, peer-reviewed process. One of these showcased the *SakKijânginnatuk Nunalik* (the Sustainabilities Communities Initiative), an ongoing project in Nunatsiavut. We end this volume on northern sustainabilities with an account of this project. Rudolf Riedlsperger, Christina Goldhar, Tom Sheldon and Trevor Bell describe the challenges the project has faced as well as the success it has experienced, and the lessons learned regarding how to overcome such challenges.

They argue that a focus on local understandings of, and approaches to, sustainability may offer a much needed counterpoint to sustainability initiatives imported from the South and informed by comprehensions distant from local values, philosophies and practices.

The range and scope of chapters in this book speak to the significance of sustainability as an overarching research theme in arctic social sciences and humanities. By organizing and compiling this edited volume, it was our intention to highlight some of the important and ground-breaking research that is influencing our understandings of the multiple facets of sustainability in the Circumpolar North. In its examination of sustainabilities, theoretically and empirically, in various places and at various scales, we hope that this book makes a contribution to both the academic and public discourse about this dynamic and diverse region, and the challenges that it faces at the start of the twenty-first century.

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Part I
Conceptualizing and Measuring Arctic Sustainability

Chapter 2
Politics of Sustainability in the Arctic: A Research Agenda

Ulrik Pram Gad, Uffe Jakobsen, and Jeppe Strandsbjerg

Abstract The concept of sustainability has become central in arctic politics. However, there is little agreement on what 'sustainable' means. For different actors (governments, indigenous people, NGOs, etc.) the concept implies different sets of opportunities and precautions. Sustainability, therefore, is a much more fundamental idea to be further elaborated depending on contexts than a definable term with a specific meaning. This paper suggests a set of theoretical questions, which can provide the first steps toward a research agenda on the politics of sustainability. The approach aims to map and analyze the role of sustainability in political and economic strategies in the Arctic. Sustainability has become a fundamental concept that orders the relationship between the environment (nature) and development (economy), however, in the process rearticulating other concepts such as identity (society). Hence, we discuss, first, how, when meeting the Arctic, sustainability changes its meaning and application from the global ecosphere to a regional environment, and, second, how sustainability is again conceptually transformed when meeting Greenlandic ambitions for postcoloniality. This discussion leads us to outline an agenda for how to study the way in which sustainability works as a political concept.

Keywords Concept of sustainability • Political theory • Discourse theory • Postcolonial identity • Greenland

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G. Fondahl, G.N. Wilson (eds.), *Northern Sustainabilities: Understanding and Addressing Change in the Circumpolar World*, Springer Polar Sciences,
DOI 10.1007/978-3-319-46150-2_2

2.1 Introduction: Sustainability as a Political Concept in the Arctic

Changes to the climate, global power balances, demands for natural resources, and aspirations for self-determination set the stage for new political struggles in the Arctic. Central to the struggles is the notion of the Arctic as a special place characterized by a nature at once hostile and fragile. In this clash between fragility and the drive towards development, the concept of sustainability has become pivotal. Yet there is neither consensus on what sustainability should refer to, or on how it should be achieved. Despite, or rather because of, its salience for policymaking, there is no consensus about the precise contents of the concept. And this is exactly what makes sustainability such an interesting and politically potent concept. With this chapter, we want to present and advocate for a particular take on sustainability that posits sustainability as a political concept rather than a technical concept.

As the social sciences have been invited to contribute both to perfecting our understanding of sustainability and to implementing it, much scholarship has embraced the concept. In contrast, some critics have advocated a wholesale rejection of the concept on accounts of neo-colonialism. Rather than joining one of these two camps, we suggest an approach that steps back and investigates the diverse political consequences of sustainability becoming a buzzword in the Arctic. For different actors (governments, indigenous people, non-governmental organizations (NGOs), etc.) the concept implies different sets of opportunities and precautions. There are significant differences between businesses and state governments that tend to see sustainability as a precautionary note in the pursuit of wealth in a fragile setting, indigenous communities that often note that it is their particular lifestyle that should be sustained, and global NGOs such as Greenpeace and the WWF which tend to act as spokespersons for a fragile nature in the context of global environmental balance and biodiversity.

As a concept, sustainability has entered an arctic political reality that may be characterized as postcolonial: Indigenous peoples hold a prominent place and have relatively strong organizations in the Arctic. Their relations to their respective states involve a variety of autonomy arrangements designed to remedy histories of colonialism, paternalism and exploitation. As an extreme case, Greenland, once a colony but now a self-governing territory within the realm of Denmark, regularly declares its ambitions to be independent. Greenland explores new strategies for economic development while negotiating a tension between a postcolonial and an indigenous political identity. Political debates in Greenland play out as a negotiation of how to prioritize and combine, in a sustainable way, political self-government with cultural self-sufficiency in terms of human resources, indigenous cultural practices (Inuit language, social norms, hunting and consumption of wild animals etc.) and imperative elements of Western modernity (Western judicial system, representative democracy, welfare state programs, market economy, etc.). These complexities are features of politics and living conditions generally in the Arctic. But in

Greenland these complexities take on a special character in the light of the unique ambitions of becoming a sovereign nation state – the first involving one of the Arctic's indigenous peoples.

