

GOVERNING ARCTIC CHANGE

GLOBAL PERSPECTIVES

EDITED BY

KATHRIN KEIL, SEBASTIAN KNECHT



Governing Arctic Change

Kathrin Keil • Sebastian Knecht
Editors

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As the Arctic Council marked its 20th anniversary in September 2016, the Arctic continues to make it to newspaper headlines and intensive academic scrutiny as a major cause of global concern. We just witnessed an abnormally warm winter. In fact, January and February 2016 were the warmest ever recorded since 1880, globally but particularly in the northern hemisphere. In Germany these winter months felt rather like changing quickly from a dry autumn to a cold and damp spring, but never truly like what we knew as ‘winter’ from our childhoods about two decades ago. With Christmas 2015 at 15 °C and overall only a few days of snow, the skiing season to many might have been reminiscent more of a summer toboggan run. Through our work and interest as Arctic researchers, we have come more and more to understand that such changes in mid-latitudes are in large part due to Arctic change, and in turn that Arctic changes are precipitated by systems and processes south of the Arctic Circle.

The situation probably has become even more notorious compared to the time we started working on this volume about two years ago. Already in the spring of 2014, the news was full of temperature record highs and Arctic sea ice record lows. Since then, the Arctic has become increasingly salient in public, political, and academic debates. As a matter of fact, the Arctic is not solely responsible for changing weather and climate patterns across the globe. But it is a crucial part of it. Also is the interrelation between Arctic and global developments not only discernable in changing weather and climate patterns. The world looks north again also due to the region’s increasing accessibility as a new corridor for global maritime trade and a presumed abundance of resources. Diverse state and non-state

actors from across the globe express their eagerness to have a say on the future of the Arctic region alongside the eight Arctic states and northern communities, and not always to the delight of the latter. We believe that a better understanding of the complex interlinkages of Arctic change to find suitable and effective governance solutions for their local and global implications is more important than ever. This is what this book is about.

Putting this volume together has been very much a collaborative effort, and as its subtitle suggests it was a global one, too. The authors that contributed to this book come from many different spots of the world, some of which would be well considered ‘truly Arctic’, others more ‘exotic’ to the Arctic mind. What all of them share is the conviction that the Arctic matters in a global picture and that we need a good bit of open-mindedness towards and constructive dialogue between Arctic and global perspectives. Only then can we put together the puzzle of Arctic change and what could and should be done about it in the region and beyond.

This volume would not have been possible without the precious time and constant efforts invested by all contributors. They are the first our thanks go to. We were fortunate enough to fall on sympathetic ears with all authors we had in mind and approached for each of the chapters. They have done a tremendous job over the past two years. Our editorial rigour was certainly not easy to live with and demanded a great portion of patience and commitment on the part of the contributors to go through several rounds of revision. All authors took up this task without ever complaining, but instead worked continuously on their contributions to make them an even better fit to the overall volume. We hope the result is a sophisticated, insightful, and distinctive book that will help shape a growing research agenda in international governance and Arctic studies alike.

Many people supported us along the way with helpful suggestions, insisting criticism and sustained enthusiasm. They have their shares for the book to come into being. First of all, we had the pleasure to find a publisher that gave us both the academic freedom and editorial guidance to make this book project a very pleasant and productive experience. We wish to thank especially Sara Crowley-Vigneau and Jemima Warren from Palgrave Macmillan for their endless support of this project and their trust in our editorial skills.

The Fritz Thyssen Foundation has provided very generous financial support for a book workshop that brought together editors, authors, and external experts in May 2015, and we very much appreciated the opportunity to host the workshop at the Institute for Advanced Sustainability

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A last word remains for those the book is dedicated to. Kathrin dedicates this book to her daughter Alana Helene who was born during this exciting journey. Sebastian dedicates this book to the memory of his father, Matthias Knecht.

Kathrin Keil and Sebastian Knecht
Potsdam/Berlin, March 2016

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ABBREVIATIONS

AAC	Arctic Athabaskan Council
AC	Arctic Council
ACAP	Arctic Contaminants Action Programme
ACIA	Arctic Climate Impact Assessment
ACOPS	Advisory Committee on Protection of the Sea
AEPS	Arctic Environmental Protection Strategy
AHDR	Arctic Human Development Report
AIA	Aleut International Association
AINA	Arctic Institute of North America
AMAP	Arctic Monitoring and Assessment Programme
AMEG	Arctic Methane Emergency Group
AMSP	Arctic Marine Strategic Plans
AOCA	Arctic Ocean Coordinating Agreement
APECS	Association of Polar Early Career Scientists
AWRH	Association of World Reindeer Herders
BB	Biomass Burning
BC	Black Carbon
CAFF	Conservation of Arctic Flora and Fauna
CBMP	Circumpolar Biodiversity Monitoring Programme
CCAC	Climate and Clean Air Coalition
CCU	Circumpolar Conservation Union
CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora
CLRTAP	Convention on Long-range Transboundary Air Pollution
ECA	Emission Control Areas
EEA	European Environment Agency

EEAS	European External Action Service
EMSA	European Maritime Safety Agency
ENGO	Environmental Non-Governmental Organisation
EPPR	Emergency Prevention, Preparedness and Response
ESPO	East-Siberia–Pacific Ocean
EU	European Union
GCF	Green Climate Fund
GCI	Gwich'in Council International
GHG	Greenhouse Gases
GLACIER	Global Leadership in the Arctic: Cooperation, Innovation, Engagement, and Resilience Conference
IADC	International Association of Drilling Contractors
IAEA	International Atomic Energy Agency
IASC	International Arctic Science Committee
IASSA	International Arctic Social Sciences Association
ICC	Inuit Circumpolar Council
ICES	International Council for the Exploration of the Sea
ICS	International Chamber of Shipping
IEA	International Energy Agency
IFRC	International Federation of Red Cross and Red Crescent Societies
IHO	International Hydrographic Organization
IMO	International Maritime Organization
(I)OGP	(International) Association of Oil and Gas Producers
IPCC	Intergovernmental Panel on Climate Change
IPO	(Dutch) Interdepartmental Polar Consultative Body
IPS	Arctic Council Indigenous Peoples Secretariat
ISO	International Organization for Standardization
ITK	Inuit Tapiriit Kanatami
IUCH	International Union for Circumpolar Health
IUCN	International Union for Conservation of Nature
IWGIA	International Work Group for Indigenous Affairs
KMA	Korea Meteorological Administration
MEPC	Marine Environmental Protection Committee
NAMMCO	North Atlantic Marine Mammal Commission
NCM	Nordic Council of Ministers
NEFCO	Nordic Environment Finance Corporation
NEP	Northeast Passage
NF	Northern Forum
NGS	US National Geodetic Survey
NOAA	National Oceanic and Atmospheric Administration

NOW	Netherlands Organisation for Scientific Research
NPP	Netherlands Polar Programme
NSIDC	National Snow and Ice Data Center
NSR	Northern Sea Route
NVP	Norwegian Scientific Academy for Polar Research
NWP	Northwest Passage
OECD	Organisation for Economic Co-operation and Development
OSCE	Organization for Security and Co-operation in Europe
PAME	Protection of the Arctic Marine Environment
PM	Particulate Matter
POM	Particulate Organic Matter
POP	Persistent Organic Pollutants
PP	Permanent Participant
RAIPON	Russian Association of Indigenous Peoples of the North
RFMA	Regional Fisheries Management Agreement
RFMP	Regional Fisheries Management Organisation
RSA	Regional Seas Agreement
SAO	Senior Arctic Official
SC	Saami Council
SCPAR	Standing Committee of Parliamentarians of the Arctic Region
SDWG	Sustainable Development Working Group
SLCPs	Short-Lived Climate-Forcing Pollutants
SOLAS	International Convention for the Safety of Life at Sea
TF	(Arctic Council) Task Force
TFOPP	Task Force on Arctic Marine Oil Pollution Prevention
TFSDU	Task Force on Sustainable Development and Utilization
UArctic	University of the Arctic
UN	United Nations
UNCED	United Nations Conference on Environment and Development
UNCLOS	United Nations Convention on the Law of the Sea
UNCSD	United Nations Conference on Sustainable Development
UNDP	United Nations Development Programme
UNDRIP	United Nations Declaration on the Rights of Indigenous Peoples
UNECE	United Nations Economic Commission for Europe
UNEP	United Nations Environment Programme
UNFCCC	United Nations Framework Convention on Climate Change
VOC	Volatile Organic Compounds
WCC	World Council of Churches
WCED	World Commission on Environment and Development
WEO	World Energy Outlook

xx ABBREVIATIONS

WG	(Arctic Council) Working Group
WMO	World Meteorological Organization
WNC	West Nordic Council
WWF	World Wide Fund for Nature

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Introduction: The Arctic as a Globally Embedded Space

Kathrin Keil and Sebastian Knecht

The United Nations (UN) Climate Change Conference (COP21) that took place in December 2015 in Paris was widely hailed as a breakthrough in global efforts to curb climate change with the ultimate aim of limiting global warming to 1.5 °C in comparison to pre-industrial levels. Even though the Arctic is not explicitly mentioned in the Paris Agreement, the 21st session of the Conference of the Parties was very much influenced by an increasing consciousness of Arctic change. On 31 August 2015, US President Barack Obama gave a remarkable speech at the *Global Leadership in the Arctic: Cooperation, Innovation, Engagement and Resilience* conference in Anchorage during the first-ever official visit of a sitting US president above the Arctic Circle in the state of Alaska in American history.

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The timing and location of the speech were pointing the way for the Paris climate negotiations with the USA just having taken over the Chairmanship of the Arctic Council in April that year at the ninth Ministerial Meeting of the Council in the small Canadian city of Iqaluit. More noteworthy, three months ahead of COP21, Obama's speech was illustrative not only of the weight the contemporary Arctic plays in US politics, but also of the importance of the North to the entire global community. The US president gave a voice to the 'Arctic messenger' (Stone 2015) by highlighting:

the incredible changes that are taking place here in the Arctic that impact not just the nations that surround the Arctic, but have an impact for the entire world, as well. [...] In fact, the Arctic is the leading edge of climate change—our leading indicator of what the entire planet faces [and moves on to plead that] this year, in Paris, has to be the year that the world finally reaches an agreement to protect the one planet that we've got while we still can. (Obama 2015)

Behind this quote stands the empirical observation that the Arctic is inextricably linked with climate, environmental and socio-economic processes that originate or are determined by places far beyond what anyone would still define as 'Arctic', widely acknowledged as all areas north of the Arctic Circle at 66°34' N. Against this background, this book is not exclusively about the Arctic. In its widest sense and ambition, it is also about the small island states in the Pacific Ocean, Europe, South and Southeast Asia and many other parts of the world affected by the severe consequences of climate change to which the Arctic is such a crucial component. According to the Intergovernmental Panel on Climate Change (IPCC) report published in March 2014, sea-level rise in the Pacific region as a direct consequence of global warming, including the retreat of the Greenland ice sheet, is a major threat to the coastal zones of low-lying atoll islands. Rising sea levels will inevitably necessitate comprehensive adaptation measures including, as a last resort, the relocation of people and entire communities (Wong et al. 2014). In September 2014, President Anote Tong of Kiribati, one of those island states in the Pacific Ocean, went on an Arctic expedition to witness the transformations taking place in that far-away region first-hand and—as he stated in his address to the UN General Assembly in New York a week later—to attain a 'wider perspective of the immensity of what is at stake beyond our own immediate concerns. This visit to the Arctic highlighted the stark reality of the very direct connection between the destruction of this polar region to what is happening to us in the equatorial region' (Tong 2014, p. 4).

This polar–pacific connection is not a one-way street, though. Another island state of Micronesia, the Marshall Islands, is the world’s third largest registry for offshore rigs and vessels deployed worldwide for the development of oil and gas resources located in maritime areas. Two rigs under Marshallese flag, the *Polar Pioneer* operated by Shell and the *Transocean Spitsbergen* by Statoil, headed for exploratory drills in Arctic waters in 2014 and 2015, respectively, which would have, had they been successful¹, further contributed to carbon dioxide emissions and global climate change that threaten the vulnerable islands in the Pacific region in the first place. The raising awareness and political salience of these interdependencies have led former Marshallese Foreign Minister Tony de Brum to announce that the country considers prohibiting the business of oil rig registration (Mathiesen 2015).

Arctic change is not new and has been a slow but steady process over centuries. And yet, it has been a forceful and quite exceptional one in past decades compared to global climate change. Temperatures in the Arctic region are rising at a rate of almost twice the global average, faster than in any other part of the world. This causes a dramatic retreat of Arctic sea ice extent, the most obvious indicator of Arctic change, by about 13.4 per cent per decade for the reference month September since satellite records started in 1979 (NSIDC 2015). Not only has the extent been in decline, but also the average sea ice thickness in the central Arctic Ocean that receded by about 22.3 per cent per decade between 1975 and 2012 (Lindsay and Schweiger 2015). However, neither the decrease of the extent nor thickness of Arctic sea ice is a linear process since there still are substantial year-to-year fluctuations. Although the aggregate numbers show a long-term decline, these yearly fluctuations add uncertainty to the processes of Arctic warming. In addition to sea ice changes, the Arctic is a sink for a large range of pollutants. Substances such as mercury, black carbon and persistent organic pollutants (POPs) originate from sources far south of the Arctic Circle—particularly from Asia, Europe and Africa—but due to long-range transport through oceans and atmosphere end up in the Arctic with often severe consequences for Arctic people and the environment (for the case of POPs, see for instance Downie and Fenge 2003). All of these examples show that there is a two-way interaction taking place: What happens in the Arctic does not stay in the Arctic and often also does not originate in the Arctic. What is remarkable, though, is the pace and extent of Arctic change in recent years, and the realisation that its large-scale implications for instance on mid-latitude weather patterns due to the

polar vortex (a circulating cold low pressure area that can extend way south of the Arctic), rising sea levels or the Asian monsoon are much more direct and severe than previously thought or hoped. Thus, it is no surprise that probably no other world region has recently seen such a rapid increase in academic and public interest and sparked intense debates about its future development and value for a universe of about four million indigenous and other inhabitants, as well as mankind at large.

In 1997, the Arctic Monitoring and Assessment Programme (AMAP), a Working Group of the back then one-year-old Arctic Council, pictured the Arctic as a ‘cold reservoir in a global hot machine’ that could serve as a ‘refrigerator in the equator-to-pole transport of energy’ (AMAP 1997, p. 14). While the *State of the Arctic Environment Report* highlighted the interdependencies of Arctic and global climate and environmental processes, it also promoted an old image of a pristine and exceptional Arctic space, one that is vulnerable but unique in and almost untouched by the global climate system. Today, it seems that our understanding of the Arctic has advanced to the point where we realise that the earth’s ‘refrigerator’ is going to be out of order due to overheating. The Arctic is not one of the last bastions to cool off global warming, but one of its victims and most forthright ‘messenger’ (Stone 2015). In fact, the Arctic is the tip of the iceberg of global climate change, and the question of how to respond to Arctic change is more pressing than ever for the entire globe.

Rather than treating Arctic transformations and their governance in isolation, that is through a purely regional lens, we argue that it is necessary and high time to understand the Arctic as a ‘globally embedded space’ that is inextricably linked to global climatic, environmental, economic and political systems and processes. As such, we are not so much concerned with changes in the Arctic itself, but with the global root causes of Arctic developments and, in turn, the wider implications thereof for world politics and the way actors and institutions on various levels of governance respond to Arctic change. Against this background, we consider it increasingly pointless to define and debate the Arctic as a distinctive region according to some definite geographical or geophysical thresholds or otherwise political, legal or cultural characteristics. Of course, those social constructs exist and do so for good reasons, for example, as a source of empowerment and self-legitimation of Arctic residents and their local identities, the formulation, implementation and assessment of regional strategies and policies by political decision-makers, or simply as a practical tool of political analysis for researchers in which ‘the Arctic as a subsystem

has its own key actors, properties and logic' (Wegge 2011, p. 166).² Yet, a southern boundary of the Arctic is not easily defined, or more precisely, varied definitions of such a southern boundary exist and are also applied for instance by Arctic Council Working Groups corresponding to their individual mandate (see for instance Knecht 2013, pp. 168–172). This points to the difficulty of drawing a clear-cut distinction between those who belong to the Arctic, call it their home or hold sovereign or territorial rights over some of its parts, and those who do not. As an analytical category to investigate the causes and consequences of Arctic change, such distinctions have been unhelpful, even though it may appear 'tempting to focus on efforts to delineate Arctic-specific issues and, in the process, to ignore or downplay links between the Arctic and the outside world' (Young and Einarsson 2004, p. 20). But to give in to such temptation will, after all, blur the vision of the global determinacy and dependency of Arctic regional processes and their wider implications. For this reason, instead of engaging in a comprehensive account of where the Arctic is (and where it is not) and who the relevant (sovereign) Arctic actors are (and who are not), we resort to a different heuristic understanding of a global Arctic as:

1. framed by different and sometimes competing *imaginaries*,
2. subject to and dealt with in multilevel *institutional politics* (local, national, regional and international),
3. articulated and influenced through the *involvement* of a diversified set of state and non-state actors as Arctic stakeholders
4. who together and within the existing and evolving governance frameworks address and cope with an increasingly complex number of pressing *issues* affecting the Arctic and beyond through various interdependencies.

IMAGINARIES, INSTITUTIONAL POLITICS, INVOLVEMENT AND ISSUES OF A GLOBALISED ARCTIC

These four *I*'s—imaginaries, institutional politics, involvement and issues—are necessary components to better understand how Arctic change takes place and is governed in a global perspective. But to speak of the Arctic as a 'globally embedded space' does not imply that its future history is easily told. The global Arctic is both a political reality and—not despite but because of that—a place of and for different imaginations and contestation

by various actors. Current transformations more and more push a once peripheral region closer into the high-level debates of twenty-first century world politics, particularly those on climate and resource governance. At the same time, there is no linearity in what the ‘global Arctic’ will bring to the region and its people and how it will be governed: Will it be proverbially the ‘canary in the coalmine’ for future climate projections stimulating consensual and sustained global action directed at coordinated mitigation and effective adaptation to climate change? An alternative treasure trove to politically less stable oil-exporting regions like the Middle East? A combination of the two? Or something much different? The future Arctic is subject to diverse and probably ever-changing imaginaries, some more dominant than others since the modes of contemporary Arctic governance are left to the interests and political ideas of its residents, governments and other stakeholders possibly located far away from what is usually perceived as ‘Arctic’.

Political imaginaries have a long tradition particularly in social theory and political philosophy and are discussed in a variety of meanings, from a road map for society or politically feasible alternative visions to the status quo to radical utopian fantasies of a social (un)order that might be desirable (or frightening) (Strauss 2006). While we do not engage in an analytical discussion of the term, we consider it necessary to define what we mean by political imaginaries as addressed in more depth by the authors in Part I of this volume and picked up repeatedly also in the chapters of the other three parts. In accordance with Charles Taylor’s influential work on *Modern Social Imaginaries*, we understand imaginaries as ‘that common understanding that makes possible common practices and a widely shared sense of legitimacy. [...] This understanding is both factual and “normative”; that is, we have a sense of how things usually go, but this is interwoven with an idea of how they ought to go’ (Taylor 2002, p. 106). Following this, we stress here a pragmatist understanding of the role of political imaginaries as organising principles and cognitive structures for a widely shared sense of a legitimate governance order in which different actors interact and collaborate towards common goals, however defined.