It is a consequence, we suggest, of these complexities that sustainability requires further theorization as a *political* concept. That means that we should look at sustainability as a concept that does something to the way in which politics unfolds. We will elaborate this notion below. For the sake of argument, in this chapter we make the assumption that sustainability has become a concept that plays a central role in all arctic development discussions. The important question we should ask is how we should understand this idea. The main ambition of this chapter, then, is to present an approach and a set of questions that could be seen as the first steps toward a new research agenda on sustainability in the Arctic. Because Greenlandic politics embrace all the dilemmas invoked by sustainability, we use Greenland as a case study to show how the concept of sustainability operates politically. The argument is structured as follows: we commence with an outline of sustainability as a political concept followed by a discussion of sustainability in Greenland's postcolonial politics. This allows us to draw out the key analytical questions which we suggest should be asked when pursuing research on the politics of sustainability in the Arctic.

2.2 Sustainability as a Fundamental Concept

Since the Brundtland Report, sustainability has invoked – for lack of a better term – traditional, technical-rational authority to inform development policies. However, we suggest that sustainability has become a much more fundamental concept ordering the relationship between the environment (nature), development (economy), and identity (how can society develop while staying the same).

Whereas the concept of sustainability can be traced back centuries (Warde 2011), its rise to prominence as a political program rather than a tool for academic analysis only came about in the 1980s. As it became clear that the ecosystem of the planet was under threat from the production and development strategies of an ever more industrialized world, the reconciliation of society's developmental goals with the planet's environmental limits became the foundation of an idea that achieved political attention from the mid-1980s. The 1987 report "Our Common Future" by the so-called Brundtland Commission (also known as the World Commission on Environment and Development) was concerned with how to achieve sustainable development defined as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (WCED 1987).

An overarching aim was to reinstate scientific and technological knowledge production in societies' efforts to achieve environmentally sustainable improvements in human well-being (Kates 1999). Four distinct research programs had developed: biological research relating humanity to its natural resource base; geophysical

research relating human activities to the earth's climate; social research placing human institutions, economic systems and beliefs in nature as its environment; and finally technological research on the design of devices and systems to produce more social goods with less harm to the natural environment (Kates 2000). Current research on sustainability in the Arctic generally stays within one of these distinct research programs, committing normatively to turning unsustainabilities into sustainabilities. However, in committing to sustainability, much research blinds itself to the political effects of employing the concept of sustainability (cf. Sachs 1990; Banerjee 2003; Lélé 1991; Beckerman 1994).

We, therefore, suggest an approach that investigates what political role is played by the concept of sustainability and the practices (including knowledge production) induced by the concept. In this light, politics could be seen as a struggle between competing visions of the future (Palonen 2006) where concepts like sustainability, development, and identity are employed to implicitly or explicitly prognosticate and prescribe specific futures (Koselleck 1985). Since the arrival of Europeans in the Arctic, a discussion has been taking place about how to value and mediate between identity and development. From nineteenth century administrators to early twentieth century explorers and anthropologists, the question was: Can and should the Inuit stay true to their original culture – or must they develop according to a Western model, lest they die out (Høiris 1986)?

The key for analyzing sustainability is to identify its referent object – in other words, what needs to be sustained – and investigate how sustainability helps organize concepts in coherent narratives (Ricœur 1988). By entering established discourses structured around identity and development, the concept of sustainability changes them. Generations of Inuit leaders have submitted different reformulations of the problematique, trying to combine indigenous identity with modern development in various ways (Thomsen 1996). Particularly with the de-legitimization of authorities in the 1960s and 1970s, a new generation of indigenous leaders has presented colonialism and modernization as a threat to their identity (Gad 2005, 2013).

Relative to identity and development, sustainability is a newcomer to political struggles in the Arctic. At first, sustainability in the Arctic was all about protecting a fragile environment (Tennberg and Keskitalo 2002); later it branched out to encompass also the sustainability of human societies in the Arctic (Tennberg 2000). To talk about sustaining human societies diverts the meaning of sustainability from the technical character that came to the fore in the 1980s to one referring to a particular identity.

What is common, however, to the various discourses on sustainability and development in the Arctic is the emphasis of a unique regional environment which, in the more abstract sense, involves the particular characteristics of the materiality of arctic space. The cultural identities of peoples living in the Arctic are seen as shaped by the harshness and remoteness of arctic space (Lorentzen et al. 1999). Economic development has been seen as inhibited by the climate and distances of the Arctic, but also potentially facilitated and even necessitated by its natural resources (Howard

2009). So, arctic space constitutes both the natural environment as fragile, and sustainability as a particularly fragile balancing act between identity, state authority and economic development.