While widely associated with critical social science, in recent decades, imaginaries have also found their way into the realm of international politics and are certainly not entirely new to Arctic studies either (see the comprehensive review by Arbo et al. 2013). At the time of accelerated globalisation, meaning ever-denser transnational societal and political interactions and dependencies, ‘the compression of the world into a single

place increasingly makes the global the frame of reference for human thought and action' (Steger 2008, pp. 11–12), also in the case of the Arctic. The region has been an imagined and contested space since European explorers and adventurers attempted to discover and conquer the lands and waters of the 'Far North' in the late eighteenth century. Soon after, the region became an arena of and for geostrategic struggles, primarily in the European North, well through the twentieth century (Tamnes and Holtsmark 2014). It was not until Mikhail Gorbachev in 1987 publicly envisioned an Arctic 'zone of peace and cooperation' that new imaginaries changed old politics—of course triggered by the end of East–West confrontation only a few years later—in that his speech 'provided inspiration for some tangible achievements, and those have provided the foundation for the Arctic region as it stands today' (Exner-Pirot 2012). Most importantly in this respect, negotiations on the Arctic Environmental Protection Strategy began in September 1989 upon Finnish initiative and resulted in an agreement in June 1991, the precursor of today's Arctic Council founded only five years later. This process has resulted in strong imaginaries of the Arctic being governed peacefully and in a cooperative manner between eight Arctic states (the USA, Canada, Russia, Norway, Denmark, Sweden, Finland and Iceland) with the aim to provide viable solutions to environmental protection and sustainable development in a region they all hold sovereign rights in.

So why and how do imaginaries matter for politics in the 'global Arctic'? Imaginaries matter because the Arctic as a global(ised) political region is still in its infancy and it is continuously debated how existing and nascent challenges for the region are to be governed, using which institutions including which stakeholder groups, and how to design policy solutions. The Arctic as an emerging region in world politics is a contested one (Smith and McCarter 1997; Steinberg et al. 2015) and tied in manifold ways to the international political, climate and economic system, though its governance framework is not carved in stone and yet to be determined. Imaginaries contain political idea(l)s of how to govern such an emerging region (Koivurova 2008; Young 2012) or how to reform the Arctic Council as a central political venue for regional affairs (Pedersen 2012; Wilson 2015). Each of these imaginaries can render possible certain policy tracks and institutional arrangements, which legitimise and empower specific groups and governance solutions, and sideline others: 'By ordering the world, ideas may shape agendas, which can profoundly shape outcomes. Insofar as ideas put blinders on people, reducing the number of

conceivable alternatives, they serve as invisible switchmen' (Goldstein and Keohane 1993, p. 12). For instance, despite continuing border-making practices in the Arctic that led to the fear of the region's carve-up, joint circumpolar governance mechanisms have been facilitated by spatial imaginaries of a common Arctic space between Arctic states (Knecht and Keil 2013). Political imaginaries thus have far-reaching consequences for the analysis of *who governs* (involvement), *where governance takes place* (institutional politics) and *what is to be governed* (issues) with regard to Arctic change.

THE ARCTIC 'OLD' AND 'NEW'

If we proceed to analyse for Arctic politics—as Taylor named it above—'how things usually go', the political order of the Arctic for long was determined by a geopolitical paradigm. Geopolitics here refers less to the mass of alarmist predictions of interstate competition and militarised conflict in the North and more to a certain kind of political order widely considered legitimate and effective by major Arctic actors. According to this geopolitical paradigm, Arctic governance is historically, geographically and legally bound by the interactions between those eight states in a favourable position due to their state territory above the Arctic Circle, a political order that also finds its institutional expression in the membership provisions of the Arctic Council. With regard to Arctic Ocean affairs, the political setting is even narrower and only comprises the five Arctic Ocean coastal states (so-called Arctic Five or A5), excluding Sweden, Finland and Iceland. Geopolitics, thereby understood as the nexus between geographical variables and political power, is then the structural manifestation of this political order. Predictions that the Arctic's opening through the continuous retreat of its sea ice extent over the past years will foster the 'revival of traditional power politics' (Blunden 2009, p. 121), a 'scramble for the Arctic' and its resources (Sale and Potapov 2010) following a 'Hobbesian free-for-all' rationale (Borgerson 2009), or the worst-case scenario of a 'new Cold War' (Cohen et al. 2010), and on the other side suggestions to contain such contingencies through a region-wide legally binding Arctic Treaty (Huebert 2009), are its political imaginaries. This geopolitical paradigm has proven to be resistant and continues to be reproduced in political and media projections of contemporary Arctic politics, though there are few to no signs that any of the scenarios would materialise anytime soon (Knecht 2015).

The concern about an increasingly exclusive Arctic political order around the five coastal states is the result mainly of two meetings between the A5 that took place in Ilulissat (Greenland) in 2008 and Chelsea (Canada) in 2010. The Ilulissat meeting produced a Declaration in which the A5 announced their prerogative in addressing a wide array of governance issues pertaining to the Arctic due to the ‘unique position’ that the A5 hold because of their ‘sovereignty, sovereign rights and jurisdiction in large areas of the Arctic Ocean’ (Arctic Five 2008). Many observers interpreted the Declaration as an attempt by the five coastal states to consolidate their central position in Arctic governance by reference to their sovereign rights in the region. Precisely, the document envisioned a club model in which national implementation and circumpolar policy coordination between the five coastal states was portrayed as being adequate and effective to address a changing Arctic. By trying to lock in how governance of Arctic Ocean affairs ‘ought to go’ (see Taylor’s definition above), the Declaration ‘marginalized alternative governance proposals, such as the Arctic Treaty’ (Dodds 2013, p. 45).

Hardly surprising, the A5 meetings sparked vociferous opposition by those that felt excluded from the envisioned governance regime, first and foremost the other Arctic Council member states and indigenous peoples’ organisations. In response to the Ilulissat Declaration, the Inuit Circumpolar Council for instance issued an own *Circumpolar Inuit Declaration on Sovereignty in the Arctic*, in which it criticised the A5 for their neglect of indigenous peoples’ rights to self-determination (Inuit Circumpolar Council 2009). Icelandic officials, on the other hand, engaged in the ‘discursive production of imaginative geographies’ to frame an alternative vision of a coastal state club of ‘Arctic Six’ in which it would be included (Dodds and Ingimundarson 2012, p. 25). How little success Iceland had in doing so became evident more recently, when the fishing nation (together with Sweden and Finland) was this time excluded from negotiations on the *Declaration concerning the Prevention of Unregulated High Seas Fishing in the Central Arctic Ocean* signed by the A5 in July 2015.

Given its contestation, an ‘Arctic Five hegemonic regime’ (Dodds and Ingimundarson 2012, p. 26) could be understood as standing in contrast to the forces of a globalised and globalising Arctic and its varying manifestations, since these would rather ask for greater inclusion and awareness of the increasing interconnectedness of systems, processes and actors. One of the main drawbacks of the more traditional political order in the

North and its imaginaries is that ‘the depiction of Arctic geopolitics as Westphalian geopolitics tends to provoke *particular* conceptualisations of both the problems and challenges that exist in the region on the one hand, and the available solution sets on the other’ (Bergman Rosamond and Rosamond 2015, p. 136, emphasis in the original). Any Arctic geopolitical narrative emphasising sovereign control over territory and resources must inevitably revolve around the five Arctic coastal states as either the exclusive source of policy design or the primary object of study in Arctic governance.

And yet, it is no big news that the dominant geopolitical order has been increasingly challenged by new actors joining the Arctic community, leading to diffusion of a plurality of interests, ideas and ideals. Further, state-centred analyses often implicitly adopt a narrow regional lens promoting circumpolar solutions to circumpolar problems and leaving aside both formal and more informal steering mechanisms on other scales below and beyond the state level and outside the Arctic region (see Keil 2015 for the case of Arctic oil and gas development). Finally, most geopolitical approaches stand in the tradition of realist International Relations theory, emphasising the importance of Arctic space and resources to notions of security and the exercise of state sovereignty at the expense of a more holistic and nuanced view on the governance of Arctic change in a time of globalisation (see e.g. Kraska 2011; Tamnes and Offerdal 2014). In short, geopolitical imaginaries of Arctic affairs restrain our understanding of what is to be governed (mainly security issues), who governs (primarily the Arctic [coastal] states) and where governance takes place (in exclusive clubs like the A5 or the Arctic Council).

THE GLOBAL ARCTIC PARADIGM

Despite those analytical ‘blindness’ and some oversimplification, a geopolitical narrative was long able to persist, not least due to ‘the absence of a well-developed alternative paradigm that provides a different but equally coherent perspective on the changing Arctic, that is forward looking rather than backward looking, and that brings into focus a twenty-first century Arctic agenda in contrast to a twentieth century agenda’ (Young 2013, p. 130). No less than introducing such an alternative paradigm of the Arctic as a globally embedded space is what we attempt in this volume. For simplicity’s sake, we will refer to this as the ‘global Arctic paradigm’ and seek to clarify this highly fashionable, albeit ambiguous term

(Dodds 2016), which we think prompts new kinds of imaginaries that affect and structure Arctic governance in contrast to an understanding of the Arctic as a geopolitical battlefield. Such a new heuristic approach is necessary for dealing with the pressing issues of contemporary Arctic transformations subject to highly complex global linkages and more and more addressed by multilevel politics and multistakeholderism.

Understanding the Arctic as a globally embedded space rather than a distinct political entity questions the governability of a region in transformation exclusively by the five Arctic Ocean coastal states, or the extended circle of eight Arctic states. In other words, given the transnational dimension of Arctic developments and its wider climatic, environmental, socio-economic and political implications, the Arctic states are unlikely to permanently control and effectively master the complexity and scope of Arctic change and to alone succeed in finding sustainable pathways for the Arctic. At the core, the global Arctic paradigm implies mainly three developments: (1) the sources and effects of a variety of problems and challenges in the Arctic are much more diverse and complex through the still largely under-researched interdependencies between processes and systems within and outside the Arctic Circle, (2) governance of these Arctic-global linkages is decentralised and takes place in a variety of political forums from the local and subregional to the national, circumpolar and international level at which the Arctic states do not necessarily dominate political controversies, and (3) connected to this, political agency is internationalised and involves a larger set of state and non-state actors with access to those political venues or other means of exerting influence, including the ability to frame Arctic imaginaries.

Certainly, this research agenda is not unproblematic in a political setting that for long has been and will remain to be largely determined by Arctic states and the recurring emphasis of their sovereign rights, the prevalence of national politics and a preferred model of intergovernmental cooperation as articulated in the 2008 Ilulissat Declaration. Yet, the global Arctic paradigm does not intend to—and cannot—replace the geopolitical one. The eight Arctic states will remain at the centre of most Arctic governance arrangements and for some of the issues at stake such as overlapping claims to the outer limits of their continental shelves this makes perfect sense. What the global Arctic paradigm does, though, is to shift the analytical focus from the geopolitical status of the Arctic states to processes of Arctic-global connectivity by investigating how actors, processes and institutions across different dimensions interact in areas beyond

Arctic state sovereignty and with the objective of addressing the causes and consequences of Arctic transformations. This perspective takes into account that the geopolitical order of the Arctic is not a natural given, but ‘that we today talk about “the Arctic” as a region is itself the result of political globalization where eight separate states across a large proportion of the world’s area have been able to be grouped together’ (Keskitalo and Southcott 2015, p. 398). In short, the geopolitical paradigm is not without alternatives, and regional politics takes place in the shadow of the internationalisation of Arctic processes, issues and actorness. Despite the fact that Arctic states have in the past eyed wider and inclusive governance initiatives ‘as an unwelcome intrusion if it is intended to over-ride domestic governance’ (Pelaudeix 2015, p. 410), such governance arrangements are already under way ranging from the Arctic Council and multilateral treaty conventions to the level of the UN and its specialised bodies such as the International Maritime Organization.

Analytically, it is worthwhile to approach this global Arctic in terms of inside-out and outside-in flows of substances, goods, actors and their political interests and ideas. Much of the recent literature has focused particularly on the outside-in dimension and how the global Arctic unfolds in ever-denser economic and people-to-people networks, climate interactions, core-periphery relationships and socio-economic impacts on Arctic regions and local communities (Heininen and Southcott 2010; Evengård et al. 2014; Keskitalo and Southcott 2015; Tennberg 2004). However, this is only part of the story. Not only is the Arctic being globalised, but also are Arctic matters globalising concerning imaginaries, institutional politics, involvement and issues. We will introduce some of these developments briefly below in a snapshot of each chapter.

BOOK STRUCTURE

This book is divided into four parts, each of which picks up one of the four cornerstones of *imaginaries*, *involvement*, *institutional politics* and *issues* that constitute the global Arctic paradigm. We have included chapters based on their innovation and accuracy with regard to contemporary debates on Arctic governance in a global context and their potential to shape future ones. It must be noted, however, that the authors in this volume have no intention to engage in any kind of imaginal politics to answer what the future Arctic will or should look like. We leave such thought experiments to more visionary people (see for instance Smith 2011).

What the contributors share is the belief that a changing Arctic has gained in importance for contemporary world politics and should not be treated in isolation from more far-reaching processes further south. The chapters hence promote theoretically driven and empirically sound assessments of the political developments that cause and result from a global(ised) Arctic.

On the basis of specific examples, Part I of the book explores how the global Arctic paradigm plays out in terms of different political imaginaries for governing a changing Arctic. The authors in this part explore the role of imaginaries in the various transformation processes the Arctic region is experiencing on multiple spatial scales. The first chapter in this part and the second to the book, co-authored by Berit Kristoffersen and Oluf Langhelle, identifies and assesses complementarities and inconsistencies between three different imaginaries on the Arctic as a ‘resource frontier’, a ‘nature reserve’ and a ‘homeland’ to indigenous communities as they relate to global discourses on sustainable development. Chapter 3 by Jessica Shadian focuses on indigenous agency in the context of climate change discourse and the Arctic Council. The last chapter (Chap. 4) in Part I by Olaf Corry analyses how the Arctic is constituted as an object of global governance through discourses on geoengineering Arctic climate change.

Part II of the volume addresses issues of Arctic governance as they play out and emerge in institutions with relevance for regional matters. Christoph Humrich starts out in Chap. 5 with a compelling analysis of the Arctic Council as a pre-eminent forum in a globally embedded and embedding regional space. He focuses on the fragmentation of Arctic environmental governance and from this derives necessary governance functions and related institutional challenges of the Council in order to be effective as a forum in governing the Arctic environment. The following Chap. 6 by Henrik Selin takes us to the global level, examining under which conditions the Arctic states and indigenous peoples succeed in raising regional concerns in international treaty negotiations on persistent organic pollutants, mercury and climate change. Chapter 7 by Piotr Graczyk, Małgorzata Śmieszek, Timo Koivurova and Adam Stępień then changes perspective and scrutinises inasmuch the European Union, Poland and China as observers to the Arctic Council have been socialised into Arctic ways of thinking through the norms and rules promoted by Arctic Council member states and Permanent Participants. In the fourth chapter (Chap. 8) in this part, Duncan Depledge and Klaus Dodds trace the emergence of the Arctic Circle assembly newly established in 2013 and

introduce the idea that less institutionalised forums such as these serve an important function in the Arctic governance system as a ‘bazaar’ for the exchange of global and marginalised knowledge, ideas and interests.

Part III looks at the changing role and influence of stakeholder and rights holder groups in Arctic affairs. To allow for a wider spectrum of actors to be looked at, the eight Arctic states have been left out intentionally since they have been subject to intensive scrutiny in past research. Chapter 9 by Sebastian Knecht illustrates different ‘worlds of commitment’ in how accredited observers participate in Arctic Council Working Groups and explains the reasons for this comparing the cases of Germany, the Netherlands and South Korea. Complementary to this, Chap. 10 by Dorothea Wehrmann assesses how effective non-state actors have been at influencing the work of the Arctic Council. Her comparative analysis is based on the examples of the World Wide Fund for Nature and the Circumpolar Conservation Union in the work of the Emergency Prevention, Preparedness and Response Working Group and the related Task Force on Arctic Marine Oil Pollution Prevention. The last chapter (Chap. 11) in this part, written by Ken Coates and Carin Holroyd, opens up the debate on what has been labelled the ‘Asian era in Arctic affairs’ following the admission of China, India, Japan, Singapore and South Korea to the Arctic Council in 2013 and discusses their different entanglements, capabilities and strategies in the North.

Finally, Part IV analyses and evaluates three central issues of Arctic change—resource politics, maritime trade and environmental governance—that are of particular relevance for or a major concern to the global community. Chapter 12 by Carolina Cavazos-Guerra, Axel Lauer and Erika Rosenthal is a joint effort by natural and legal scientists to make the case for the dramatic consequences black carbon emissions mainly from outside the region have on the Arctic ecosystem and how black carbon has recently become the specific focus of a regime complex. Chapters 13 and 14 provide new perspectives on the Arctic as an economic region taking into account global forces at play. Arild Moe argues in his chapter that the hopes of Russian authorities and other actors in the global maritime industry to invigorate the Northern Sea Route for international shipping overestimate its current potential. Similarly, the final chapter (Chap. 15) by Kathrin Keil assesses the prospects for Arctic oil and gas development by taking a closer look at international determinants, which have been largely overlooked so far.

Some readers may not find the list of chapters and issues covered in this book to be exhaustive for discussions of the global Arctic paradigm. They are most certainly right. In fact, it is our ambition to open up a new strand of debate, not to shut it down. There are many more issues to be explored, more actors and voices to be heard, more institutions and governance forums to be looked at and other innovative methods to be applied in the analysis of the role of Arctic change in twenty-first-century world politics. We attempt to broaden the perspective on Arctic governance and to foster a better understanding of the global conditions and implications of Arctic change. Against this background, we hope this book is not only relevant for the growing community of Arctic experts but also to other scholars and practitioners in the fields of international climate, environment, resource and security governance far below the Arctic Circle. The Arctic is there, too.

NOTES

1. Royal Dutch Shell terminated the contract that was to expire in July 2017 for the *Polar Pioneer* drilling rig with the company Transocean Ltd. already in December 2015 as a consequence of its decision to abandon its Arctic drilling plans off the coast of Alaska in the summer of 2015. As of early 2016, the *Transocean Spitsbergen* drilling rig is still in operation for Norwegian Statoil.
2. On the social construction of the Arctic as a political region, see (Keskitalo 2004; Knecht 2013).

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PART 1

Imaginaries: How to Envision the
Arctic in a Global Context?

Sustainable Development as a Global-Arctic Matter: Imaginaries and Controversies

Berit Kristoffersen and Oluf Langhelle

INTRODUCTION

According to Heininen et al. (2014, p. 1), the stakes are high in the Arctic:

Some groups are fighting for their culture, their history and their identity in this world; others are fighting to save the Arctic from would-be exploiters and believe nothing less than the future of the planet is at risk. ... We will soon enter a situation where it is necessary to ask: what is the future development we want in, and for, the Arctic? (Heininen et al. 2014, p. 1)

This situation has indeed already come today, and it is more urgent than ever to ask what future we want in and for the Arctic. In this chapter, we argue that the politics of the Arctic and the conflicts over its future is less about territories and hegemony than it is about imaginaries of the Arctic and their discourse, which play a key role in politics. The introductory quote underscores how the Arctic has become a political space inscribed

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with imaginaries of multiple interests and high stakes (Dittmer et al. 2011). The quote exemplifies the increased political attention towards the Arctic as a *globally embedded space*, which leads to imaginary battles over present and future governance structures, involvement and issues (see Chap. 1 by Keil and Knecht, this volume).