2.3 Sustainability in Greenlandic Politics of Postcoloniality

Greenland is a self-governing territory within the realm of Denmark. It was a Danish colony from 1721 to 1953. After the formal decolonization process in the wake of World War II, Greenland experienced some devolution of powers from Denmark but also, and somewhat paradoxically, a growing Danish presence and a "Danification" of private businesses and public services. One could say that Greenland was decolonized by being integrated (Beukel et al. 2010). This generated protests and gave birth to a national independence movement that resulted in the introduction of Home Rule in 1979. This process of "Greenlandification" developed further, and in 2009 an Act on Self-Government was adopted. In the present situation, Greenland enjoys a large degree of autonomy in domestic matters, but does not retain decision-making power on questions pertaining to citizenship, monetary, foreign, defense and security policy (Ackrén and Jakobsen 2015).

The 2009 Act, however, included a promise of full political independence from Denmark. The preamble of the Act on Self-Government stated that "the people of Greenland is a people pursuant to international law with the right of self-determination". In the Self-Government Act the conditions for independence are specified. On the one hand, a "Decision regarding Greenland's independence shall be taken by the people of Greenland" (21(1)). On the other hand, the procedure states, "An agreement between Naalakkersuisut [the Government of Greenland] and the [Danish] Government regarding the introduction of independence for Greenland shall be concluded … with the consent of the Folketing [Danish Parliament]" (21(3)). Before the Danish Parliament concludes, the agreement shall have "the consent of Inatsisartut and shall be endorsed by a referendum in Greenland" (21(3). Hence, this is the process through which Greenland can obtain political independence from Denmark (cf. Kleist 2010).

The economy remains a significant obstacle to this aim. It follows from the constitutional arrangement that increasing political autonomy from Denmark requires an economic surplus on Greenland's budget balance and thus, simply speaking, independence requires economic development (Strandsbjerg 2014). Obviously, the transfer of an annual grant of more than 3.5 billion Danish kroner (US$ 550 million) that Greenland receives from the Danish government budget, would stop once Greenland becomes independent from Denmark. Moreover, Greenland paid a crucial price for the formal recognition of its right to independence. In pursuant of the 2009 Act and in contrast to the provisions of the 1978 act, Greenland has to pay for further devolution. According to Article 5(1), the annual block grant is fixed at the 2009 level. Moreover, Article 6(1) states: "Fields of responsibility that are assumed by the Greenland Self-Government authorities … shall be financed by the Self-

Government authorities from the date of assumption". During the Home Rule years, every field of responsibility 'taken home' had a cheque attached to it in the form of an increased block grant.

So, in a speech on "Greenland's way forward" at the international conference 'Arctic Frontiers' in Tromsø, Norway in January 2014, then Greenlandic Premier Aleqa Hammond declared that Greenland's short term goal is a sustainable economy in order to obtain the long term goal of political independence: "I want Greenland to have a self-sustaining economy based on our own resources with a greater degree of integration into the world economy. Greenland's long-term political goal is independence" (Hammond 2014). Both the long-term goal of independence (however defined) and the immediate task of a self-sustaining economy outlasted Aleqa Hammond's brief period in power. Indeed, they are generally accepted across most of the political spectrum in Greenland, although differences pertain to the details of the roadmap for independence and the urgency of progress.

A further complication to the politics of sustainability in Greenland is the unsustainable nature of not only the financial side of the economy but also the human resources situation (Lang 2008). Greenland insists on proceeding as a technologically advanced welfare state, even if the level of education among the general population cannot sustain it. The result is a steady import of humanpower from the former colonizing power, Denmark and a continued reliance on the Danish language. This postcolonial re-enactment of colonial dependence forms the background of Aleqa Hammond's claim at the presentation of her government's working programme in April 2013 that "a special Greenlandic element should be to include culture in the concept of sustainable development. The process of reconciliation and forgiveness will be a central element in a sustainable development. Hence, the initiation of a series of activities, e.g. conferences, seminars and debates, aimed at uncovering the 'effects of colonial times'" (Aleqa Hammond in *Rigsombudsmanden* 2013: 6; our translation). With this, Hammond explicitly tied sustainability and potential sovereignty to a particular vision of Greenlandic culture conditioned by postcolonial ties to Denmark.

2.3.1 Greenland in the Politics of Sustainability in the Arctic

As one case among other arctic societies, Greenland has been approached by scholars as a struggle between indigenousness and modernization, both at the level of concrete societal practices and at the level of identity discourses. This has shown how Greenlandic politics is shaped as a negotiation of the specific combination of practices and aims promoted as indigenous with developments deemed necessary for prospering culturally, economically, and politically in a modern world (Thomsen 1996; Gad 2009). In this perspective, Greenland stands out as unique in the Arctic by aiming to become the first sovereign, indigenous nation state (Strandsbjerg 2014).

When the concept of sustainability is introduced to the Arctic, it changes its meaning and application from the global ecosphere to a regional environment. In this regard, sustainability seems to be conceptually transformed to allow rather than limit development in a fragile arctic environment. Scholarship often points to the Arctic as a special case; both nature and societies here are presented as particularly fragile (Lorentzen et al. 1999). Hence, the Arctic has become an arena for clashes between, on the one hand, institutions and NGOs promoting a global model for environmental management and, on the other hand, local knowledge and the cultural significance of the Inuit way of life (Caulfield 1997). These clashes illustrate the tension between sustainability as a universal concern and as a local concern.

In the Arctic, sustainability often means the sustainability a particular way of life (Berman et al. 2004; Buckler and Wright 2009), an understanding which might contradict universal attempts to regulate and manage the environment in a globally sustainable manner. This tension is but one example of what happens when a universal discourse on sustainability meets the discourses on arctic particularity and the regional interests of arctic politics. We argue, that the peculiarity of arctic space makes a difference – but we still need to see the full picture of what this peculiarity means in order to understand how the concept of sustainability works in the Arctic.

The point we want to make here is that we need to understand what difference the Arctic as a region with specific characteristics does to sustainability, and the different ways in which the concept of sustainability is employed in current struggles to define postcolonial statehood in Greenland and elsewhere in the Arctic. In Greenland, as discussed above, discourses on the particularity of arctic sustainability, arctic identity, arctic security, and arctic development are configured in a particular way due to the unique double role of the nation-state in Greenland. As a self-governing territory within the realm of Denmark, Greenland does not yet enjoy full sovereignty, but Self-Government is a promise of full sovereignty in the future. In this way a separate, future sovereign state is built into the constitutional arrangement of an existing post-imperial state.

We argue, that this arrangement makes a difference when the global struggles over the reconfiguration of arctic space are articulated in Greenland. It makes a difference whether one has in mind the sustainability, identity, security, and development of a future Greenlandic nation-state with its own independent national economy and human resource base, or whether Greenlandic identity is bound to be developed in a sustainable way within a Danish state ultimately in charge of citizenship, fiscal, foreign, defense and security policy. In sum, we propose that this makes a difference, but we still need to understand just what difference this peculiar version of post-coloniality means for how the concept of sustainability works in Greenland.

To recapture the argument, Greenland is in midst of a local struggle over how state authority is to be configured. This struggle is fueled by a developing climate change narrative that combines actual developments and political aspirations. It is said that arctic global warming means melting ice, both ice sheet and sea ice, and that melting ice means more accessibility to on shore and off shore natural resources, more possibilities for sailing in arctic waters and growing feasibilities for new

shipping routes through the Arctic Ocean. Furthermore, more access to natural resources means more mining to meet growing demands on a global scale and more exploration for oil and gas in the Arctic, and more possibilities for new shipping routes mean more attractiveness for Asian interest in the Arctic.

Greenlandic political discourses combine the Asian interests in Greenland's natural resources with the possibility of economic sustainability as the pre-condition for political independence. These factors and this climate change narrative set the stage for a renegotiation not only of the materiality of arctic space but also of post-colonial sovereignty and statehood in Greenland. The climate change narrative, however, also implies that sustainability is conceptually transforming to allow rather than to limit development in this fragile arctic environment. Thus, in her opening speech of the Greenland Parliament in September 2013, then Premier Aleqa Hammond stated that "climate change and the receding ice mean that new business opportunities become available" and that the "mining industry can expand the exploration of raw materials", and that the more ice-free arctic waters in the future may play a role as "an alternative route for container traffic to and from Asia" (Hammond 2013).

So, one plausible scenario is that the goal of economic sustainability driven by exploitation of natural resources in order to obtain political independence marginalizes notions of cultural, social, and political sustainability. The consequence of such developments is that sustainability is transformed from a concept meant to limit development to a concept meant to allow development to take place in an otherwise fragile arctic environment.

2.4 Politics of Postcoloniality and Sustainability in the Arctic: Towards a Research Agenda

This chapter has been motived by the observation that sustainability has become an important and widely applied concept in arctic development discourses while, at the same time, there is little or no agreement between these discourses about the meaning of the concept. This has spurred us to pursue a theoretical approach – or research agenda – to capture the rise of sustainability discourses as a political process renegotiating the relationship between nature, society and development in the political struggles unfolding in the Arctic. This calls for a more nuanced analysis of how and where good and bad futures are envisioned when talking about sustainable development in the Arctic (Tennberg et al. 2014; Sejersen 2014, 2015). The intricacies should be systematically investigated in a research agenda involving both a mapping and a systematic analysis of the role of sustainability in various political and economic strategies in the Arctic.

To acquire a better understanding of arctic development, we need to capture sustainability as a political concept. Sustainability cannot be taken for granted – neither with regards to its substantial meaning nor to its political effects. We need to analyze

the uses of the concept of sustainability, rather than assume that it works as a signpost for problem solving and the rational balancing of interests.