In the following, we investigate Arctic imaginaries embedded in the sustainable development discourse and discuss various potential conceptual and political meanings of the concept in an Arctic context, almost 30 years after it was first popularised as a global concept. Conceptually, sustainable development opens up a number of imaginaries in which it is possible to understand the Arctic as a *globally embedded space*. While often taken as self-evident, sustainable development is both a simple and a notoriously complex concept. The World Commission on Environment and Development (WCED) put sustainable development on the global political agenda with the report *Our Common Future* (1987). While the Commission drew on a number of earlier events and contributions, it developed a normative and political conception of sustainable development that was unique in its configurations of global challenges, diagnosis and proposed policy directions for achieving sustainable development. The specific configuration of the concept of sustainable development that the Commission put forward—development that meets the needs of the present without compromising the ability of future generations to meet their own needs—was primarily a global concept. When they defined sustainable development as a global development trajectory, the objective was to reconcile ecological sustainability ('the environment') with intragenerational and intergenerational justice ('development'), to which all nations can and should aspire. In the Commission's view, the defined trajectory could sustain human progress 'not just in a few places for a few years, but for the entire planet into the distant future' (WCED 1987, p. 4).

The Commission argued that although interpretations of sustainability¹ will vary between countries and regions, these interpretations 'must share certain general features and must flow from a consensus on the basic concept of sustainable development and on a broad strategic framework for achieving it' (WCED 1987, p. 43). Despite this, what sustainability means in a specific geographic or social context is usually controversial and involves trade-offs between different goals and interests. Hence, underlying the problem of implementation are problems of geographical scales and governance levels, competing worldviews and vested interests.

After the turn of the century, a new academic concept and debate was added to global political–ecological trajectories, namely whether we have entered the era of the ‘Anthropocene’ (Anthropo [man] + cene [new geological age]), ‘the time interval in which human activities now rival global geophysical processes’ (Steffen et al. 2011, p. 739; see also Crutzen and Stoermer 2000). Simultaneously, the Arctic has emerged as a symbol of the Anthropocene, with a growing concern of the impact of climate change and intensified globalisation, routinely framed as an ‘exceptional space’ that appears to demand and encourage extraordinary actions (Powell and Dodds 2014, p. 3). An increasing number of politicians, scholars both within and outside the region, and not least Arctic residents, believe that a strong framework for Arctic governance engaging the range of actors and perspectives involved in the futures of the Arctic is required to address present and future challenges (Nord 2015; Powell and Dodds 2014, p. 12). In this process, all parties involved make recourse to *imaginaries*, which are defined as ‘ideas about what the Arctic is and about what it can, or should, be. Arctic imaginaries, like the Arctic itself, are never settled’ (Steinberg et al. 2015, p. 9).

We take Steinberg et al.’s definition as our point of departure and focus on how actors position imaginaries of the Arctic between the global and the local. In other words, what are the implications of a global approach to sustainable development *for the Arctic* as a region? And if the question is posed the other way round, what are the specific challenges for sustainable development seen *from the Arctic*? These two ways of arguing about sustainability in the Arctic we refer to as ‘the Global in the Arctic’ and ‘the Arctic in the Global’, reflecting an ‘outside-in’ and an ‘inside-out’ perspective, respectively. *The Arctic in the Global* refers to explicit attempts to specify the challenges of sustainable development as seen from the Arctic (including the aforementioned Arctic ‘exceptionalism’), drawing on different imaginaries both of the Arctic and sustainable development (inside-out). In this approach, the Arctic is special with its own social, environmental and economic challenges. *The Global in the Arctic* refers to explicit attempts to specify and act on the challenges of sustainable development in the Arctic from a global perspective of sustainable development (outside-in). There is not necessarily anything special or specific about the Arctic; the challenges of sustainable development—as well as contested imaginaries—apply also in other parts of the world.

These ways of linking the Arctic to sustainable development draw on and are connected to different imaginaries of the Arctic, where climate

change is at the forefront of contestations. These imaginaries both limit and open the space for consensus and contestation among and between actors. This means for our analysis that contextualisations and imaginaries not only draw on different interpretations of sustainable development, but also place different sustainability challenges on different spatial scales. What sustainability means in the Arctic is then dependent upon whether and how various actors see the Arctic in the interconnectedness between global, regional, national and local scales. We further draw upon critical polar geopolitics that analyses political forecasting without privileging some knowledge and imaginaries over others. This approach brings out a range of actors and perspectives, from both within and outside the region, which historically have played important roles in the geographical imagination and governance of Arctic spaces (Powell and Dodds 2014, pp. 8–12).

IMAGINING ARCTIC FUTURES AND THE ROLE OF SUSTAINABLE DEVELOPMENT

Political imaginaries—and their close links to identity, legitimacy and norms—are tools to explore the growing interdependency of the Arctic's political geography with other spaces through narratives, discourses, policies and regimes in global governance (see Chap. 1 by Keil and Knecht, this volume). Among political geographers and political scientists researching the Arctic region, there is a growing body of literature analysing Arctic contestations in terms of representations, discourses and practices that are involved in the constitution of global and regional politics, recognising their importance in political-economic and socio-natural relationships (Powell and Dodds 2014, p. 9). Imaginaries are often put forward as political anticipatory logics. These discursive statements about Arctic futures can be analysed in terms of how actors prepare for and cope with uncertainties (Dodds 2013, p. 194). Narratives and discourses about the Arctic are, however, more than imaginary politics, as they are also a form of positioning about (potential) Arctic futures. Arctic contestations are in this chapter then analysed as occurring primarily not between states, but within and between *imaginaries*.

For example, the 2008 Ilulissat Declaration exemplifies a discursive statement about Arctic futures, where sustainability in the Arctic is mediated through the state system. The dominant imaginary offered by the Arctic states is that they are working closely together 'to implement a

shared vision of the Arctic’ (Steinberg et al. 2015, p. 17, own emphasis). This reflects that territorial, political and discursive strategies are interconnected and equally important for carving out Arctic futures. The five Arctic coastal states (Arctic Five or A5) as authors of the Declaration hereby privilege a Westphalian imagination (the dominance of the Arctic states), emphasising the underlying ‘significance of resources and territorial advantage in a world frequently understood to be shaped by competition’ (Powell and Dodds 2014, p. 9). In this context, the A5 display themselves as being in a ‘unique position to address these possibilities and challenges’ at a time when the ‘Arctic Ocean stands at the *threshold* of significant changes [where] climate change and the melting of ice have a potential impact on vulnerable ecosystems, the livelihoods of local inhabitants and indigenous communities, and the potential exploitation of natural resources’ (Arctic Five 2008, own emphasis).

With the Arctic Council taking the self-declared role to foster sustainable development, what this means for perceiving developmental and environmental paths as global-regionally interconnected is far from settled. A broad range of structures (like Working Groups, Task Forces and Expert Groups), scientific research, reports, conferences and meetings have been initiated by the Arctic Council and others (see Chap. 9 by Knecht; Chap. 10 by Wehrmann and Chap. 8 by Depledge and Dodds, this volume). Together with an increasing media coverage, especially the Arctic Council’s Arctic Climate Impact Assessment (ACIA) report (2004) displayed the Arctic moving from the *frozen* to a *changing* Arctic imaginary (Steinberg et al. 2015, p. 168). Against this background, what are the imaginaries of the Arctic pursued by states, the Arctic Council and stakeholders and rights holders inside and outside the Arctic? How do these imaginaries try to solve and reconcile the dimensions of sustainable development? Finally, how are these imaginaries connected to specific scales of the interconnectedness between global, regional, national and local levels? In the following, we try to answer these questions from the perspectives of sustainability in the Arctic as ‘the Global in the Arctic’ (outside-in) and ‘the Arctic in the Global’ (inside-out).

ARCTIC IMAGINARIES

Resembling imaginaries, the Arctic Human Development Report (AHDR) identified what they called ‘visions of the Arctic’, understood as ‘general perspectives that stakeholders bring to consideration of human development

in the Arctic' (Young and Einarsson 2004, p. 22). These vary 'as a function of the vantage points and interests of individual actors' and include visions of homeland, land of discovery, magnet for cultural emissaries, storehouse of resources, theatre for military operations, environmental linchpin, the scientific Arctic, destination for adventure travellers and an Arctic of imagination (Young and Einarsson 2004, pp. 22–26). The phrase 'Northern Frontier, Northern Homeland', for example, was said to capture 'the distinction between those who see the circumpolar Arctic as a storehouse of natural resources of interest to industrialised societies to the south and those who reside in the Arctic and see themselves as the current representatives of peoples who have lived in the region' (Young and Einarsson 2004, p. 22). These and other visions give rise to 'distinct mindsets': mindsets that 'tend to spawn dramatically different and sometimes conflicting approaches to Arctic issues of public importance' (Young and Einarsson 2004, p. 22). Building on imaginaries identified by Steinberg et al. (2015), in the following we discuss three imaginaries of the Arctic in more detail: the 'resource frontier', 'nature reserve' and 'transcendent nationhood' imaginaries, which resemble the visions of a storehouse of resources, an environmental linchpin and homeland in the AHDR.²

These imaginaries of the Arctic depict different aspects of sustainable development, and they are imaginaries of the Arctic that 'cross borders' (Steinberg et al. 2015, p. 15). Within the resource frontier imaginary, the resource richness in the Arctic is described as 'a trove of opportunities for states, corporations and individuals whose roots are elsewhere and who seek not incorporation of territory but extraction of riches' (Steinberg et al. 2015, p. 16). The nature reserve imaginary (or as we prefer, the 'environmentalist imaginary') 'views the Arctic as a space whose nature is pristine but endangered, and that therefore should be governed according to an ethic that transcends the prerogative (and the developmentalist ideals) of the sovereign state' (Steinberg et al. 2015, p. 17). The transcendent nationhood imaginary reflects circumpolar indigenous identities that seek 'a kind of indigenous nationhood that transcends not just state boundaries but state ideals. Rather than reproducing the idea of statehood and transposing it to the context of indigenous peoples, this imaginary uses indigenous worldviews to challenge the fundamental assumptions behind the modern, territorial state' (Steinberg et al. 2015, p. 17; see also Chap. 3 by Shadian, this volume).

Although there are variations of these imaginaries (they are not necessarily 'pure'), the point made by Steinberg et al. is that some versions of

these imaginaries are the root of Arctic contestations. We argue that they are also embedded in and thus relevant for the wider discourse of sustainable development.

THE COMPLEXITIES OF SUSTAINABLE DEVELOPMENT

Sustainable development adds another layer to Arctic imaginaries and further limits and opens the ‘space’ of possible contextualisation and contestation. Sustainability is a contested concept, not only in terms of substantive content, but also in terms of its implications and what is needed to achieve it. Historically, the concept grew out of a ‘melting pot’ of different ideas of progress, environmental protection, economic growth and development (Waas et al. 2011, p. 1640). The arguably most important antecedents to the concept were all global in their nature: the United Nations (UN) sponsored Founex meeting in Switzerland in 1971, the UN Conference on the Human Environment (the Stockholm Conference) in 1972, the Club of Rome’s 1972 report *Limits to growth*, work within the World Council of Churches in the 1970s, and the report *World Conservation Strategy: Living Resource Conservation for Sustainable Development* published in 1980, where the concept of ‘sustainable development’ appears for the first time (Langhelle 2000).

In the approach of the WCED, sustainable development defines a global development trajectory where the general features are given by the core definition of the term, which is ‘development that meets the needs of the present without compromising the ability of future generations to meet their own needs’ (WCED 1987, p. 43). This definition, according to the report, contains two key concepts:

- the concept of ‘needs’, in particular the essential needs of the world’s poor to which overriding priority should be given and
- the idea of limitations—imposed by the state—of technology and social organisation on the environment’s ability to meet present and future needs.

The satisfaction of human needs is the major objective of development. Needs include sustenance, basic health, work, energy, housing, water supply and sanitation, echoing a human security focus in the UN in the 1990s (UNDP 1994) and in the Arctic in the 2000s that centred on people rather than on national and state security needs (O’Brien et al. 2010, p. 4).

Moreover, there is a close relationship between need satisfaction and social justice in *Our Common Future*. Social justice, in terms of need satisfaction and equal opportunities both within and between (global) generations, can be said to constitute the primary goal of development in 'sustainable development' (Lafferty 1996; Lafferty and Langhelle 1999). As stated in *Our Common Future*, 'first and foremost our message is directed towards people, whose well-being is the ultimate goal of all environment and development policies' (WCED 1987, p. xiv).

The qualification that this development ought to be sustainable is a constraint placed on this goal, meaning that each generation is permitted to pursue its needs only in ways that do not undermine the ability of future generations to meet their own needs. In terms of the environment, this is formulated as 'the minimum requirement' for sustainable development: 'At a minimum, sustainable development must not endanger the natural systems that support life on Earth: the atmosphere, the waters, the soils, and the living beings' (WCED 1987, pp. 44–45). Hence, ecological sustainability is an inherent part of the goal of sustainable development, although it is not part of the definition.

Reconciling development with environmental concerns on a global scale is the core challenge of sustainable development. How do we eradicate poverty globally without disastrous consequences for the environment and humankind in the future? The Commission saw itself confronted with two critical questions in this regard. First, are there any environmental limits to human development and continued social advance, and if yes, how should they be conceived? And second, is it possible to change the content of economic growth so that environmental limits can be avoided, and if so, how? The optimism in *Our Common Future* is fundamentally based on the possibility of changing the content of growth in order to avoid environmental limits. On the one hand, it was argued that economic growth has no fixed limits, because environmental limits can be manipulated by technology and social organisation. On the other hand, the report argues that 'ultimate limits there are, and sustainability requires that long before these are reached, the world must ensure equitable access to the constrained resource and reorient technological efforts to relieve the pressure' (WCED 1987, p. 45). The Commission argued that different limits hold for the use of energy, materials, water and land. In fact, they argued that the limits likely to be exceeded first are the availability of energy and the biosphere's capacity to absorb the by-products of energy use.

From this frame of reference, the WCED argued that a set of critical objectives—or strategic imperatives—follow from the concept of sustainable development. These include: reviving growth; changing the quality of growth; meeting essential needs for jobs, food, energy, water and sanitation; ensuring a sustainable level of population; conserving and enhancing the resource base; reorienting technology and managing risk; and merging environment and economics in decision-making (WCED 1987, p. 49).

The UN General Assembly endorsed *Our Common Future* on 11 December 1987. In the resolution, all governing bodies, organs, organisations and programmes of the UN system were asked to review their policies, programmes, budgets and activities with the ‘aim of contributing to sustainable development’ (United Nations 1987). Since then, the UN has actively pursued a sustainable development agenda both institutionally and through a number of summits and meetings addressing different aspects of sustainable development, often referred to as the UN Conference on Environment and Development (UNCED) process.

Already at the Earth Summit in 1992, there were signs of a further development of the concept of sustainable development, most notably a categorisation of the concept into different dimensions, which was put down in the so-called Agenda 21. This Agenda 21 operates with three dimensions of sustainable development, which has become the standard understanding of the concept: ‘Economic development, social development and environmental protection are interdependent and mutually reinforcing components of sustainable development’ (United Nations 1997, para. 23). The same ‘interdependent and mutually reinforcing pillars’ are found in the Plan of Implementation from the Johannesburg Summit in 2002 (United Nations 2002). In the final document of the 2012 United Nations Conference on Sustainable Development (UNCSD), *The Future We Want*, sustainable development is understood to ‘ensure the promotion of an economically, socially and environmentally sustainable future for our planet and for present and future generations’ (United Nations 2012, p. 1; see also Langhelle 2016).

The conceptualisation into different dimensions can be termed the UNCED approach to sustainable development. However, the tripartite understanding of sustainable development is not unproblematic. It is particularly challenging under circumstances of conflicting targets: How is one to balance the environment against the social and economic dimensions? Which dimension should be given priority? These predicaments entered the Arctic through the participation of the Arctic states

and Arctic stakeholders and rights holders in the UNCED process. The predicaments are also well reflected in the policy approaches to sustainable development in the Arctic. It is precisely in the dilemmas created by the need to reconcile the different dimensions of sustainable development that imaginaries and scales come into play.

FROM GLOBAL TO REGIONAL SUSTAINABLE DEVELOPMENT: AND BACK AGAIN

Historically, the Arctic concern for sustainable development has been closely related to the UNCED process. In 1989, the Government of Finland took the initiative to discuss cooperative measures to protect the Arctic environment, which culminated in the Arctic Environmental Protection Strategy (AEPS). The strategy was developed in 1991 by the eight Arctic states and assisted by the Inuit Circumpolar Conference (ICC), Nordic Saami Council, USSR Association of Small Peoples of the North, the Federal Republic of Germany, Poland, the UK, the United Nations Economic Commission for Europe, the United Nations Environment Programme and the International Arctic Science Committee (AEPS 1991, p. 1). The AEPS was embedded in the language of sustainable development. It should 'allow for sustainable economic development in the North so that such development does not have unacceptable ecological and cultural impacts' (AEPS 1991, pp. 6–7). At a ministerial-level meeting in Nuuk in 1993, the Arctic states created a Task Force on Sustainable Development and Utilization (TFSDU) as a response to the UNCED process and the 1992 World Summit in Rio de Janeiro, as well as due to pressure from the ICC who also played an important role at the Rio conference (Reimer 1993). The Nuuk Declaration affirmed Principle 22 of the Rio Declaration concerning indigenous peoples and contained statements with clear linkages to the UNCED process and sustainable development.

For some, however, the AEPS was seen to have a too strong focus on the environment. According to VanderZwaag et al., the participants at the Nuuk meeting 'reached a general recognition that the AEPS needed to consider issues of sustainability and not only environmental protection' (2002, p. 152). The establishment of the Arctic Council in 1996 reflected the three dimensions of sustainable development as a framework for the Arctic. With the Ottawa Declaration, the Arctic Council was mandated to undertake a broad programme to include all dimensions of sustainable development. The creation of the Arctic Council led several environmental

ministries and environmental non-governmental organisations (NGOs) to worry that a shift from environmental concerns to the broader issues of sustainable development could weaken or downgrade environmental efforts in the Arctic (Archer and Scrivener 2000, p. 615; Langhelle et al. 2008). According to Archer and Scrivener, the establishment of the Arctic Council ‘revived mutual fears of hidden agendas behind the impetus to regional collaboration and also diplomatic caution about circumpolar institution-building, while bringing into sharper focus tension involved in reconciling pollution and conservation concerns with economic development under the elusive rubric of sustainable development’ (2000, p. 616). At the Ministerial Meeting in Iqaluit, Canada in 1998, the Arctic Council replaced the TFSDU with the Sustainable Development Working Group and approved a strategic framework document on sustainable development. The most recent Iqaluit Declaration reaffirmed (as all other declarations) the Arctic Council’s ‘commitment to sustainable development in the Arctic region’ (Arctic Council 2015, Article 4).

The Global in the Arctic: Sustainable Development Outside-In

There is little doubt that the resource frontier imaginary is the most dominant and influential imaginary of the Arctic in recent years (see also Chap. 13 by Moe and Chap. 14 by Keil, this volume). It relates to the global agenda of development through (fossil-fuelled) economic growth. In this perspective, the resources in the Arctic are needed for global development. This argumentation is especially visible in the energy debate. The ‘crown jewels’ of Arctic natural resources are oil and gas (Steinberg et al. 2015, p. 96), and the Arctic Five, with some variation, are all pushing for increased extraction together with oil and gas companies, and sometimes with support from other stakeholders and rights holders (Wilson Center 2013). As the International Energy Agency (IEA) argued in its *World Energy Outlook* (WEO) 2008: ‘Oil is the world’s vital source of energy and will remain so for many years to come, even under the most optimistic of assumptions about the pace of development and deployment of alternative technology’ (OECD/IEA 2008, p. 37). Also in the 2015 WEO, fossil fuels are seen to ‘remain the dominant source of energy supply to 2040, but their share of the energy mix falls’ (OECD/IEA 2015, p. 56). This ‘fuels’ the resource frontier imaginary and pictures the Arctic as an arena of opportunity, securing the necessary resources for global economic growth. In terms of energy and sustainable development, the

slogan is that ‘the world needs more energy’ and that includes Arctic oil and gas. From this point of view, there is no difference between oil and gas from the Middle East and the Arctic. This is one common imaginary of the ‘Global in the Arctic’ (see Chap. 14 by Keil, this volume).

The challenge is of course how to balance resource extraction with the social and environmental dimensions of sustainable development, and climate change concerns in particular. Climate change has been described as the ultimate sustainable development issue in the era of the Anthropocene. It relates not only to ecological sustainability, but also in a fundamental sense to distributive justice on a global scale: a just distribution of emission rights (i.e. the right to burn fossil fuels) that leaves sufficient ‘emissions headroom’ for developing countries (Bradshaw 2013, p. 83) and inter-generational justice as reflected in the WCED definition. The 2015 Paris Agreement at the COP 21 meeting increased the focus on the need for greenhouse gas mitigation on a global scale.

The Arctic Eight have in their Arctic climate change policies largely focused on adaptation because consumption of fossil fuels, and thus changes for mitigation, largely takes place outside the Arctic. The 2004 Arctic Climate Impact Assessment was groundbreaking as the first comprehensive regional assessment of climate impacts. In the report, climate change is conceived of as a global problem with regional impacts, although in the case of the Arctic it will in turn also have serious consequences for the global climate in the form of strong feedback loops between Arctic and non-Arctic regions. The disappearance of Arctic sea ice and snow increases the absorption of heat from the sun and thus further warms the planet (see Chap. 12 by Cavazos-Guerra et al., this volume). Glacial melt and river run-off add freshwater to Arctic waters, which can slow down ocean circulation, affecting regional and global climates. It may further ‘alter the release and uptake of greenhouse gases from soils, vegetation, and coastal oceans’, and also have implications for biodiversity around the world affecting migratory species depending on the Arctic (ACIA 2004, p. 10).

However, the focus of the ACIA report was, as the title indicates, explicitly on the *impacts* of climate change. Mitigation efforts and emissions reductions of greenhouse gases were beyond the scope of the report. It is striking that in the context of the Arctic, increased access to regional oil and gas activities is framed in terms of opportunities and not in terms of the impacts that increased oil and gas production and usage (everywhere) will have on climate change. The impacts of oil and gas production in

the Arctic are not considered relevant in the larger global picture. Even the study *Assessment of Oil and Gas Activities in the Arctic* of the Arctic Monitoring and Assessment Programme (AMAP) explicitly states that the assessment ‘specifically does *not* include the relation between Arctic oil and gas development and global carbon dioxide (CO₂) emissions and greenhouse warming’ (AMAP 2010, p. 2, emphasis in the original). This topic, it was argued, is covered in other assessments such as the ACIA as well as by the Intergovernmental Panel on Climate Change (IPCC) and national assessments. This is only partially true. Few of the activities within the Arctic Council, including ACIA, look at the effects of Arctic oil and gas production and consumption on global emissions. The AMAP studies on short-lived climate-forcing pollutants (SLCPs) are an exception (AMAP 2015), focusing on the possible immediate effects on the climate from regional SLCP reduction (see Chap. 12 by Cavazos-Guerra et al., this volume). For the Arctic Five, however, the context in which mitigation efforts are placed is within ‘their commitments under the UNFCCC and other agreements’, and the ‘countries’ share in total global greenhouse gas emissions’ (Arctic Council 2004, p. 5). Thus, the link between oil and gas production in the Arctic and climate change has been lifted *out of the Arctic* and placed at the global and national levels (Langhelle et al. 2008). The global relates to mitigation, while the regional/Arctic focuses mainly on adaptation.

This version of the resource frontier has been increasingly challenged by the environmental imaginary and, in our context, from another ‘Global in the Arctic’ or outside-in perspective. A number of studies in recent years have argued that the problem is not too little fossil fuels, but too much. In 2012, it was acknowledged by the IEA that two-thirds of fossil fuel reserves have to be kept in the ground if global warming is to stay within the target of 2 °C above pre-industrial levels, that is ‘[n]o more than one-third of proven reserves of fossil fuels can be consumed prior to 2050 if the world is to achieve the 2 °C goal, unless capture and storage (CCS) technology is deployed’ (OECD/IEA 2012, p. 25). The IPCC in their fifth Assessment Report argued in the same way (IPCC 2014). Sixty-five per cent of the carbon budget compatible with the 2 °C target has already been used. This spurred a new focus on fossil fuels in terms of ‘unburnable fossil fuels’ and fossil fuel disinvestment. McGlade and Ekins (2015) argue that globally a third of oil reserves, half of gas reserves and over 80 per cent of current coal reserves should remain unused from 2010 to 2050. The Arctic’s resources, in this scenario, should remain untapped entirely.

In this environmentalist imaginary, Arctic oil and gas extraction is fundamentally at odds with the environmental dimension of sustainable development. Arctic oil and gas epitomises a fundamental violation of the minimum requirement for sustainable development to ‘not endanger the natural systems that support life on Earth’ (WCED 1987, pp. 44–45). Hence, this version of the ‘Global in the Arctic’ puts severe constraints on oil and gas exploration in the region. There is, in other words, a contestation between the imaginary of a resource frontier and the environmentalist imaginary in the Arctic. The two fundamentals of sustainable development—environment and development—are colliding head-on in relation to climate change. Among the Arctic Five, however, this environmentalist imaginary has been marginalised. Instead, current policies and future imaginaries of the Arctic Five appear to be moving into a state of *opportunistic adaptation*, defined as the idea that the economic benefits of climate change (through increased accessibility in the Arctic) should be prioritised over efforts to address the causes (Kristoffersen 2014, 2015). In the Arctic, the potential advantages of climate change in relation to oil and gas are inextricably linked to the paradox that their usage will contribute to further climate change. This raises the issue of Arctic states’ responsibilities towards climate mitigation, and also which responsibilities they should have for the uneven distribution of ‘positive’ and ‘negative’ effects of climate change. Increased ice melting and thus also extraction opportunities in the Arctic may well entail increased desertification, drought and flooding in other parts of the world (Kristoffersen 2015). In this manner, the resource frontier imaginary manifests itself in the global.

The Arctic in the Global: Sustainable Development Inside-Out

In terms of sustainable development, the resource frontier imaginary is also an influential imaginary in the ‘Arctic in the Global’. Economic growth and development are key concerns for Arctic people, and oil and gas extraction is said to offer such potential. But there are some important differences. Most notably, the inside-out perspective challenges the part of the resource frontier imaginary that focuses on moving material and profit from high to mid-latitudes. Instead, the primary focus is on Arctic development: How can we make sure that more of the profits from resource extraction actually stay in the Arctic (Langhelle and Hansen 2008)? In other words, the main objective is to secure economic growth and

strengthen the social and economic development *within* the geographic boundaries of the Arctic.

The transcendent nationhood imaginary is closely related to the ‘Arctic in the Global’ in its fight for indigenous rights, autonomy, self-government and self-determination in the Arctic, including control of the development of their resources, which has been a focus of indigenous peoples’ organisations like the Saami Council and the Inuit Circumpolar Council (see Chap. 3 by Shadian, this volume). It is maybe the place where the ‘Arctic in the Global’ has played out in its fullest, in the sense that indigenous peoples ‘have been successful at promoting an imaginary under which the Arctic, while under political control of sovereign states, is also characterised by identities and values that transcend state borders’ (Steinberg et al. 2015, p. 130). In the attempts to create an Arctic identity, it has been a core message that indigenous peoples ‘must be an integral part of any state or international Arctic policy’ (Steinberg et al. 2015, p. 125). As Steinberg et al. continue to argue, ‘most Inuit leaders realised that opting out of the development game in the Arctic would simply mean that southern populations would develop the region without the Inuit’s interests in mind’ (Steinberg et al. 2015, p. 126). Still, there is a tension between identities of traditional and modern lifestyles that leads to conflicting views on the benefits of the resource frontier imaginary, especially in the longer term. For example, in the oil-rich fisheries-dependent region of Lofoten in Norway, not only opponents but also the advocates of oil and gas developments do not want to ‘trade fish for oil’—a simplified slogan often used to describe local sentiments on the matter. This tension reflects a process where the choices made today depend on the considerations, perceptions and expectations for a viable and meaningful post-petroleum future or what can or will happen the day ‘the oil’ comes to an end in Lofoten (Kristoffersen and Dale 2014, p. 203).

SUSTAINABLE DEVELOPMENT AND THE INTERCONNECTEDNESS OF IMAGINARIES

Although the above analysis has distinguished between the ‘Arctic in the Global’ (inside-out) and the ‘Global in the Arctic’ (outside-in), the different imaginaries are fundamentally interconnected. So are the different dimensions of sustainable development. Sustainability dimensions and imaginaries play out differently depending on the scale, the context, the actors who use them and the interests that the dimensions and imaginaries

embody. Hence, local interest groups can use the economic dimension of sustainability and the resource frontier imaginary in order to promote economic interests and development. Likewise, indigenous groups can use the transcendent nationhood imaginary as a constraint on both the economic dimensions of sustainability and the resource frontier imaginary, and also draw on the global UNCED process. Indigenous groups have played an active role in the UNCED process where they have been ascribed a central role in global environmental governance. As stated in Principle 22 of the Rio Declaration on Environment and Development:

Indigenous people and their communities and other local communities have a vital role in environmental management and development because of their knowledge and traditional practices. States should recognise and duly support their identity, culture and interests and enable their effective participation in the achievement of sustainable development. (United Nations 1992)

The fight for indigenous rights, autonomy, self-government and self-determination, therefore, has both an inside-out and an outside-in dimension: The imaginaries draw their legitimacy both from the global concern for indigenous peoples and from regional and local political processes.

The environmentalist imaginary contains the same duality and interconnectedness between regional and global scales. The more extreme environmentalist imaginary of geoengineering the Arctic can be seen as both inside-out and outside-in, depending on whether it is done to protect the Arctic in itself or to stay within the Paris Agreement target, or both (see Chap. 4 by Corry, this volume). The biodiversity issue is of course global in its nature, but biodiversity is also inherently local. Biodiversity can therefore draw on both global and local imaginaries. As argued by the Arctic Council's Conservation of Arctic Flora and Fauna (CAFF) Working Group, it is 'essential to recognize that conservation issues must be considered in a global context' in the Arctic (CAFF 2002, p. 2). While there are certainly other ecosystems in the world that are threatened, too, the Arctic environment at the same time is unique. There are distinctive physical, ecological and social features of the Arctic that are a vital part of the diversity of life on earth and in need of collective efforts to conserve them.

For many environmental NGOs, therefore, the Arctic is a place in need of special protection. The Arctic environment, reinterpreted as one being threatened by industrial pollutants and climate change processes originating from outside as well as inside the Arctic, draws on both the 'Global

in the Arctic' and the 'Arctic in the Global' reflecting concern for global conservation and the unique Arctic environment. Unlike other places where conservation is more a question of 'protecting what little is left', the Arctic Biodiversity Assessment report (CAFF 2013, p. 43) argued that the 'Arctic offers a rare opportunity to put sustainable development into practice and to apply solid conservation measures not as an afterthought, but as a priority'.

CONCLUDING REMARKS

This chapter argued that 'Arctic sustainability' needs to be embedded in both a global and a regional understanding of sustainable development that addresses the complex links through which the ecology of the region is sustained in relation to other places and political contexts. This means that states cannot be the only actors when addressing sustainability and climate change in the Anthropocene, as the economic legacy of states expanding their territorial and fossil fuel-based economic activities is not sufficiently capable of dealing with the causes of climate change but might instead intensify them (Kristoffersen 2015). This is reflected in what Leichenko and O'Brien (2008) call 'double exposure', where the combined drivers of climate change and globalisation create positive feedbacks that facilitate increased fossil fuel extraction, increased international transport and trade, and increased net emissions of greenhouse gases, leading to further climate change.

The 2008 Ilulissat Declaration is usually read as an argument that the Arctic is not contested between states (the United Nations Convention on the Law of the Sea [UNCLOS] provides the legal framework), and as such, a 'status quo' imaginary is upheld (Steinberg et al. 2015, pp. 12–17): A world of states that effectively crowds out the other actors, where the Arctic Ocean is viewed as a space for exercising geopolitical statecraft. Simultaneously, it might also be read as a statement directed towards an audience of actors outside the Arctic, clarifying that rights and interests of the Arctic Five put them in the aforementioned 'unique position to address [the Arctic's] possibilities and challenges' (Arctic Five 2008). In other words, the coastal states take on a leading role putting the Arctic in world politics in terms of their responsible stewardship when it comes to providing the sufficient legal and political framework for sustainability. In the end, it seems that the aim of the Arctic Five is it to 'increasingly normalize the Arctic and make it like any other place: a region that is governed by states, in which law and order is maintained so as to facilitate investment and commerce without major conflict' (Steinberg et al. 2015, p. 164).

However, that the statecraft by the Arctic Five alone can provide sufficient sustainability through ‘normalising’ can be challenged by turning the argument around and putting the ‘Global in the Arctic’. The Arctic is a global concern. As such, defining sustainable development plays into the question of who is a legitimate actor and into various aspects of the distribution of power (territorial, political or discursive) in the Arctic.

As of now, both the Arctic states and the Arctic Council have failed to ‘lead a broad international effort to curtail the industrial processes that are negatively affecting the Arctic’s climate’ (Steinberg et al. 2015, p. 168; see Chap. 6 by Selin, this volume), neither in the Arctic nor beyond the region’s southern borders. Therefore, the actors inside and outside the Arctic are still facing the same issues that the World Commission struggled with—how to understand and define environmental limits and how to avoid hitting them. Contrary to back then, we do now have a *politically* defined environmental limit as stated in the Paris Agreement: ‘Holding the increase in the global average temperature to well below 2 °C above pre-industrial levels and to pursue efforts to limit the temperature increase to 1.5 °C above pre-industrial levels’ (United Nations 2015, p. 22). However, we have not managed to change the content of economic growth in any substantial manner since Rio in 1992. The worrying part is that there is nothing in Arctic policies that points to a new direction or towards a new development trajectory (or sustainable development). On the contrary, Arctic development is deeply entrenched in efforts and imaginaries of the prospects of fossil fuel production. Hence, the Arctic is not just another place in the global. Rather, it has deliberately been detached from global sustainable development concerns. This makes the Arctic special, if not exceptional in yet another sense.

NOTES

1. Sustainability is here used as a short term for sustainable development unless otherwise specified.
2. As noted by Steinberg et al. (2015, p. 15), there are many more imaginaries of the Arctic, or as they put it, ‘at least as many as there are individuals’.

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Reimagining Political Space: The Limits of Arctic Indigenous Self-Determination in International Governance?

Jessica M. Shadian

Over the past decades, the Arctic's indigenous peoples have made significant political gains from negotiating increased rights and land claims treaties at home to obtaining a seat at the negotiating table at the Arctic Council (AC) to the adoption of the United Nations (UN) Declaration on the Rights of Indigenous Peoples in September 2007 and the creation of the UN Permanent Forum for Indigenous Issues (UNPFII) in July 2000. While these achievements have been praised in many circles, this chapter will focus on the possibilities and challenges for indigenous self-determination going into the future. Specifically, this chapter will focus on two specific issues: (1) the implications of a shifting international discourse from sustainable development to climate change and (2) the legal status of the indigenous Permanent Participants on the AC. This chapter

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will begin with a discussion on theory and indigeneity in International Relations (IR) research. It will then discuss the historical context of indigenous internationalism before turning to the two cases of climate change discourse in the context of Inuit politics and the AC.

INDIGENEITY IN THEORETICAL AND HISTORICAL CONTEXT

Indeed, it is impossible to make sense of the issues that trouble the relationship [between Aboriginal peoples, the Canadian government and Canadian society as a whole] today without a clear understanding of the past. [...] We simply cannot understand the depth of these issues or make sense of the current debate without a solid grasp of the shared history of Aboriginal and non-Aboriginal people on this continent. (Royal Commission on Aboriginal Peoples [RCAP] 1996, p. 36)

For much of its history as a discipline, the field of IR theory has been confined to a Western-dominated narrative about global politics (Picq 2013, 2014), the assumption that global politics is an *a*historical enterprise about the state and interstate politics. When confined to this framework, many polities and political instances are consequently either entirely overlooked, ignored or can only be understood in relation to the state and interstate politics. Politics, which occurs outside of interstate interaction, is left unacknowledged, and non-state polities are left lacking political agency in their own right, particularly if they are not seeking statehood. In effect, conventional IR theory determines what we can and cannot discuss (Picq 2013, pp. 447–449). In a world of state-focused interaction, indigenous politics are of peripheral interest at best, and certainly they are not considered endogenous to world politics.

In order to undertake Beier's challenge for 'International Relations scholars to engage seriously with indigenous diplomacies' (Beier 2009, p. 12), IR must first break free from 'the epistemological straitjacket that defines what can and cannot constitute IR' (Picq 2013, p. 447). This includes an analytical move away from studying state interaction towards a political space, which accommodates all polities: state and non-state alike (Ferguson and Mansbach 1996).

Indigenous diplomacies do not operate abstracted from global politics, namely interstate politics. The structures which they have created to engage in interstate politics are themselves manifestations of their historical

interactions with global politics. Indigenous peoples have, in turn, expanded the parameters of that system as well (e.g. the UNPFII). Indigenous polities, as such, are co-constituted by the history of the making and transformations of the international state system (viewed as a dynamic and not static system).

European exploration of the North American and Greenland Arctic eventually gave way to permanent settlement, until the Arctic was finally remade into peripheral appendages of the states that had consumed the region (Shadian 2013, 2014). By the 1960s, the colonised regions of the world outside the Arctic began a process of re-appropriating their own voices and their own politics through international efforts to attain self-determination. At that time, self-determination was based on territorial integrity (i.e. statehood); a pre-existing political architecture, according to which sovereignty arose from territory and national identity, and an independent state required both (Anghie 1999, pp. 23–30). Decolonisation, then, expanded and reaffirmed the Westphalian political architecture with the addendum of new states.

While relations between the USA, Canadian, and European governments and their indigenous populations differed from one another and from colonial relations in other parts of the world, they were also similar in that they all constituted internal colonisation. Decolonisation in Africa and Asia had effectively divided the world into a Global North and Global South; internal colonisation in the Arctic had led to an internal inverse of these events. Southern capitals eventually controlled the political affairs of their northern territories. The unique situation that the Arctic's indigenous peoples shared across the North American and European Arctic soon became a point of common ground.