The aim of such a research agenda is to theorize the changes that take place in the Arctic by investigating how the concept of sustainability is given radically different meanings and how these different meanings inform different political strategies. The agenda involves a series of consecutive steps:

- The first task will be to identify and map separate discourses of sustainability in the Arctic. Scholarly reports, political debates, regulatory texts as well as statements from all types of stakeholders in the Arctic should be analyzed to distill claims about *what* should be sustained, in relation to *what* environment or larger community or greater good, as well as *who* is responsible for getting us to sustainability.
- A second task will involve charting the genealogies of each discourse. From where do central ideas come? Did international governance bodies or national regulatory traditions provide the language in which each sustainability discourse is couched? Who promotes each discourse? How do the promoters work together or fight each other? How have the discourses clashed and merged? And what scenarios can be built to understand and predict future clashes or mergers?
- A final task will be to investigate how concepts of nature, identity and development are being reconfigured in these different discourses.

The research following this agenda should pay specific attention to the way in which discourses play out and order distinct scales. First, how is arctic space renegotiated in struggles over the meaning of sustainability and how is a global concept of sustainability given distinct meaning when articulated to arctic space? Second, how is postcolonial statehood and sovereignty renegotiated, especially when the struggles over the meaning of sustainability in the Arctic meet Greenlandic strategies for postcoloniality? We need to understand how the different ways in which the concept of sustainability is employed in current struggles to define postcolonial statehood in Greenland and independence from Denmark, and in parallel processes in other parts of the Arctic.

Hence, two research questions relating to specific changes in geographical scale are each in need of theoretical and empirical investigation. First, what happens when global discourses on sustainability meet the regional particularities of arctic material space? Second, what happens when the resulting discourses on arctic sustainability meet the prospects of Greenland as an indigenous nation state in the Arctic – and, in parallel, when they meet the way other distinct arctic communities envision each their futures? In both of these changes in scale, two core analytical questions are central: How is the concept of sustainability given radically different meanings? And how do these different meanings inform different political strategies?

By pursuing these questions we would get a better understanding of how sustainability works as a concept, but there is also the normative implication that by highlighting the political character – as opposed to its technical-rational appearance – of sustainability, the referent object, and hence what should be sustained, is opened for a political discussion proper.

Acknowledgement The authors would like to thank Marc Jacobsen and Nikoline Schriver for their valuable input to this chapter; in particular with their effort to study global and arctic discourses and the scholarly literatures on sustainability.

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Chapter 3
Uranium: The Road to "Economic Self-Sustainability for Greenland"? Changing Uranium-Positions in Greenlandic Politics

Lill Rastad Bjørst

Abstract How did the government of Greenland in just a few weeks take on a clear pro-uranium position in the eyes of the industry? I introduce a case study of the production of tolerance towards the mining of Greenland's uranium as developed in the recent political debate about resource development, and particularly, uranium, and to the knowledge practices which help to legitimize varying arguments in the debate. The concept of sustainability is often mentioned in the debate but is given radically different meanings by different actors. In this study I question how these different meanings inform various political strategies, in the context of increased global attention to the possibility of the industrial development of one of the world's last underground treasures.

Keywords Greenland • Mining • Uranium • Sustainability • Development • Social license to operate • Arctic

3.1 Introduction

An old ambition of the former Danish colonial power of profiting from the mining of Greenland's uranium has reappeared. On October 24th, 2013, the Greenlandic Parliament, *Inatsisartut*, lifted a decade-long moratorium on mining radioactive elements. It had been previously following a zero-tolerance policy toward uranium (Sørensen 2013). This paved the way for Greenland (and the Kingdom of Denmark) – to become the newest western (and arctic) supplier of uranium (Vestergaard 2015:153). But as the debate around the acceptability of this move accelerated, it became clear that uranium was not just another mineral, but one capable of

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G. Fondahl, G.N. Wilson (eds.), *Northern Sustainabilities: Understanding and Addressing Change in the Circumpolar World*, Springer Polar Sciences,
DOI 10.1007/978-3-319-46150-2_3

penetrating regional, local, and global energy, resource, environmental, power, and security agendas.

How did the government of Greenland, in just a few weeks, take on a clearly pro-uranium position in the eyes of the industry? This chapter provides an introduction to a case study of the growth of tolerance towards uranium mining, during the debate about resource development, and specifically uranium, that occurred in Greenland between 2013 and 2015. This chapter will also discuss the knowledge practices which help to legitimize varying arguments in the uranium debate. The concept of sustainability is often mentioned in the debate but it is assigned radically different meanings by different actors. In this study, I want to question how these different meanings inform various political strategies in the context of increased global attention to the possibility of the industrial development of one of the world's last underground treasures.