When the Arctic's indigenous peoples such as the Inuit in the 1970s began to assert their political rights within the countries that had colonised them and act as transnational polities in the international arena (e.g. the Saami Council, the Inuit Circumpolar Council, and Aleut International Association), creating states of their own was not their central aim. The international political architecture had already begun a process of change through expanding practices of Westphalian politics, including changing notions of sovereignty. At the same time, existing policies governing the Arctic's indigenous peoples began to shift away from paternalism and assimilation towards an entirely new set of political ideals. These ideals were themselves part of global changes taking place at the international legal level regarding international rights and indigenous ideas of self-determination.

By the time the Saami and Inuit throughout the circumpolar region began actively pursuing self-determination, their political aims were not driven by desires for territorial integrity (states of their own). Rather, in anticipation of expected resource developments on their lands, Saami and Inuit aims for self-determination were largely driven by desires for control over the development of those resources. The manner in which they pursued self-determination also reflected broader global political changes as these related to changes in international law, shifting ideas of land ownership, and new notions of international development. While the Inuit land claims, for example, were a product of local circumstances and domestic politics, the political awareness underlying the land claims processes was equally rooted in changing understandings of the links between resource development, territory, and sovereignty at the global level.

EXPANDING THE DOMAIN OF INTERNATIONAL LAW: THE CASE OF THE INUIT POLITY

The founding of the UN in 1945 marked a new era in international law, and since 1945, it has undergone continuous change. In the context of indigenous peoples, the legitimacy of indigenous ideas of stewardship has come about through a strengthening relationship between indigenous rights and international human rights—a relationship that has linked indigenous self-determination to debates over both human rights and sustainable development. The changes in international law have come to bear on the scope of human rights and environmental law (in particular, through the concept of sustainable development). It has also changed assumptions relating to the privileged position of states in the world order, unseating long-held beliefs that land and resources are ultimately owned and controlled by the sovereign states in which they are found.

Unlike many other areas of the world, the Arctic's indigenous peoples were internally colonised. By the 1970s, Inuit living in Greenland, Canada, and the USA¹ began their own political processes of self-determination. Those efforts began with expectations to develop resources on Inuit lands, and the debates which followed eventually led to Inuit land claims agreements in Alaska and Canada as well as Greenland Home Rule, which has now become Greenland Self-Rule. By the time Inuit land claims settlements were in motion at home, indigenous internationalism was also on the rise. This political movement developed alongside greater international attention to the global environment. A new

language of international rights was emerging, including new notions of what it means to be indigenous. Rather than being designated as nomadic peoples who lived subsistence lifestyles and therefore would not fit the modern world, traditional indigenous lifestyles were reframed as sustainable development in practice (see also Chap. 2 by Kristoffersen and Langhelle, this volume). According to the Inuit Circumpolar Council's (ICC's) Sheila Watt-Cloutier (2002):

[a]s Inuit, we think in holistic ways. We know that everything is interrelated. [...] Sustainable development requires holistic thinking and acting. [...] Sustainability [has] three pillars: economy, health and environment. [...] I am wearing a sealskin vest. This is not just a piece of clothing. It has become a political [statement;] a symbol of our human rights. This vest shows who we are, what we value, what we stand for, and even how we intend to make our way in the world. Traditional ways of making a living should be preserved as an element of local economies. We can find ways to support and expand this economy. Nunavik Arctic Foods has developed caribou pate for gourmet markets in southern Canada. The Inuvialuit Development Corporation produces high quality sweaters made of muskox wool that are very popular in Japan. Labrador Inuit export Labradorite to Italy where it is used for marble fireplaces and floor covering. Nunavut Inuit are exploring Omega-3 seal oil capsules with other countries.

Throughout the colonial era, Europeans justified their expansion into the Arctic on the grounds that while Inuit lived off the land, they did not own it and therefore it was essentially not theirs. However, the Inuit principle of stewardship—of living off the land without actually owning it—has now resurfaced in discourses of indigenous self-determination as well as international law. The local Inuit land claims agreements provided institutional precedent for broadening these debates over indigenous rights under international law (Shadian 2014, p. 57). This includes the expansion of rights to include collective rights, not just individual ones. Inuit land claims agreements, as such, also compliment the broader international legal discussions and shifting definition of *rights*. Included in this shift is the transfer of rights in international law from only individual rights to also include certain forms of collective rights. In the case of the Inuit, these collective rights have been realised in the context of the international legal language of indigenous rights. Achieving Inuit self-determination at home is subsequently interdependent of the state and the international system.

At the international level, indigenous internationalism developed alongside greater attention to the global environment. For many indigenous organisations, the onset of an international discourse of sustainable development validated the concept of indigenous stewardship. At the same time, indigenous ideas about stewardship were reshaped to fit within this discourse and accompanying international policy instruments. The human rights regime has played an additionally critical role in expanding the parameters of international law. This includes a shift from states' rights to rights and responsibilities *for* states, individuals, and non-state collective groups. International law has also extended into the environmental arena, bringing together the environment, development, and human rights under a grand international policy tool of sustainable development. The Rio Earth Summit in 1992 created a new basis for non-state political participation, and state sovereignty has since become diluted through the participation of new political actors from above, below, and across state borders.

In terms of indigenous rights, one of the greatest challenges to traditional state sovereignty at the international level is the 2007 UN Declaration on the Rights of Indigenous Peoples (United Nations 2008), which officially declared indigenous peoples as legitimate political actors at the international level (though as collective peoples and not as states). It can be argued that these gains for indigenous peoples have also come about at the exact same time that the validity of the very international system and the effectiveness of the UN to adequately meet today's global challenges have come under question. The challenges of governing in a world where states are only one of many actors remain to be mastered and have become a litmus test for the future of the entire UN system. For the Arctic's indigenous peoples, these challenges are colliding with a vastly changing Arctic political space.

A CRISIS IN THE NARRATIVE:²

Over the past several decades, indigenous peoples have become more vocal, better organised, and have succeeded in shifting the boundaries of Westphalian international law. In many communities of Alaska and Canada, and Greenland as a whole, indigenous peoples have gained the right to develop their own resources, if not own them outright. These successes have been achieved mainly in accordance with a particular philosophical understanding of human (and therefore indigenous) agency and the environment; that is, if humans can develop resources sustainably, the

environmental state of the Earth can be controlled (what is commonly referred to as sustainable development).

In recent years, however, the discourse surrounding sustainable development has been diminished due to increased attention to global climate change (see also Chap. 2 by Kristoffersen and Langhelle, this volume). The prevailing issue is no longer how to *control* the environment in a sustained manner, but how to mitigate the resulting damage. In that sense, nature itself has achieved agency (Latour 1999), and the scientific goal has become to find ways for humans to *adapt* to a changing climate. This has had a strong impact on indigenous peoples and the international narrative of indigenous rights, particularly as regards rights to resource development.

In the international policymaking arena, the threat of climate change has unseated the prevailing assumptions about sustainable development: if development is carried out sustainably, humans can control the environment and consequently the earth's ecosystems. The onset of a new climate change narrative (as a threat to humanity) has shifted the location of agency within the human–nature relationship and with this parameters upon which international development is articulated (Shadian 2009). The climate change narrative has become a ‘crisis’ narrative, which focuses on the agency of nature, while undermining the agency of humans, therefore offering societies few measures but to cope by becoming more resilient and adapting to this new reality.

This conversion in the human–nature relationship is coming to bear on rights-based legal instruments of sustainable development policies with vast implications for what it means to be indigenous within the international legal system. The indigenous narrative has become a key component of sustainable development—ideas that have been codified in international law, covenants and other forms of international agreements. Indigenous peoples are recognised as the earth's stewards—a testament of sustainable development in practice. This has become the basis upon which indigenous groups have attained a legitimate voice in demanding the right to control and develop their own lands and resources. The assumption is that if development is led by indigenous communities, then by definition it must be sustainable (if it is not, indigenous cultures will become extinct). But the narrative of the climate change crisis has unhinged these acquired rights regarding indigenous rights to resource development in several important ways.

In the Arctic, the narrative of climate change has resulted in two polarised visions of the Arctic. The world's interest in Arctic resource development is growing in tandem with the crisis narrative of the melting polar

ice cap. These two opposing political discussions are deeply linked in ways that are redefining the Arctic and which have forced many Arctic communities and the international community as a whole to choose one narrative or the other. On the one hand, the Arctic is the global laboratory for climate change science (see Chap. 4 by Corry, this volume). On the other, the melting ice cap has turned the Arctic into a global resource frontier and maritime corridor. For the Arctic's indigenous peoples, this paradox is far more than news entertainment or fodder for non-governmental organisations (NGOs). Indeed, it brings into question what it *means* to be indigenous in the Arctic, and what impact that meaning will have on the international rights that this affords them.

The climate change crisis narrative has been brought to bear on specific rights-based legal language as it relates to Arctic indigenous political agency. Arctic land claims treaties, governance arrangements, and other shared land and resource management bodies have afforded Inuits the rights to the resources themselves (if not ownership) and to control the processes of resource development and management schemes on their lands. Through land claims treaties in Canada and Alaska, as well as Greenland Self-Rule, Inuit for instance have regained control over their own land and acquired the right to become partners in, and profit from, the many types of resource developments taking place (from oil and gas to mining), all the while continuing with their subsistence economic activities.

When the climate change crisis narrative overtakes the narrative of sustainable development in the Arctic, it also trumps the legitimacy regarding the resource rights and ownership that Inuit have acquired. This discord raises questions as to whether or not indigenous peoples can be more than mere victims (or bystanders) of climate change (Shadian 2014, p. 168). Can Inuit, for instance, own airline companies (enabling them to travel between their communities, without having to go through Ottawa or Copenhagen) and still be considered indigenous (when it is now acknowledged that these activities are in fact contributing to the climatic changes that *victimise* them)? Can they be major shareholders in oil and gas pipelines, hydrocarbon extraction projects, and mining companies without jeopardising the entire modern indigenous narrative that they are the earth's stewards (Shadian 2014)? Can indigenous peoples only represent themselves as symbolic victims of forces larger than they can control and if so where does that leave indigenous communities as they work to exert control over their own development and, therefore, their own futures (Bravo 2009, p. 257)? Moreover, if climate change discourse revolves

around how to save ‘ourselves’ (humanity) from disaster rather than how to develop sustainably, it seems that this is not only a crisis of the modern indigenous movement, but also an overall crisis in the modern perception of human agency and ‘our’ ability to create policy that is proactive, rather than merely reactive to the forces of climate change (the December 2015 Paris Agreement under UNFCCC offers a first international political opening to deviate from this assumption) .

All grand narratives, including the climate change narrative, establish parameters regarding which actors will have the authority to speak and formulate the terms of their and others’ existence. While the ideas of indigenous peoples as symbolic representatives of a warming earth in action have put indigenous communities in the international spotlight, the terms of their international political engagement have narrowed. Whereas the notion of sustainable development provided a newfound political agency for indigenous peoples to demand access to resource control, the climate change narrative which followed frames indigenous peoples as either victims or turning their backs on their own cultural survival. These either/or scenarios, rather than expanding indigenous agency, further conditioned the boundaries upon which they are able to legitimately control the course of their own development. The consequences of these limitations include undermining the internal cohesion of indigenous internationalism.³ Moreover, the victimisation of indigenous peoples by climate change politics narrows the space in which new alternatives and policies for development can be considered and developed. While the climate change narrative has had consequences for international policymaking (and particularly for indigenous internationalism), the discourse that is coming to dominate the Arctic is one which is about its resource and maritime potentials for the global economy (see Chap. 13 by Moe and Chap. 14 by Keil, this volume). These discussions—more than climate change—are raising questions about the future of indigenous agency in the realm of Arctic governance and the AC.

INDIGENOUS DIPLOMACIES IN A GLOBAL ARCTIC: RIGHTS HOLDERS, NOT STAKEHOLDERS

Arctic political cooperation began in earnest with the Rovaniemi Declaration in 1991. Arctic indigenous groups were part of the process from these beginnings. By December 1996, representatives of the eight Arctic member states and three indigenous Permanent Participants (PPs),

the ICC, the Saami Council, and the Russian Arctic Indigenous Peoples of the North, met in Ottawa and signed the Declaration on the Establishment of the AC. The AC is a consensus-based body founded on a political declaration, rather than a legally binding charter. Its central mandate is to facilitate sustainable Arctic economic and social development and to protect its environment. To date, it remains the only fully circumpolar intergovernmental institution. The overarching objective of the AC is to promote ‘cooperation, coordination and interaction among the Arctic States, with the involvement of the Arctic indigenous communities and other Arctic inhabitants on common Arctic issues’ (Arctic Council 1996). This includes finding ways to accommodate sustainable development in the Arctic region, while ensuring protection of the environment. Representatives of the eight Arctic states meet every two years to adopt policy recommendations and initiate joint activities regarding Arctic issues which emerge from the ongoing Working Group and Task Force Meetings (see also Chap. 9 by Knecht and Chap. 10 by Wehrmann, this volume).

Unlike its many observers comprised of non-Arctic states and international organisations (intergovernmental and NGO), the PPs sit at the negotiating table alongside the eight Arctic states. In 1998, the Aleut International Association became a PP followed by the Gwich’in Council International and the Arctic Athabaskan Council in 2000. Though the PPs do not have full sovereign authority akin to that of the eight Arctic states, the presence of the indigenous organisations has constituted a historic shift in IR in that they have succeeded in making a place for themselves at the negotiating table. Rosemarie Kuptana—past president of the Inuit Tapiriit Kanatami—has said that the AC will provide an ‘opportunity for the circumpolar nations to establish a model of partnership and cooperation with indigenous peoples on the most vital northern policy issues’ (Grey 1993).

From its founding through 2007, the AC served as the primary means for the Arctic states and Arctic indigenous and other local communities to collaborate on issues conventionally viewed as low politics, first and foremost sustainable development and environmental protection. It was distinctly determined at its founding that high politics, namely military security, would not be part of the AC’s activities. During the first decade of the AC, its predominant outcomes were its scientific reports. By 2009, however, at the first AC Ministerial meeting following Artur Chilingarov planting a Russian flag at the bottom of the North Pole, increased global interest in the Arctic was apparent. In the early years of the AC, any

interested party could attend its meetings. At the 2009 Ministerial meeting, however, world interest in the Arctic had grown exponentially such that the Rica Hotel in Tromsø, the venue of the meeting, was heavily secured, and the inside lobby was filled with Arctic heads of state. In addition, there were major diplomats from around the world from France to China, not to mention the journalists, NGOs, academics, and multinational corporations. What became overtly clear at the opening day of the 2009 Ministerial meeting was that the AC had undoubtedly become *the* Arctic institution of global interest (see also Chaps. 5 by Humrich and 7 by Graczyk et al., this volume).

Recognising the impacts of this global interest that was already underway in the two years leading up to this meeting, the ICC took the opportunity to clarify what and who the ICC represents in Arctic and global governance. At that meeting, the ICC (2009) released its 'Inuit Declaration on Arctic Sovereignty'. In the Declaration, the ICC asserts that not only are Inuit essential to the debates over Arctic governance, but even further, they are not merely another group of Arctic interested stakeholders. Instead, the ICC argues that Inuit have sovereign rights to contribute to Arctic policymaking by virtue of their status as 'rights holders'—something entirely unique and distinct from other stakeholders. This includes being party to all discussions regarding who owns the Arctic and who has the right to develop its resources. According to ICC's Aqqaluk Lynge, the ICC Declaration on Inuit Sovereignty 'is not an Inuit Nunaat declaration of independence, but rather a statement of who we are, what we stand for, and on what terms we are prepared to work together with others' (Nunatsiaq News 2009).

The Inuit Declaration on Arctic Sovereignty set out to formally redefine the conventional understanding of sovereignty in IR, and in this move, they sought to establish new norms of accepted international diplomacy. While the AC already included the six indigenous PPs at the negotiating table, the ICC wanted to make it clear to the global political community that though the Permanent Participants are not states, they nevertheless are formal political actors who are part of the formal structures of Arctic diplomacy.

Since this 2009 AC Ministerial meeting, global interest in the politics of the Arctic has grown even wider. This burgeoning international interest has forced the Arctic states to question what type of institution the AC can and should play in international affairs, and set within this is the issue over what type of power the Permanent Participants can and should continue to hold in Arctic governance. Without a clear legal status, observer

countries such as China have little means other than engaging with the Permanent Participants as stakeholders like all interested stakeholders. The ICC Declaration on Inuit sovereignty in the Arctic has gone to great lengths in attempting to rectify this by making it clear that Inuit are not merely stakeholders. Instead, it argues that Inuit are ‘rights holders’.

The question concerning what kind of legal or political standing does and can a ‘rights holder’ provide in the context of Arctic or global governance or even international law is part of a larger discussion as to how far indigenous self-determination can go in global politics (if the aim is not to become a state). If the unique role that the PPs have had up to now by being party to the negotiating table of the AC is to remain in light of increasing global interest and participation in Arctic governance, then it is necessary to grapple with the difficult questions such as how to create a more nuanced legal definition of the Permanent Participants and what this type of legal affirmation should include, not to mention the associated financing to ensure stable means to carry out this political power.

As a necessary first step, we can discern what the PPs are not. They are not states; they are not stakeholders; and they are certainly not merely NGOs (see also Chap. 10 by Wehrmann, this volume). Yet, what exactly are they in the context of carrying out Arctic diplomacy? In their current capacity, the Permanent Participants have very little regional legal personality. While the UN Declaration on the Rights of Indigenous Peoples can very well be argued to have transformed the boundaries of the UN as well as international law by providing a minimal set of obligations by which states must consult with indigenous peoples, it does not provide guarantees for the future power of the Permanent Participants in the AC.

When it comes to today’s political landscape where countries such as China or South Korea are now observers, all of which orbit in a global political framework where states operate under the traditional umbrella of state sovereignty, what does the concept of rights holders mean for them? This question is one that is much greater than the AC itself. And subsequently, it is here that questions of theory and the grand debates in IR are brought to the surface. These questions about what the Permanent Participants are or are not and where they fit into the landscape of global politics are, in fact, symbolic of the wider changing conceptions of Westphalian sovereignty and governance and, within this, the challenge as to how global political institutions can effectively account for and accommodate

the rising numbers of non-state political actors who have a legitimate space in the global political arena.

This reality, as the UN and other international institutions are slowly coming to realise, requires new governance structures, which cannot only accommodate indigenous diplomacies and other non-state actors in a meaningful way but, even further, which can govern effectively. According to one ICC member, the founding aim of the ICC was not, after all, ‘a new country, but a new consciousness’. The question is whether or not the AC and the UN will be able to uphold this new political consciousness (and reality) that Inuit and other indigenous peoples around the world have not only articulated but, further, have achieved through institutional political legitimacy. The imaginary of global political space has undoubtedly changed. Will its institutions be able to catch up?

NOTES

1. Inuit also live in Russia though they have not enjoyed the same types of gains as the Inuit in Canada, Alaska, and Greenland.
2. For a more in-depth discussion of this section, see Shadian (2014).
3. For instance, in April 2009, the UN and the ICC co-hosted the Indigenous Peoples’ Global Summit on Climate Change. The meeting brought together more than 400 delegates from 80 nations to examine the projections published by the Intergovernmental Panel on Climate Change. The expected outcome of the summit was the signing of a declaration, which the organisers would then take to the 2009 Copenhagen Summit on Climate Change on behalf of the world’s indigenous peoples. The summit, however, ended without consensus. In the final hours, two calls for action were put forward. The first call was for a phasing out of fossil fuels and a moratorium on new fossil fuel developments on or near indigenous lands and territories; the second was for a process that would phase out fossil fuels, without infringing on the development rights of indigenous nations (Indigenous Peoples’ Global Summit on Climate Change 2009 in Shadian 2014, p. 166). While many indigenous peoples may indeed be on the frontlines of climate change, an increasing number of indigenous groups are also either already, or becoming, owners, co-managers, and other kinds of beneficiaries of the extraction and development of non-renewable resources on their lands. According to arguments put forward by scholars such as Jean-Jaques Simard (1990) or Carina Keskitalo (2004), this dilemma can be perceived as the inevitable crisis in the indigenous narrative—indigenous peoples must always represent an image of ‘back to nature’.