3.2 A New "Mining Friendly" Geopolitical Regime

Until 2009, mining in Greenland was under the institutional control of Denmark. A repatriation of the political and economic responsibility for mineral resources followed the introduction of the Greenland Self-Rule in 2009. Greenland has a long history of mining, including the extraction of coal, cryolite, gold, copper, and other minerals. Most mining activities took place in a period with limited or no environmental focus on the delicate arctic ecosystems. Some of the mining sites were later analysed and found to have traces of pollution with heavy metals from tailings (Sejersen 2014b). Mining legacies in the form of social and ecological impacts are known, but play a small part of the current political debate in Greenland – a debate framed by questions of agency, respect, and Greenland's right to development (Bjørst forthcoming).

With the introduction of the Self-Rule Act in 2009, Greenland had to look for new sources of income. The downturn of economic activities in 2012 and 2013, which continued in 2014, suggests that Greenland might face substantial economic problems in the years to come (Christensen and Jensen 2014). Scientists, politicians, and the Greenlandic business community have more-or-less accepted this 'inconvenient truth' and are looking for alternative ways to create growth and attract investors (CGMRBS 2014; Rambøll Rapport 2014; Fremtidssenarier for Grønland 2013).

The Self-Government Act stipulates that the subsidy the Greenland Self-Government receives from Denmark will be reduced as revenue from Greenland's mineral sector grows (Act nr. 473 2009). With this in mind, the introduction of a new "mining friendly" geopolitical regime in Greenland can be seen as an integrated part of the ongoing nation-building process and the road to build an independent, sustainable economy. From an economic point of view, it seems to be in the interest of both Denmark and Greenland that Greenland becomes a mining nation (Bjørst forthcoming). While the government of Greenland is preparing for what it

characterizes as "sustainable mineral resource development" in the newest oil and mineral strategy (Government of Greenland 2014a:90), resistance in the urban centers, especially in the capital, Nuuk, is growing. Conflicting claims about 'what is sustainable for Greenland' is part of the debate. Whereas non-governmental organisations (NGOs) are mostly concerned about health and environmental problems related to uranium mining, industry advocates for mining as the road to job creation and local economic development.

3.3 Ambivalence Towards Mining of Greenland's Uranium

The mining company Greenland Minerals and Energy A/S (GME) began to operate in Greenland in 2007. Its activities in Greenland are concentrated in a licensed area in Kvanefjeld by the town of Narsaq in the south of Greenland. According to one source, Kvanefjeld contains 575 million pounds of uranium and 10.33 million tonnes total of rare earth oxide (Proactive Investors 2015). The company is a subsidiary of Greenland Minerals and Energy Ltd., which is listed in Australia and has its headquarters in Perth (GME 2015). GME seems confident that, in the years to come, it can finalize a cooperation agreement on the regulation of uranium production and exports from Greenland. Yet it still needs 'the social license to operate', which will not be achieved without some resistance. Studies from 2013 show that many local actors in Greenland are still undecided about uranium mining in Greenland (Bjørst forthcoming). Politicians have responded to these concerns by suggesting a local referendum about uranium. As of this chapter's writing, the question of whether referendum on uranium would be held was still undecided.

Another initiative was a public pre-hearing, which was held in Greenland in late-2014. The pre-hearing was complicated by an unexpected parliamentary election that was called because an expenses scandal prompted Prime Minister Aleqa Hammond to step down as leader of her party. The election gave new life to the public dispute on the mining of Greenland's uranium. A few weeks before the election, the leader of the opposition party Inuit Ataqatigiit (IA), Sara Olsvig, was quoted in a Danish newspaper saying that regardless of the outcome of the upcoming election and the promised local referendum on uranium mining, her (personal) suggestion was to vote against the mining of uranium in Narsaq (Klarskov 2014). In the Greenlandic newspapers she claimed afterwards that the quote was a misinterpretation of her statement (Duus 2014b). In any case, she had revealed her own ambivalence towards mining of Greenland's uranium, something the other parties would use against her during the campaign. In the Greenlandic newspaper *Sermitsiaq* she was accused of "speaking with a forked tongue" (Duus 2014a). Siumut-candidate Julie Rademacher, also running for a seat in parliament, called Olsvig's opinion "highly problematic," and the Greenland Minerals and Energy's managing director John Mair declared:

> I am very surprised by the announcement – because then everybody has been ridiculed: the Greenlandic voters, who have to vote for no reason; the international investors, who have wasted their time; and GME, which so far has spent eight years to prepare a fantastic possibility for Greenland in close cooperation with the former Government and everyone else interested (Klarskov 2014).[1]

What is significant in this quote is a shift in paradigm, which has turned mining *in* Greenland into mining *for* Greenland, and legitimizes an argument about mining as "a fantastic possibility" and the only road to development (Bjørst 2016).

3.3.1 A State in Formation and the Pro-uranium Position

The positive discourse about mining is closely linked to the political project of Greenland as a state in formation (Gad 2014). As is true of most Greenlandic politics, this dispute can be read as a negotiation of how that national project is to be configured (Gad 2009). Recent local studies show that mining, and especially the Kvanefjeld project, is positioned as the solution to the problem of what Greenland will need to survive in the future. Therefore, the storyline of "saving the community" (promoted by GME, among others) and doing something for the benefit of Greenland is of high value among Greenlandic politicians (Bjørst 2016). In the election programs of the Greenlandic political parties prior to the parliamentary election in 2014, the question of how uranium penetrated political discussions was noteworthy. The issue ended up being a determining factor for the formation of the final political coalition (Østergaard 2014). In December 2014, Greenland got its new government. After long days of negotiations, what finally united the parties Siumut, Demokraterne and Atassut, and determined the formation of the coalition was their support for uranium exploration in Greenland. These parties promised to work to ensure "economic self-sustainability for Greenland" (Coalition Agreement 2014:3), which thrilled industry. Proactive Investors representative of GME John Mair proclaimed to the international news and media: "All coalition parties are of a pro-uranium position, and we anticipate that the government will be proactive in quickly moving to continue the work with Denmark on uranium regulation" (Proactive Investors 2015).

With this statement, Mair emphasized that the future extraction of rare mineral resources in Kuannersuit (near Narsaq) could not take place until the framework conditions were fulfilled, the required information was provided by the Danish state and Greenland and the requirements met. These included compliance with the International Atomic Energy Agency's safety guidelines and the requirements outlined in Euroatom's cooperation agreement (Coalition Agreement 2014). The Coalition Agreement states that its ambition is to "submit proposals to Inatsisartut to determine an upper limit to the uranium content required to be able to extract this mineral in the mineral resources sector" (Coalition Agreement 2014:7).

[1] All translations are those of the author unless otherwise stated.

On the question of the 'social license to operate', GME describe their version of the "conditions" for having an exploitation license approved as "largely dependent on establishing an economically robust, and environmental and socially acceptable development scenario" (GME 2014a:10). In other words, the "environmental and socially acceptable development scenario" was still being negotiated and the outcome of those negotiations would result in a 'social license to operate' and eventually, an exploitation license. Building trust with local communities is crucial for mining companies: it is no longer enough for mining companies to solely meet the formal obligations for a license to mine (Moffat and Zhang 2014:69). As part of this process GME has modified the Kvanefjeld Project numerous times. Having followed this process since 2012, I identified inconsistent information and a lack of transparency as being characteristics of the project. As the project is in its early stages, GME's own material seems to be the primary source of information. GME's communication shows that its public relations' staff is well trained and have continuously adapted the Kvanefjeld project to feed into Greenland's political agendas (Bjørst 2016). All the potential benefits mentioned by GME seem to be congruent with what the municipality (Kommune Kujalleq) feels are important needs for the community (Simonsen 2013:30). In June 2014, a raw materials strategy and action plan was adopted by the municipal council in Kommune Kujalleq (Kommune Kujalleq 2014). As part of its vision, this plan asserts that the "precondition for the sustainable use of the non-renewable resources is to ensure that the overall result of the activities leaves the local community in a positive position with continuous economic growth even after mining has ceased" (Kommune Kujalleq 2014:19). To be left in a "positive position" could mean many things, but at the moment the major issue locally seems to be securing jobs, and bringing Narsaq "back on track "in order to put the region back on the map (Bjørst 2016).

The quest for jobs and development takes into account the industrialisation of the Arctic and is framed as the primary benefit of attracting such a project to the town (Sejersen 2014a). Industry was very much aware of who it should mention as the primary stakeholders in the negotiation, and as a final remark to its *Quarterly Report* of December 2014, GME wrote about ambitions for future collaboration: "Greenland Mineral and Energy Ltd. will continue to advance the Kvanefjeld project in a manner that is in accord with both the Greenlandic Government's and local community expectations, and looks forward to being part of continued stakeholder discussions on the social and economic benefits associated with the development of the Kvanefjeld Project." (GME 2014a:19).

In this *Quarterly Report* (GME 2014a), as well as in the mining strategy of Kommune Kujalleq, 'sustainability' was primarily economically based. Any mention of the environment in outreach materials was mostly about creating a "stable investment environment" (GME 2014b). In her analysis of the economy of appearance, Anne Tsing has questioned the investor-driven process in which profit must be imagined before it can be extracted, and the potentials of companies, countries, regions, and towns are dramatized as places for investment. Based on her findings, she claims that: "Dramatic performance is the prerequisite of their economic performance" (Tsing 2000: 118). The predominately optimistic discourse of mining as a

positive force of change in society and as something that brings growth has gained influence among politicians and the business community in Greenland. Take for example Greenland's Oil and Mining Strategy from 2014. In the preamble to the Strategy, the opening lines state:

> The Government of Greenland wishes to promote the prosperity and welfare of Greenland's society. One way of doing so is to create new income and employment opportunities in the area of mineral resources activities. The Government of Greenland's goal is to further the chances of making a commercially viable oil find. In addition, Greenland should always have five to ten active mines in the long term (Government of Greenland 2014a:7).