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Globalising the Arctic Climate: Geoengineering and the Emerging Global Polity

Olaf Corry

INTRODUCTION

Because of its crucial role in the globe's climate system, the Arctic has been singled out as a region worthy of special attention for possible 'geoengineering' (also referred to as 'climate engineering') technologies. These aim to intentionally intervene in the climate system to deal with global warming, rather than by limiting emissions of greenhouse gases or adapting human societies to deal with their effects (The Royal Society 2009). Some of the leading plans for geoengineering are designed to directly cool the Earth by reflecting more light back into space—and the Arctic is frequently invoked as a site for possible experimentation or deployment to stem recent rapid warming tendencies.

However, discussion about Arctic geoengineering has so far developed largely in technocratic terms and is typically dealt with separately from ongoing analysis of Arctic geopolitics and the regional interests invested in it. Indeed, it is not clear who might be the relevant state or non-state

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actors, should an intervention to alter or restore the Arctic climate ever be attempted. While a Westphalian gaze on Arctic politics highlights the littoral states with their physical borders and sovereign claims to the Arctic region, this volume suggests various ways of going beyond a neatly territorial sovereign approach to instead analyse the Arctic as a ‘globally embedded space’ (Chap. 1 by Keil and Knecht, this volume).

This particular chapter uses an object-oriented approach to explore how the Arctic is being constituted as a global governance-object within an emerging ‘global polity’, partly through geoengineering imaginaries. It suggests that governance-objects—the socially constructed targets of political operations and contestations—are not simple ‘issues’ or ‘problems’ exogenously given to actors to deal with. Governance-objects emerge and are constructed, and rather than slotting neatly into existing structures, they have their own structuring effects on world politics. The emergence of the Arctic climate as a potential target of governance provides a case in point.

The argument unfolds as follows: First, I argue that International Relations (IR) has traditionally been subject-centric, ignoring how the targets or objects of governance emerge or transform with different structuring effects. Second, an alternative approach is introduced that initially brackets the question of which actors are relevant and begins from governance-objects to analyse the ‘polities’ that coalesce around them. In the third section, geoengineering is briefly introduced, and the special place of the Arctic in geoengineering discourses is noted, showing how the Arctic has become a site of virtual geoengineering experimentation and intervention. Fourth, the polity approach is used to argue that the Arctic climate is becoming a governance-object within a global polity pushing it up the political agenda but drawing it away from its local and political context. The last section considers the implications of this for Arctic politics.

SUBJECT-CENTRISM IN IR

Whereas IR as a discipline has been accused of being state-centric or of ignoring or underestimating the importance of other ‘non-state’ actors (see also Chap. 3 by Shadian, this volume), another bias has hitherto been mostly ignored: IR has been obsessed with its (potentially changing set of) actors and institutions to the exclusion of the question of what it is that is being governed. Where the objects of world politics came from and how they emerged in the form that they have, how they might change, and

what they mean for the structure of world politics have been taken somewhat for granted. For example, for William Boyd (2010, p. 849),

[t]oo often, the study and practice of environmental law and governance take the object of governance—be it climate change, water pollution, biodiversity, or deforestation—as self-evident, natural and fully-formed without recognising the significant scientific and technological investments that go into making such objects and the manner in which such investments shape the possibilities for response.

Noortje Marres, drawing on John Dewey, puts the point more generally: ‘In the complicated environment opened up by the technological society, the question of the object of politics can no longer be bracketed’ (Marres 2005, p. 208).

What objects of governance have traditionally been identified and given weight in IR? States were of course considered the pre-eminent subjects of IR, across the theoretical landscape of IR. This is the case from modern-day structural realists (Waltz 1979; Mearsheimer 2001), over liberal and English School writers interested in institutions (Keohane 1989; Bull 1977; Buzan 2004), to constructivists focusing on the ‘cultures of anarchy’ that emerge in the interaction between states (Wendt 1999). With states identified as the key subjects, ‘nations’ or other forms of domestic society were for a long time assumed to be the governance-objects that states focused on governing—so much so that in political science governing them became synonymous with government itself. Correspondingly, relations between states became known as ‘international’ politics. With the question of the subjects and objects bracketed, realists focused on the number and relative strength of great powers; liberal institutionalists focused on the formation of state interests (Moravcsik 2008), the distribution of information, and settings for strategic state agency (Keohane 1989); and constructivists focused on states’ subjectivities: for example, do they view each other as friends, competitors, or enemies (Wendt 1999)?

In modern IR with the rise of the idea of global governance, ‘governance without government’ came into focus (Rosenau and Czempiel 1992). Global governance literature has been less subject-centric, commonly taking ‘issues’ or ‘problems’ as the point of departure. The concept arose out of the end of the Cold War and the new sense that common global problems might be tackled through cooperation (Commission on Global Governance 1995), perhaps with US leadership. However,

‘global governance’ in IR mainly focused on the role of actors (including non-governmental ones) and other emerging forms of authority (naturally figuring alongside the states) (Rosenau and Czempiel 1992) or the development of international institutions. For regime theory, it was the institutions, norms, and rules that were the natural focus of attention rather than the issues themselves (Krasner 1982). Moreover, the dominant models of structure that provided the meta-theoretical backdrop to this debate about states and institutions, whether in form of anarchy or hierarchy, focused solely on how different agents stand in relation to each other, ignoring objects altogether (Corry 2010, 2013a). Discussions of an emerging world hierarchy in the form of a global state (Shaw 2000), a global polity (Ougaard and Higgott 2002), or globalising state functions (Ougaard 2003) emphasised essentially the agglomeration of Western-led institutions, economies, and militaries. But such lines of enquiry into hierarchy in world politics have made slow progress at best in a discipline defined by the idea of an international system. ‘Globalisation’ understood as the withering away of that system and perhaps the replacement of the anarchic structure by something else has been declared an exaggeration (Hirst and Thompson 1996) with Justin Rosenberg delivering a post-mortem of globalisation (Rosenberg 2005). While the idea of a global actor has been rejected, the globalisation of objects of governance has gone largely unscrutinised.

GOVERNANCE-OBJECTS AND POLITIES

If focus shifts from the actors to the objects, it is perhaps less easy to dismiss the idea of a truly ‘global’ politics being a reality. Taking up the idea of a global polity, I have argued that what makes a ‘polity’ is not the establishing of a hierarchy of power structures. Rather a polity exists when:

a group of units become oriented towards the governance of a common “governance object”. The latter can be defined as an object that is constructed as real, distinct, malleable and subject to political action, for example, constructs such as “France” or “the climate”. (Corry 2010, p. 159)

In these terms, a ‘global polity’ is not best thought of as a world-spanning hierarchy of power relations. Rather, it can be thought of as a situation where actors orient themselves towards objects of governance that are ‘global’ in that they reference the world as one place. To say that these are

‘global’ is not to say that such objects cover the entire space of the world (i.e. again a territorial notion). Rather, global governance-objects are entities or assemblages that have been rendered knowable and operable—governable—but whose construction as governable objects depends on them being part of one single planetary space (Corry 2010, p. 159). A global polity then exists ‘to the extent that actors of whatever kind have become oriented towards the governance of specifically *global* governance-objects’ (Corry 2010, p. 159, emphasis added).

Drawing on this framework, Methmann conceives of climate politics as a global climate polity ‘revolving around the Earth’s carbon cycle as a real, distinct, malleable object subject to political action; formed of all those actors that attempt to contribute to the governance of this carbon cycle’ (Methmann 2014, p. 10; see also Corry 2013b). Whereas membership in the international system depends on mutual recognition of and by sovereign states, membership of polities is established through the relationship with the object, which is usually outside the direct control of other actors in the polity. In the Arctic, we see this in the way that states without a geographical border to the Arctic Circle such as China have staked a claim to being a part of the Arctic polity, concerned with governing the Arctic. Whether the Arctic states accept that or not, they are forced to relate to the claims made, and thus, China enters the fray around the governing of the Arctic: it enters the Arctic polity. Of course, institutional or resource barriers may prevent actors from having direct influence, but that does not exclude them from the polity. In the polity approach, non-empowered actors are not sifted away analytically *a priori* since it is the object of governance that is considered constitutive of the polity, instead of the institutions or the relationship of the actors to each other.

This version of a global polity does not depend on the weakening or disappearance of nation states, nor the emergence of a global state of some kind. Neither is the concept of sovereignty pivotal, mainly because polity theory is focused on the subject-to-object relations rather than whether states recognise each other’s authority or autonomy. In this sense, it is not a post-international perspective looking for globality in the demise of the international. Methodologically, to begin from the objects and *then* ask who are the actors engaged in governing these objects and whether they are states or not makes for a different approach that does not pre-judge who the relevant actors are, and does not take the object of governance for granted.

There are numerous possible examples that can illustrate this. Arguably ‘global poverty’ has been constituted as a governance-object through an

elaborate process of knitting together certain physical and social conditions across multiple countries via measurements, benchmarks such as ‘under a dollar a day’, knowledge banks and institutions such as the World Bank, United Nations Development Programme (UNDP) reports measuring human development, international policy programmes and discursive constructs such as the Millennium Goals, and iconic images of famines and discourses of underdevelopment (Corry 2014a). More obviously, the climate itself is now emerging as a global, governable entity, albeit of strange proportions and with a part physical, part social constitution—what one writer evocatively calls a ‘hyper-object’ that is everywhere yet not directly visible (Morton 2013). The infrastructure that allows measurement, tracking, and ultimately governance of the climate has delivered, as Paul N. Edwards (2010, p. 8) puts it:

not only specifics about the past and likely future of the Earth’s climate, but also the very idea of a planetary climate as something that can be observed, understood, affected by human wastes, debated in political processes, cared about by the general public, and conceivably managed by deliberate interventions such as reforestation or gigantic Earth-orbiting sunshades.

Edwards charts how layer upon layer of initially fragmented weather monitoring technology, bodies of knowledge, and networks in the end produced global climate models and facilitated global institutions. Together, this ‘vast machine’ of apparatus such as satellites, measuring stations, models, databanks, observatories, academic disciplines, and intergovernmental organisations rendered climate change an object of political and technocratic governance, which ‘helped to create global institutions and ways of thinking globally’, something Edwards labels ‘infrastructural globalism’ (Edwards 2010, p. xviii).

Thus, armies may have been instrumental in carving up territory into states, but today data generation, modelling, and measurement play a key role in assembling otherwise disparate parts of reality into discrete objects liable to be governed, politicised, or even securitised. Some of the impetus for designing the vast climate machine was originally military: Cold War rivalries led to the intense space race and charting of weather patterns and deep-sea topographies. Early city-state rulers in Florence instigated rudimentary weather monitoring in order to gain advantages in agriculture as well as on the battlefield, which eventually led to the discipline of meteorology and eventually climatology.

The general point is that as such objects emerge and actors constitute and coalesce around them, new polities—and new identities—are created in the process. In this sense, ‘problems’ and ‘issues’ are not just things exogenously given and to be tackled by pre-existing actors operating inside existing structures—they are co-constitutive of polities themselves. The weather has become ‘the climate’, and ‘activist climate scientist’ is one new hybrid among many engaged in trying to govern it.

GOVERNING THE ARCTIC CLIMATE?

The Arctic, although long considered a discrete territory, has not historically been a target of governance in the ‘governmental’ sense of arranging, regimenting, or fundamentally altering something for political purposes (Faubion 2000). According to Järvenpää and Ries (2011, p. 129), the Arctic was a ‘*terra nullius* to all but the indigenous populations’ before the Cold War, became a strategic site during the nuclear stand-off between the Soviet Union and the USA during the Cold War, and then lapsed again into dormancy after 1990. However, particularly with the rise of climate change as a political issue and the rapid changes now underway, the Arctic is becoming subject to political attention in unprecedented ways. Climate change has played a role in transforming the Arctic, not just literally by melting and warming previously frozen grounds and surfaces, opening up sea routes, and posing new geopolitical dilemmas, but politically by rendering it a governance-object that is measured in new ways, studied and pored over at international conferences and summits, campaigned about, and discussed the world over. A significant aspect of contemporary global politics—climate politics—has as one of its primary aims to halt the warming of the Arctic region and/or the melting of the ice cap.

Yet, while much climate policy is intended to affect the Arctic climate, this is usually treated as a part of the *global* climate efforts to limit global average temperature rise to not more than 2 °C (see also Chap. 2 by Kristoffersen and Langhelle, this volume). In the global climate polity, actors jostle to govern energy systems, transport technologies, and lifestyle choices the world over in part with the aim to prevent further warming of the Arctic. Significantly, however, there are now also technological plans that involve *directly* regulating the Arctic climate. Plans to geoengineer (or ‘climate engineer’) specifically the Arctic mark out the Arctic climate as a discrete governable object on its own.

Geoengineering

Geoengineering is usually defined as large-scale and deliberate interventions in the climate system with the aim of reducing global warming (The Royal Society 2009) and can be thought of in two broad categories: solar radiation management (SRM), which works by reducing incoming sunlight, and carbon dioxide removal (CDR) techniques, which aim to remove or ‘reverse’ emissions. Research and plans for geoengineering remain mainly at the pre-field test stage and exist primarily as a ‘sociotechnical imaginary’, that is as ‘collectively imagined forms of social life and social order reflected in the design and fulfillment of [...] scientific and/or technological projects’ (Jasanoff and Kim 2009, p. 120). The visions engendered are therefore of potential consequence, not just because they may one day be implemented but also because they have effects in themselves, including, I argue, by helping to constitute the climate as a directly governable entity in certain ways.

While not a new idea (Marchetti 1977), climate engineering was until recently largely taboo and has been resisted by many scientists and policy-makers, partly due to the risks (Robock 2008) and fears that merely contemplating such methods might undermine already faltering efforts to mitigate global warming by reducing greenhouse gas emissions (The Royal Society 2009). The idea, however, has been gaining serious momentum, particularly during the last decade. Nobel laureate in chemistry Paul Crutzen (2006) is widely regarded as having opened the current debate with an editorial recommending research into SRM in 2006. A meeting of leading scientists at Harvard in 2007 broke more ice in the scientific community considering options to cool the atmosphere directly or use technologies to reduce carbon dioxide concentrations (Kintisch 2010, pp. 4–5). In 2009, a landmark Royal Society report was published explicitly rejecting the taboo on the grounds that without further research, potentially beneficial options might be ignored and bad proposals may be taken forward untested. The report recommended carefully governed research in the event that a climate emergency does develop that requires immediate or extraordinary interventions in the future (The Royal Society 2009). In 2015, the US National Research Council published a two-volume report on the two major types of climate engineering: SRM and CDR (National Research Council 2015). It warned of serious risks and shortcomings but also endorsed further research.

The most popular framing has been the ‘plan B’ framing (Brahic 2009; Luokkanen et al. 2013) which maintains that it is a fallback option should the preferred strategies of mitigation and adaptation fail. This justifies research in climate engineering as an insurance plan that, while risky, might one day be needed in the case of dramatic or accelerating climatic change. Major risks associated with SRM include adverse effects on the ozone layer and changes in precipitation, raising fears of droughts and floods. CDR methods are often thought to be costly and in many cases slow as the sheer amounts of carbon that need to be recaptured are huge. A range of political risks have also been highlighted including that of ‘moral hazard’ whereby geoengineering might lower individual, political, and economic incentives to pursue effective mitigation measures (Gardiner 2011), but also ‘security risks’ whereby direct intervention in the climate system could create the basis for antagonistic relations or even conflict around climate politics (Corry 2014b).

Arctic Geoengineering

The Arctic has played a specific role in geoengineering discourse functioning as a kind of virtual experimental site for research into and debates about geoengineering. Models have been run, and engineering scenarios have been constructed that would specifically alter the Arctic climate (Caldeira and Wood 2008; Robock et al. 2008) or at least are justified with reference to tipping points in the Arctic (e.g. Davidson et al. 2012). Joshua Horton (2011, p. 60) observed that ‘one of the most common proposals for SAI (stratospheric aerosol injection) involves regional deployment designed to stabilise climate in the Arctic, including the Greenland ice sheet’. At a workshop in 2007, early experimentation was suggested ‘first on the Arctic with a particulate shield experiment’ to help ascertain whether stratospheric particle injection would increase or decrease snowfall in the region and hence whether the Albedo—the Earth’s reflectivity—could be successfully manipulated (Lane et al. 2007). The experiment would also show ‘how well atmospheric circulation patterns confine most of the deployed particles to the Arctic’ (Lane et al. 2007, p. 5), reflecting an interest in limiting the effects to the Arctic region. Other methods such as ocean whitening are also being considered as a means to re-establish Arctic sea ice volumes (Cvijanovic et al. 2015).

This all suggests that the Arctic climate is being considered a discrete entity or object of sorts. In fact, although these particular methods and

aims are novel and still evolving, interest in engineering the Arctic climate has a longer pedigree. US officials speculated during the 1950s about ‘the use of nuclear explosives to warm the arctic climate via the creation of infrared reflecting ice clouds’ (Keith 2000, p. 253), while their Soviet counterparts showed ‘persistent interest in the grand project of removing the arctic sea ice to warm Russia’ (Keith 2000, p. 251). The Soviets apparently thought that ‘the annihilation of the ice cover of the Arctic would be permanent: once destroyed it would never be re-established’ (Keith 2000, p. 251). Historian Jim Fleming (2010, p. 201) dates the idea of deliberately melting the Arctic ice cap to the 1870s when a geologist at Harvard suggested ‘channelling more of the warm Kuroshio Current through the Bering Strait’ by suspending a giant rope to slow down the southward flow of the Labrador Current ‘causing it to deposit its sediment load’. This operation, it was thought, would double the ‘life-sustaining power of the lands north of forty degrees of latitude’ (Fleming 2010, p. 201). The novel by Jules Verne, *The Purchase of the North Pole* (1889), in which American investors plan to melt the ice cap to gain access to lucrative coal and mineral deposits by eliminating the tilt of the Earth’s axis, may well have been inspired by such plans (Fleming 2010, p. 202).

Current plans to govern the Arctic are of course focused on cooling rather than thawing it. It is symptomatic that Paul Crutzen’s taboo-breaking 2006 article on geoengineering also singled out the Arctic as both a reason for geoengineering as well as a theatre for practicing it. Crutzen cited research according to which clearing up air pollution would paradoxically contribute to global warming by lowering the scattering effect of sulphate particles currently being emitted inadvertently from fossil fuel burning (see also Chap. 12 by Cavazos-Guerra et al., this volume). Removing the sulphur pollution would lead to ‘a decadal global average temperature increase by 0.8 K on most continents and 4 K in the Arctic’, Crutzen wrote (2006, p. 211), pointing specifically to the risk of Arctic feedback mechanisms: ‘Climate heating is known to be particularly strong in arctic regions [...], which may trigger accelerated CO₂ and CH₄ emissions in a positive feedback mode’ (2006, p. 217). Around the same time, a climate scientist with an interest in geoengineering, Michael MacCracken (2006, p. 241), was speculating that:

injecting a relatively large amount of aerosols into the Arctic lower stratosphere, where the aerosols might persist for only 6 months and so not impact winter ozone levels, might be used to reduce the solar radiation enough that

it would promote an earlier icing up of the Arctic Ocean that would in turn induce further cooling.

The political salience of geoengineering the Arctic is also rising, and the debate is spreading. As a governance-object emerges, it provides a discursive space in which groups can take up positions in relation to it. Sometimes identities are changed or even constituted in relation to a governance-object they become oriented towards. For example, there are now anti-geoengineering pressure groups such as Hands Off Mother Earth and the Canadian ETC Group who each point to geophysical and political risks as well as ethical objections to geoengineering. The Canadian ETC Group compared it to genetically modified organism technologies criticising the paradox of ‘men from northern industrialized countries’ deciding on something ‘so universal in its implications’ (ETC Group 2010, p. 39). Opposition typically centres on the environmental risks such as changing rainfall patterns, and political risks including ‘moral hazard’, as well as on the difficulty of governing geoengineering technologies in broadly democratic ways (Robock 2008; Szerszynski et al. 2013; Hulme 2014). Supporters counter that all strategies carry risks, including refraining from geoengineering, suggesting that a precautionary approach could also justify climate interventions rather than the opposite (Reynolds and Fleurke 2013).

Notably there is now also a pressure group devoted to arguing in favour of urgent action including Arctic geoengineering in order to halt sea ice decline and beginning methane seepage. The organisation Arctic Methane Emergency Group (AMEG) is run and supported by a mix of scientists and non-scientist campaigners who read the signals from the Arctic as a kind of ecological revelation. They describe themselves as:

a group of determined scientists, engineers, communicators and others, dedicated firstly to establishing what really is happening to our planet (especially in the Arctic) using best scientific evidence, secondly to finding effective and affordable means to deal with the situation, and thirdly communicating these matters to authority and the general public. (AMEG 2015)

One member, Peter Wadhams, is an expert in Arctic sea ice who in 2011 predicted the first ice-free Arctic summer to happen in 2015. Wadhams cited a model which, unlike the 2007 Intergovernmental Panel on Climate Change (IPCC) report, also took thinning of Arctic ice into account. This

model ‘is really showing the fall-off in ice volume is so fast that it is going to bring us to zero very quickly. 2015 is a very serious prediction and I think I am pretty much persuaded that that’s when it will happen’ (Collins 2011).

Other models indicate that summer sea ice will survive until around 2030 but AMEG argues that such estimates do not factor in positive feedbacks such as declining albedo from shrinking ice. They claim that ‘emergency intervention is needed both to save the Arctic sea ice and to reduce the risk of catastrophic global warming from a sudden large emission of methane’ (AMEG 2011). To lend their position authority, they cite United Nations Secretary General Ban Ki-moon’s statement that the state of the global climate ‘is an emergency and [...] we need emergency action’ (AMEG 2011). However, AMEG is more specific, pointing to Arctic sea ice and Arctic carbon emissions as a key independent threat to the global climate: ‘the meltdown of the Arctic summer sea ice, with the Arctic already emitting additional methane to the atmosphere, must be declared a planetary emergency’ (AMEG 2011).

AMEG also stands out in terms of what should be done. Whereas the more mainstream plan B framing posits geoengineering as a possible future option worthy of investigation *just in case*, for AMEG, it is a pressing need requiring massive diversion of military and aerospace funding ‘to the great enterprise of stabilizing the Arctic, protecting our planet, and rescuing our future. [...] The immediate emergency response is to stabilize Arctic sea ice and Arctic carbon by cooling the Arctic. This is certainly doable and can be done safely’ (AMEG 2011).

Not all observers are sanguine about the feasibility of cooling the Arctic. Until recently, research remained of a largely theoretical nature. Further research and plans to intervene deliberately in the Arctic climate are highly likely however, and with the growing knowledge and monitoring of the Arctic climate, and political positions forming around governing it, we can say that the Arctic climate is becoming a governance-object—distinct, malleable, and increasingly politically salient.

THE ARCTIC CLIMATE IN A GLOBAL POLITY

In this final section, I consider some implications of how the Arctic climate is being rendered governable for our understanding of the Arctic as a globally embedded space.

Firstly, it is important to note that in geoengineering imaginaries, the Arctic is primarily becoming politically salient in terms of its role in the

global climate system. In particular, the purpose of engineering the Arctic climate is expressly to prevent adverse *global* effects such as rising global sea levels and extreme weather. Actual plans and operations may focus on preserving the sea ice or other features of the Arctic deemed desirable, but the rationale behind this is not primarily to govern the Arctic in and for itself. For example, although AMEG members are scientists and experts in Arctic conditions and processes, they do not claim to speak for the Arctic as such, but for a wider global constituency. Thus, AMEG's declaration at the 2014 UN Climate Change Conference (COP20) in Lima was clear about the purpose of intervening in the Arctic: 'The Arctic must be cooled, ASAP, to prevent the sea ice disappearing with disastrous global consequences' (AMEG 2014). Governing the Arctic is increasingly becoming part of the politics of ordering the global (see also Currier 2012).

Secondly, although it raises the Arctic's global profile, local interests will not necessarily be well served by the Arctic climate becoming something designed to serve other potentially faraway purposes. Once the Arctic is rendered governable in global terms, there is no *territorial* limit to the claims that may be laid on it; for example, China has sought and been granted such status, as have non-governmental organisations such as the World Wide Fund for Nature (WWF) and international organisations such as UNDP (see Chap. 10 by Wehrmann, this volume).

This is not to claim that all members of the global polity have equal power over the Arctic. Institutional, legal, and political barriers persist, as do differences in resources and political motivation. For example, the permanent members of the Arctic Council decide who gains access or observer status to their forum. Actors such as the European Union and Greenpeace have applied for observer status but not been granted it. Saying that an actor is peripheral or weak does not, however, imply that they are outside the polity. Although institutions may be closed, membership of a *polity* (as defined above) is open, since actors who identify with governing something—in this case the Arctic—are in a sense free to declare their interest and recognise it as a governable object with high salience to them. Outside the official institutions, as we have seen, AMEG has staked a public claim to speak about the Arctic climate. Inequities are thus *internal* to the polity of actors who all recognise the Arctic as potentially governable and stake some kind of claim to governing it.

Thirdly, it is significant that the Arctic climate is being assembled as a governance-object in large part through expert framings and scientific knowledge processes such as measurement, modelling, and

experimentation. As with climate change in general, although expert discourse has helped the Arctic to gain high political salience (e.g. through publication of shrinking sea ice cover or crumbling glaciers), the Arctic is simultaneously depoliticised by being construed as a purely technical zone of intervention. Considerations of power relations and different interests have been relatively peripheral in much geoengineering work. Even geopolitical and strategic questions concerning the Arctic that would be crucial to the feasibility of any form of experimentation, let alone implementation of geoengineering, are routinely excluded from the technology-led discourse on Arctic geoengineering. Deciding on a governance-structure for Arctic geoengineering is of course outside the remit of scientific papers focused on the climate system itself, and some explicitly assume a unitary and rational implementing actor for the sake of the modelling geoengineering scenarios (Keith and MacMartin 2015, p. 201). While understandable, this still leaves the technologies politically decontextualised while they are deemed feasible (or not).

One Canadian sustainability-oriented think tank does connect wider Arctic politics with geoengineering. In the paper *Desperate Times, Desperate Measures: Advancing the Geoengineering Debate at the Arctic Council*, the International Institute for Sustainable Development identifies the Arctic states as having a duty to investigate geoengineering:

Being on the front line of impact from both climate change and potential geoengineering intervention, the Arctic countries must not only wake up to challenges that come with the prospect of geoengineering, but must recognize that they have a special responsibility to carry out such investigation. (Egede-Nissen and Venema 2009, p. 2)

This posits responsibility for geoengineering with the territorial Arctic states, although it also raises a swathe of questions about accountability and risk. But such relative specificity is rare, and in general, the Arctic climate has been rendered an object of governance without clarity about the subjects doing the governance or the directly affected parties such as Arctic populations and indigenous peoples. A technocratic global governance-object thus co-exists with a relative silence about responsibility and rights to govern and be heard.

To be sure, the Arctic is not purely a *global* governance-object. Some environmental groups such as Greenpeace see Arctic governance

as necessary to preserve the natural systems of the region for their own sake (Greenpeace 2012). Indigenous organisations focus on the human communities that live there. However, even some of these local rationales sometimes fall back onto a globalist agenda. Environmental groups expand their moral or political claims, for example, concerns for polar bears, by linking them to a global entity such as climatic stability and global prosperity. Arctic governance of, for example, sea routes is also sometimes seen as a means to prevent not just a compromising of the fragile Arctic nature, but also a wider (perhaps global) conflict between the major powers including Russia and the USA, again making the Arctic something that should be governed not actually for its own sake, but for a greater purpose (world peace in this case).

This combined global and technocratic construction of the Arctic climate as governable reflects some of the wider frameworks of understanding that surround geoengineering and the debate about climate change, especially clear in the idea of the ‘Anthropocene’. This is the idea that humanity is now such a force of nature that the Earth has left the relatively stable Holocene epoch and entered a new geological ‘age of man’. Paul Crutzen (2002, p. 23) mentioned geoengineering in passing as he famously introduced the concept of the Anthropocene as a tool for ‘scientists and engineers’:

A daunting task lies ahead for scientists and engineers to guide society towards environmentally sustainable management during the era of the Anthropocene. This will require appropriate human behaviour at all scales, and may well involve internationally accepted, large-scale geo-engineering projects, for instance to “optimize” climate.

Not only is it decontextualised experts that are to do the guiding, there is also assumed to be a singular ‘society’ for whom they do it. As others have pointed out, the Anthropocene concept posits the *species* as the relevant category of agency and thereby ignores stark class and international differences and injustices in culpability for climate change and control of the technology (Malm and Hornborg 2014). Similarly, the politics of who would be geoengineering the Arctic, in whose particular interests, with what claims to legitimacy, and against which kind of opposition is written systematically out of the conversation.

CONCLUSION

This chapter has tried to depart from usual IR approaches that take particular actors or institutions as their point of departure, and instead foreground objects of governance. It has argued that besides the physical opening up of the Arctic, the Arctic is being rendered governable in new ways. This has a number of implications for the Arctic as a globally embedded space. While increasingly seen as distinct, malleable, and politically salient, the Arctic climate is being cast as a *global* governance-object where the rationale of government has not directly to do with improving the Arctic itself, but rather pursuing other ‘global’ goals and aims.

Being part of a global polity like this means that the Arctic becomes a potential target of a wider range of actors than just those geographically close by. States and other groups physically remote from the Arctic feel emboldened to claim their stake in the Arctic. This takes the Arctic centre stage of politics while simultaneously marginalising the political aspects of it. It shifts the gaze of analysts and actors away from specific interests and localities of political action to an abstract ‘global’ perspective. The situated and present-day politics of Arctic geoengineering thus easily become blurred by the grand sweep of globality, species-agency, planetary aggregation of problems, and epochal geological time frames. In a nutshell, there is a danger that the slogan ‘think globally, act locally’ has a darker incarnation as a technocratic obfuscation of particularistic interests legitimising interventions in somebody else’s locality.

In this chapter, examining how the Arctic is being rendered governable in this way has aimed to highlight the globalist presumptions of geoengineering and bring into focus how technological research and scientific debates about (Arctic) geoengineering are an integral part of a political process, rather than a politically innocent research agenda. Treated as a distinct entity that can meaningfully be spoken about and potentially operated on (objectified), the Arctic climate potentially becomes more amenable to governance and orderings. The more it is constructed as potentially governable, and the more tools that are developed that are supposed to allow manipulation, the more facilitating conditions there are for actors to make governance-claims and take up subject-positions in relation to the Arctic. In that sense, research and debate about geoengineering the Arctic are not only an ‘insurance policy’ but also politically constitutive: effectively an envisioning of future orders and relationships—between ice, sea, people and climate, and between Arctic and global politics.

This absorption of the Arctic in global politics may ultimately also have implications in terms of institutions. Just as infrastructural globalism such as meteorology and climate science has led to the construction of the World Meteorological Organisation, the UN Framework Convention on Climate Change (UNFCCC) and IPCC, so building the conceptual and physical structures for geoengineering could provide an occasion to create or adapt institutions for governing it. Calls for the Arctic Council to take it upon itself to oversee the geoengineering of the Arctic, and other proposals for governance-structures for geoengineering are signs of this tendency. Once an entity like the Arctic climate enters the political sphere as a target of operations, plans can begin to be made for its governance, inevitably in line with specific interests. Clarity about whose specific interests are to be prioritised should therefore accompany debates about Arctic geoengineering, irrespective of how ‘global’ the rationale is claimed to be.

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PART 2

Institutional Politics: How to
Organise a Global Arctic?

Coping with Institutional Challenges for Arctic Environmental Governance

Christoph Humrich

INTRODUCTION: ARCTIC ENVIRONMENTAL GOVERNANCE IN AN EMBEDDED AND EMBEDDING SPACE

The first comprehensive formulation of Arctic international environmental cooperation principles and goals, the 1991 *Arctic Environmental Protection Strategy* (AEPS [1991](#)), already stipulated that many environmental problems facing the Arctic originated from outside the region. However, its signatories, the eight states with territory above the Arctic Circle, had no doubt that environmental protection in the Arctic would also generate many benefits beyond the region because of the Arctic's global significance in geophysical and biological regard. Consequently, the AEPS was first and foremost focused on its signatories' action within the region. Nevertheless, it not only acknowledged that many multilateral environmental agreements applicable to the Arctic existed and could be used to tackle environmental problems there, but also asked the Arctic states to work together to influence the further development of respective international and global instruments.

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Since the signing of the AEPS in 1991, three tightly interwoven developments occurred which changed the institutional arrangements of Arctic international environmental cooperation. The first is the unprecedented increase in the number of multilateral environmental agreements and the emergence of global environmental governance in the wake of the United Nations Conference on Environment and Development (UNCED) in 1992 (see Chap. 2 by Kristoffersen and Langhelle, this volume). The second is the evolution of international environmental cooperation on the regional level. With the founding of the Arctic Council (AC) in 1996, the initial environmental cooperation under the AEPS was incorporated into a broader and increasingly institutionalised Arctic environmental governance approach (Scrivener 1996). Finally, as attention for the Arctic region grew, the AEPS and later the AC did not remain the only institutions active in the region. New subregional institutions for environmental cooperation were created, for instance in the Barents Euro-Arctic Region. Existing subregional institutions with reach into the Arctic put stronger emphasis on their policies with respect to the region, for example the Commission of the *Convention for the Protection of the Marine Environment of the North-East Atlantic* (OSPAR Convention), the European Union (EU), or the Nordic Council. In short, an Arctic governance architecture emerged, in which the region is both an embedded and an embedding space. In this space, the AC established itself as ‘the pre-eminent high-level forum of the Arctic region’ (Arctic Council 2013). As Olaf Stokke (2009, p. 350) succinctly formulated, the question thus arises: ‘How do activities under the Arctic Council interact with narrower, sub-regional regimes in the North and with institutions whose spatial ambit covers but exceeds the Arctic?’ Immediately connected to that is also the question about the effectiveness of this pre-eminent forum in regard to Arctic environmental governance. Stokke (2007a, b, 2009) has analysed what he calls the institutional interplay of Arctic environmental governance and its effectiveness in several studies with collaborators. In Stokke’s analysis, interplay and effectiveness are conceptually linked in the notion of a governance niche, which an institution needs to find within a pre-existing or evolving governance architecture. The niche he sees for the AC is primarily cognitive: The AC engages in knowledge production, not in the generation of regulatory norms. According to Stokke, the AC has also been quite successful in mobilising political actors and contributing to region-building. By contrast to proponents of an Arctic treaty, Stokke (2011, p. 847) does not see any comparative advantage of the AC

in regard to regulation: In its regional scope it 'is either too big or too small' to deal with relevant regulatory problems.

Yet, also Stokke's notion of the governance niche and its application to the AC have at least two problems: The concept's ecological connotation might lead one to assume some sort of quasi-natural process, in which an equilibrium state emerges through niche selection *by* institutions and natural selection *of* institutions. Such an understanding downplays the significance of active interplay management. Following from that, the description of the AC's governance niche does not leave much chance to analyse and understand the AC as the pre-eminent institution for Arctic environmental governance, because a pre-eminent institution would certainly be expected to actively take a role in managing institutional interplay in the region.

If one looks for analytical cues in regard to the AC's effectiveness as a pre-eminent regional forum and active manager of interplay, one is surprised how little this role is considered in the literature despite the fact that the AEPS and the AC have recognised the Arctic as embedded and embedding space for governance institutions early on. While proponents of an Arctic treaty hope to escape the necessity of interplay management by integrating all regulatory issues in a legally binding document, Stokke and other analysts of actual governance dynamics seem to assume that institutions by necessity find their respective niche and thus active interplay management will not be one of the most pressing tasks. Moreover, also the numerous evaluations of the AC's performance rarely if ever take up interplay management as a governance activity of the AC (see Nilson 1997; Haavisto 2001; VanderZwaag et al. 2002; Koivurova and VanderZwaag 2007; VanderZwaag 2011; Kaankaanpää and Young 2012; Fenge and Funston 2015).

In what follows, I provide some exploratory thoughts on how to analyse the AC as the pre-eminent forum in a globally embedded and embedding regional space. I will do so by slightly refocusing the perspective Stokke and others have applied in four ways. First, I will not focus at institutional interplay, but at the fragmentation of the governance architecture. Thus, rather than looking from the bottom of one institution up to the architecture or on the intermediate level of interaction between institutions, I take a top-down or holistic perspective as an initial step. Second, I do not accept the self-chosen niche of the AC within that governance architecture, but rather ask which functions the AC would need to perform in order to actively manage interplay as the pre-eminent regional forum. Within the limits of this chapter, I can only present these functions

in a highly stylised way. From the respective environmental governance literature, at least six governance tasks can be distilled. Because terminology varies, I rename the tasks in a stylised way to make my point here: I argue that the AC needs to generate and maintain *commitment* of relevant actors, ensure the broadening and deepening of *collaboration* between various types of actors, achieve *coordination* between different levels and sectors of governance, further facilitate *cooperation* for regulatory norm generation, manage *compliance* with these norms, and finally engage in some form of *controlling* in which goal achievement in a constantly changing environment is assessed and reflective feedback is provided in order to adjust policies if necessary. My third refocusing then zooms in on the institutional challenges for the AC arising from the functional tasks and not on those connected to its self-selected niche. Again, I identify these challenges in a highly stylised way as *inclusion* of actors, *integration* of issue areas, and *information* provision about policy implementation and impact. Finally, I propose to use the notion of *forum* not just as the AC's self-description, but also as pointing to actual deliberative processes. This leads to a consideration of the significance of such processes for coping with institutional challenges.

THE FRAGMENTED ARCHITECTURE OF ARCTIC ENVIRONMENTAL GOVERNANCE

I now briefly turn to the character of the Arctic governance architecture in terms of fragmentation (Biermann et al. 2009; Humrich 2013). I use the governance architecture for marine environmental protection in the Arctic as an example. At least two reasons speak in favour of that: On the one hand, it shows very well the character of the Arctic as embedded and embedding space from which part of the fragmentation results and which requires the active management of institutional interplay. On the other hand, the AC has created a Task Force on Arctic Marine Cooperation to 'assess future needs for a regional seas program or other mechanism [...] for increased cooperation in Arctic marine areas' (Arctic Council 2015a, p. 11).¹ The task force itself is one outcome of the acknowledgement that the governance architecture in the marine and maritime realm can be described as 'a complicated mosaic' (Arctic Council 2009, p. 50). In regard to marine environmental protection, the AC has progressed farthest in acknowledging the fragmented nature of governance and assuming the role of an active interplay manager.