In the spring of 2014, the Strategy (in a short version with many illustrations) was also distributed along the coast of Greenland via the Greenlandic newspaper *Sermitsiaq* in both Greenlandic and Danish, with the title "Our natural resources [raw materials] must create growth (Government of Greenland 2014b). Judging from the political debate in Greenland, Denmark and elsewhere during the last 5 years, there seems to be no alternative to depending on mineral resources, oil and gas for economic growth (Bjørst 2016).

3.3.2 Urani? Naamik (Uranimium? No)

The decision to overturn the uranium ban has attracted widespread criticism from Greenlandic and international NGOs. In April 2013, 48 NGOs from around the world signed an appeal to the Greenlandic and Danish governments to uphold the uranium zero-tolerance policy in the Danish realm. Part of their argument was that rare earth elements can be extracted in Greenland without uranium (Avataq 2013). Avataq, which co-signed the appeal, is a Greenlandic environmental group that is not against mining in Greenland as such, but has expressed concerns that the repercussions from mining operations will have serious long-term consequences. A statement issued by the group clearly illustrates its argument against mining Greenland's uranium: "In the long term, the environmental impacts from uranium mining could constitute comprehensive radioactive contamination, which – because of the health risks – would make it dangerous to live, and necessary to ban fishing, hunting, agriculture and animal husbandry, in significant parts of Southern Greenland" (Avataq 2013:2).

GME, the Kommune Kujalleq, and the Government of Greenland see the mining of rare earth elements (REE) and uranium as the road to development and growth. Conversely, NGOs see a rather alarming future for the region from contamination, health risks, and – if damage is done – high cleanup costs of the residues of uranium mining, which would be covered by the tax payers in both Denmark and Greenland (Avataq 2013). The debate thus is characterized by the co-construction of different geopolitical imaginaries that range from boom to doom (Arbo et al. 2013) and by conflicting spatial storylines about "saving" or "destroying" the local community

(Bjørst 2016). As Law (2004:55) has observed: "Different realities are being created and mutually adjusted so they can be related – with greater or lesser difficulty."

When it comes to the mining of Greenland's uranium, a divided Greenland has significant implications for small arctic communities and populations on a daily basis. Studies of mining in other parts of the Arctic show that the social and cultural cost of mining operations cannot be ignored and need to properly addressed (Tester and Blangy 2013). Social and economic benefits are debatable. Impact and Benefit Agreements (IBAs) have been mentioned as a road to empowering local people and stakeholders. Based on her experience from Greenland, Anne Merrild Hansen (2014:15) asks: "Is IBA a tool to secure 'local' acceptance to achieve 'social license to operate' or the means to empower the locals to take part in the development processes?" There is a big difference between being a partner, a stakeholder or an ordinary citizen who is compensated via benefits. Hansen emphasizes that Greenlanders generally welcome development and that hopes for the future are high, but the public also feels a certain degree of anxiety concerning uncertainty about how life in Greenland will unfold when new projects are implemented (Hansen 2014). Demonstrators in Nuuk, Narsaq, and Copenhagen (from 2013 to 2014) who did not want to be a partner, stakeholder or beneficiary protested with the refrain, "Urani? naamik" (Uranium? No). Yet, while the resistance movement in Greenland has been growing, the majority of the population still supports the current government and its stand on the mining of Greenland's uranium.

3.4 Conclusion: Uranium and "Economic Self-Sustainability for Greenland"

How did the government of Greenland, in just a few weeks, adopt a "clear pro-uranium position" in the eyes of the industry? The answer is that the Greenlandic politicians see the mining of uranium as one of the important ways to strengthen the economy of Greenland and to ensure what they call "economic self-sustainability for Greenland" (Coalition Agreement 2014:3). The positive discourses and related storylines about the mining of Greenland's uranium, as developed in the political debate of 2013–2015, are mostly to be understood in that context. Similarly to other places in the Arctic, social issues are ignored under the rhetoric of "employment" (Tester and Blangy 2013). Discussions on the mining of Greenland's uranium illustrate how extractive industries affect local ideas of (sustainable) development in the Arctic. They also demonstrate that Greenlanders cannot be reduced to passive victims of mining capital. Rather, Greenlanders are co-producing the aspirations of the mining industry when they negotiate what kind of society they are willing to tolerate. 'Sustainability' is a political concept and part of what is required to be granted and maintain a 'social license to operate'. Parallel and conflicting storylines are constantly being produced and reproduced and have led to several splits between civil society and expert perceptions of risk and human impact. But that does not stop

another spill-over of uranium ambivalence into the uranium debate. There could be another major shift in uranium-positions when more information about the technical, social, and environmental impacts is available and communicated to relevant stakeholders and decision-makers. The lift on the zero-tolerance policy towards uranium mining might be just the first of many changes following the election of the new Greenlandic government. Development scenarios are still being negotiated among actors inside and outside Greenland. It remains to be seen whether (or when) Greenland will become a supplier of uranium.

Acknowledgements This study was funded by Aalborg University in Denmark and will contribute to new research on how extractive industries affect local ideas of (sustainable) development in the Arctic.

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