As an ocean or regional sea, the Arctic is embedded in the global marine and maritime realm. This realm is governed by the *United Nations Convention on the Law of the Sea*, which has often been described as the global ‘constitution of the oceans’ (Friedheim 1999, pp. 750–753). Below this global constitutional level, there are principles and recommendations on ocean governance agreed in global forums and contained in global functional organisations and treaties, which govern the marine and maritime realm. To the former belong the respective parts of the final documents of the global United Nations environmental conferences, for instance UNCED’s outcome. To the latter one can count first and foremost the *International Maritime Organization* and the several dozen functional treaties and other documents adopted by its assembly. However, marine biodiversity, marine pollution and marine resource use are also covered by other global functional treaties, like the *Convention on Biological Diversity* of 1992, the *London Dumping Convention* of 1972 or the *International Convention for the Regulation of Whaling* of 1946.

As part of the global marine realm, the Arctic also embeds other regional and subregional institutions or parts of these. The previously mentioned examples are the multilateral cooperation of the *Barents Euro-Arctic Council* (BEAC) established in 1993 and the 1992 OSPAR Convention, which with its Area I reaches into the Arctic Ocean. With its maritime and marine policies, its Northern Dimension policy, and its participation in the AC and BEAC, also the EU engages in activities with Arctic elements and impacts.

The five Arctic coastal states, the USA, Canada, Denmark/Greenland, Norway and Russia, also constitute a subgroup embedded in the Arctic, because the Arctic Ocean of course is only a part of the region. The Arctic Five discussed among them sovereignty and jurisdictional issues emerging in the Arctic Ocean, and have in July 2015 also signed a declaration on High Arctic fisheries (Molenaar 2015). In addition to these multilateral subregional efforts come the various bilateral agreements on environmental protection or marine resource use between individual Arctic states, for instance the various agreements between Norway and Russia pertaining to the Barents Sea (Stokke et al. 1999).

At the regional level, the AEPS and AC included marine environmental governance as part of their portfolio as well. While the Working Group on the Protection of the Arctic Marine Environment certainly is the main institutional site for respective activities, all other Working Groups have been concerned with marine environmental issues as well. The Working

Group on Emergency Prevention, Preparedness and Response for instance has also covered marine oil spills, and the Conservation of Arctic Flora and Fauna (CAFF) Working Group has started the first steps towards an Arctic network of marine protected areas. Under the auspices of the AC, numerous guidelines and recommendations with relevance to marine environmental protection have been concluded, as well as two legally binding agreements on maritime search and rescue (SAR) (2011) and marine oil pollution, preparedness and response (2013).

Summing up, the different levels of governance and the differing memberships and scopes of the respective institutional arrangements relevant for Arctic marine environmental governance involve different sets of actors and a plethora of sometimes differing norms. Thus, as Oran Young has argued, on a continuum from integrated to fragmented, ‘it is undoubtedly the case that the Arctic governance system at present is located relatively far toward the fragmentation end of the spectrum’ (Young 2011, p. 330).

FUNCTIONAL TASKS FOR ENVIRONMENTAL GOVERNANCE IN A FRAGMENTED GOVERNANCE ARCHITECTURE

Which functional tasks result from the fragmented governance architecture, if one sees the AC as pre-eminent regional institution and active manager of interplay? As mentioned above, the literature on international institutions provides at least six functional tasks. Two relate to getting actors involved, two to the policy-making process and two to policy implementation.

Getting the actors involved requires first the generation and maintenance of *commitment* and then the deepening and broadening of *collaboration* between the decision-makers as governance authors and stakeholders and rights holders as governance addressees.

Fragmented governance architectures provide ample opportunity for forum-shopping or avoidance of costly governance. It is therefore necessary that all relevant actors are committed to a core institution and its principles (Jacobson and Brown Weiss 1998; Biermann et al. 2009). In a sense, the AC itself came into being only after commitment had successfully been generated: As a global superpower, the USA was reluctant to be identified with a particular region (Scrivener 1996). However, as the AEPS and AC evolved, the USA was drawn into the emergence of a common Arctic identity.² The AC’s activities of knowledge generation about the region helped to generate this common identity and then to maintain the commitment to the

AC as pre-eminent regional forum (Stokke 2007b; Knecht and Keil 2013). This commitment so far even survived the current crisis between Russia and the West over Ukraine that began in February 2014. However, the pre-eminence of the AC is challenged by the Arctic Five particularly in regard to ocean governance (Pedersen 2012). Their constitution as a subgroup in their 2008 and 2010 meetings as well as their most recent exclusive activities in regard to fisheries (Molenaar 2015) cast doubt on their commitment to the AC. Moreover, the question is to what extent the AC is built on a commitment to common principles, which are sufficient to guide governance. The broad sustainable development agenda of the AC has made it possible to get many different interests involved. In this sense, it was generative of commitment (Young 1996). This, however, worked to the degree that the concept remained rather undefined and thus could be interpreted differently (Langhelle et al. 2008). The question is whether the commitment can be maintained when the concept needs to become operative.³

When it comes to the second task, collaboration, the AC fares equally well on first view. On second view questions emerge. Research on international environmental governance has frequently led to the insight that broad participation of stakeholders and rights holders as well as of the addressees of governance has a positive influence on effectiveness (Raustiala and Victor 1998; Young 1999; Haas and McCabe 2001). The AC has not only provided a unique way of collaboration with the indigenous peoples of the Arctic by making them Permanent Participants (PPs) of the AC (see also Chap. 3 by Shadian, this volume; Koivurova and Heinämäki 2006), but in general has been very successful in mobilising interest and support as growing numbers of AC observers and participants in Arctic events show (Stokke 2007b). Moreover, the establishment of the *Arctic Economic Council* at the end of 2014 is a step to broaden and deepen collaboration with business actors. However, the indigenous peoples point to a lack of human and monetary resources to adequately participate in the fragmented institutional landscape of Arctic governance. The northern regions and the non-indigenous Northerners as well as other non-governmental observers are still not drawn much into the policy process, or even explicitly left out (Steinberg and Dodds 2015). While the AC has developed new rules for observers to cope with the growing interest in its work, it has not done too well in including non-Arctic state observers into its collaborative exercises (Graczyk and Koivurova 2014). Particularly, the negotiation of the legally binding SAR and oil pollution agreements and the meetings of the Arctic Five rather created the impression of a

reduction of collaboration with other actors when it comes to policy-making (Wood-Donnelly 2013).

This directly leads to the next two functional tasks, both of which are related to the policy-making process: coordination and cooperation.

Coordination points to the core of interplay management in a fragmented governance architecture (Oberthür 2009; Humrich 2013). Vertical coordination is required between the different levels of governance; horizontal coordination between regulatory sectors so that the problems defining an issue area can be tackled more effectively by exploiting synergies and avoiding contradictions or conflict between norms. For vertical coordination, the AC has employed two strategies. On the one hand, relevant regulatory instruments on all levels have been identified and the implementation of their norms by the Arctic states urged in respective AC documents.⁴ On the other hand, the AC member states have chosen to coordinate themselves in regard to their position in other forums in order to influence policies there. While this has been successful in some cases (see Chap. 6 by Selin, this volume; Stokke 2007b), it has not been of much consequence in others (as the drag in regard to the legally binding Polar Code might suggest)—except maybe for the fact that the Arctic states have been recognised as a regional grouping. Horizontally, the lack of coordination between issue areas within the AC and between its Working Groups has frequently been criticised (Huebert and Yeager 2008; Fenge and Funston 2015). However, as stated above, progress has been made particularly in regard to marine environmental governance with the Arctic Marine Strategic Plans (AMSP) (Arctic Council 2004, 2015b), which integrate efforts from all of the AC Working Groups.

As Timo Koivurova (2009) has shown, the largely unsuccessful efforts to create a network of Arctic marine protected areas through activities of CAFF until 2009 can partly be explained by the vertical and horizontal fragmentation of the respective governance architecture. The AC now pursues this goal further under the new AMSP, but no new vertical coordination efforts have been undertaken. Overall, a recent article maintains that the Arctic states ‘have not attempted any systematic coordination of national and regional efforts to manage challenges facing the Arctic Ocean’ (Baker and Yeager 2015, p. 361).

As it is stated in its founding Declaration, the AC certainly has facilitated cooperation among the Arctic states, but not in the more demanding sense of regulatory output. The AC has been called a *policy-shaping* rather than a *policy-making* governance arrangement (Kankaanpää and

Young 2012), and as Stokke has argued accordingly, the governance niche of the AC does not entail cooperation in the sense of producing regulatory norms. On the contrary, while the AC has taken up the regulatory context of binding multilateral instruments, like the *Espoo Convention* of 1991 in its recommendations on Environmental Impact Assessment, it has produced only recommendations of a soft-law nature (Koivurova 2002). However, in light of the environmental and economic changes occurring in the Arctic, many have argued that increased cooperation in the sense of regulatory output has become a necessity (already VanderZwaag et al. 2002; Huebert and Yeager 2008; Casper 2009). While the recent negotiation and conclusion of the two binding agreements under the auspices of the AC cast some initial doubt on the continuing validity of Stokke's assessment, these do not much more than to repeat existing normative commitments of the Arctic states (Kao et al. 2012). Rottem (2015, p. 56) also concludes that the agreements are mostly symbolic and have not led to any change in operational conditions. It would thus be too early to stipulate a change in the AC's functioning. The negotiations in the Task Force on Arctic Marine Oil Pollution Prevention, for instance, have not resulted in a binding document despite the political salience of the issue. The resulting *Framework Plan for Cooperation on Prevention of Oil Pollution from Petroleum and Maritime Activities* (Arctic Council 2015c) displays rather vague and weak language as the Arctic states did not manage to go beyond the lowest common denominator.

With not much cooperation in the sense of regulatory output to speak of, the next two functional tasks, compliance and controlling, have not yet figured very prominently in AC politics. As the international governance literature pointed out, compliance needs to be managed (Chayes and Chayes 1993; Jacobson and Weiss 1998; Raustiala and Victor 1998). Moreover, for successful problem-solving governance needs a reflective component which evaluates impact and can lead to policy adjustments (Chayes and Chayes 1991; Clark et al. 2001). This is even more the case in fragmented governance architectures, where compliance with differing obligations is complex and impacts are difficult to determine. Much to the annoyance of some analysts of AC politics, however, compliance with its soft-law recommendations has mostly not been managed at all (Koivurova and Vanderzwaag 2007). The AC has produced numerous reports, which provide necessary knowledge, but these have rarely been related to state practice or reported on practices and their impact. More interesting in regard to controlling thus were the reports tasked to evaluate the AEPS's

and AC's performance (Nilson 1997; Haavisto 2001). However, these were commissioned *ad hoc* and were not part of the regular institutional process, even though they had some impact on the evolution of the institutional arrangements. If one can speak of compliance management and control, it is again in Arctic marine environmental governance where some progress has been made. The Arctic Marine Shipping Assessment has given rise to a continuous progress review in the implementation of its recommendations.⁵ For the recent *Framework for Action on Enhanced Black Carbon and Methane Emissions Reductions* (Arctic Council 2015d), an Expert Group has been tasked by the Arctic states 'to report on our collective progress' (Arctic Council 2015a, p. 8).

However, all in all there is neither much compliance management nor is there a systematic organisation of implementation review. These two mostly occur in those issue areas where the AC has also achieved some coordination with a strategy. The usually more project-driven work of the Working Groups has not given rise to follow-ups once the projects were concluded.

INSTITUTIONAL CHALLENGES FOR THE ARCTIC COUNCIL AS 'PRE-EMINENT HIGH-LEVEL FORUM OF THE ARCTIC REGION'

If the performance of the AC in regard to the functional tasks for governance is not very convincing yet, what kind of institutional challenges emerge from this insight? I argue that three particular institutional challenges arise in regard to actors, policy-making and policy implementation. These challenges are inclusion, integration, and information provision. As I show below, however, meeting these challenges is not very easy, because they entail strategic dilemmas.

Maintaining commitment and deepening and broadening collaboration requires that relevant actors are given meaningful opportunity to participate in the agenda-setting and policy-making processes, and they need to be included in a way that interests can be taken care of. This is a challenge for the AC as a governance institution, because it involves the first dilemma. If, on the one hand, effective Arctic environmental governance needs the commitment and collaboration of a broader range of actors than are currently involved, the AC needs to expand its opportunities to contribute. However, on the other hand, the more other actors are involved, the more the AC might lose its relevance for the Arctic states and the

involved indigenous peoples themselves, because their influence *in* and control *over* the policy process will decrease. Ensuring the commitment and collaboration of a wide variety of actors thus might endanger commitment and collaboration of the core regional actors. Already now there are more non-Arctic state observers registered at the AC than there are regular state members. The same kind of dilemma with regard to the non-littoral Arctic states confronted the five Arctic coastal states when they chose to meet separately on Arctic Ocean governance issues as this ensured their control over the agenda. However, they did so much to the annoyance of the three other Arctic states and other state observers (Nord 2010; Pedersen 2012; Molenaar 2015). This might create negative repercussions in the future also for ocean governance policies within the AC. The negotiation and adoption of the two legally binding agreements without participation of indigenous peoples and other interested non-state parties and non-Arctic states ensured a quick process. But it might also decrease the excluded actors' will in the long term to contribute to the governance of these topics. Moreover, the dilemma will be particularly felt with the indigenous peoples. They fear their marginalisation should more civil society organisations and non-Arctic states gain a seat at the table or more extensive participation rights as observers in the AC. Exclusion might thus preserve the AC as a regional forum, but it certainly does not further interplay management in the fragmented Arctic governance architecture.

The second institutional challenge is the *integration* of issues and levels. Vertical and horizontal coordination will be successful to the degree they manage to integrate the accords of different institutional arrangements and activities under a common set of principles. Moreover, achieving cooperation beyond the lowest common denominator will require principles as a baseline for legitimate bargains and rationales for synergistic issue linkages (Haas 1980; Keohane 1984). However, here the second dilemma arises. On the one hand, integrating levels and issues might be necessary to tackle the respective issues effectively and to avoid costly trade-offs or competing and contradicting impacts. On the other hand, of course respective principles need to be agreed on first. The more abstract the principles are, the easier it is to agree on them. Later, however, difficulties might arise when it comes to devising more concrete common policies on their basis. The more concrete the principles are, by contrast, the longer it might take to agree on them in the first place (Young 1996). The Arctic states experienced such a situation with the concept of sustainable development. In 1993, in the wake of UNCED, they introduced it as an

overarching concept for policies in their cooperation to provide a unifying and overarching frame for the initial four AEPS Working Groups and adding a developmental perspective (AEPS 1993). However, it then took almost a decade to turn it into operative guidelines and work plans for the Sustainable Development Working Group (Langhelle et al. 2008, pp. 25–30). The notion of ecosystem-based management, by contrast, is more concrete. While it now figures prominently in the AMSP, the progress of incorporating it into AC activities has been slow. Its application so far is limited to the management of marine resources and does not serve as an overarching principle.

Finally, there is the challenge arising from the functional tasks of compliance management and controlling. It is generally agreed that implementation is of central importance for the future of Arctic environmental governance, and for implementation, these two tasks are essential. Both for compliance management and controlling, it is important to know how and whether the actors are implementing or not and what impact this finally has on the problem in question. Moreover, availability of information about compliance behaviour is generally assumed to be conducive to compliance itself (Keohane 1984; Chayes and Chayes 1993). In other words, information about relevant actors' behaviour and policy impacts needs to be provided timely and reliably (Raustiala and Victor 1998; Haas and McCabe 2001). However, there comes the final dilemma. Political costs of being identified for instance as laggard in implementation might either spoil commitment to demanding standards in the first place or the willingness to set up systems of implementation review later. The success of the AC's monitoring and assessment programme has so far relied on an aggregated circumpolar perspective; that is, it has mostly refrained from identifying individual problems and policy challenges. For instance, while the AC has provided information on individual countries' black carbon and methane release, it remains to be seen whether the wording about reporting 'collective progress' in the Iqaluit Declaration of the AC (Arctic Council 2015a, p. 8) will identify individual Arctic states' success or shortfalls in this regard.

ENABLING INTERPLAY THROUGH DELIBERATIVE PROCESSES AND ACTOR NETWORKS

The dilemmas identified above make it difficult for the AC to assume the role of an active interplay manager. They explain the reluctance of Arctic states to take more decisive steps into this direction and probably

justify Stokke's focus on niche selection (2007a, b): rather than managing and forging a respective governance architecture, the states adapt to the limits and possibilities provided within the existing institutional environment. Therefore, if one wants to explore the options how to cope with these institutional challenges, the focus has to shift away from the states as actors and the AC as intergovernmental institution. I propose to refocus on deliberative processes surrounding the AC and on networks of actors, which transcend the spatial limits and scope of the AC. The AC then comes into view as a forum in a more genuine sense.

All of the AC's meetings, be it of the Working Groups or the biennial Ministerial meetings, are connected to wider actor networks via their participants. These carry information to and from the meetings and thus provide a context of deliberative processes within which Arctic policies are framed and made. While the Working Groups collect and create, test and evaluate the knowledge and information brought forward, and condense it into respective arguments about the state of the Arctic or for practical recommendations, there is also a *deliberative periphery* to the AC—what Depledge and Dodds (Chap. 8, this volume) call 'the bazaar'. Selling and buying information is certainly one main function of events like the annual Arctic Circle Assembly or the Arctic Frontiers conferences, but they, together with the numerous workshops and conventions held in virtually every Arctic state and beyond the Arctic, also explore and articulate shared social goals (in contrast to the knowledge of the Working Groups).

This periphery is connected to the Working Groups and the political level of the AC by the networks of actors present at the respective events, like the *Northern Forum*, the *Standing Committee of Parliamentarians of the Arctic*, various civil society organisations like the *World Wide Fund for Nature*, professional associations like the *International Arctic Science Committee* or the *University of the Arctic*. These networks can reach from local rights holders to global stakeholders and thus provide—albeit weak—links between fragmented levels of governance. They act as transmitters of the information from the periphery to the centre of Arctic regional governance in their function as observers to the Council (see also Chap. 9, by Knecht, this volume).

Within the deliberative periphery and these actor networks, inclusion of actors is possible. To the degree that the results of deliberative processes in the periphery gain attention at the AC level, they might be able to sustain commitment and collaboration even from those actors formally excluded from intergovernmental cooperation.

In a true bottom-up process, actors in these arenas could aim at compiling a set of agreed principles for regional governance by reviewing all the knowledge and recommendations already produced in Arctic inter-governmental cooperation. Such a set could serve as a new blueprint for coordination of levels and issues in governance. If transnational civil society actors used deliberative arenas to find compromises or even consensus which bridges conflicting interests, or if they came up with an integrated vision of the region, governments' discretion to pick and choose their issue menu could be limited, and thus cooperation beyond the lowest common denominator could become possible.

Moreover, nationally based organisations could provide at least some of the information needed for an assessment of compliance and the respective controlling. As soon as respective information is out, states' incentives would diminish to stall the pursuance of respective governance tasks.

CONCLUSION: COPING WITH THE INSTITUTIONAL CHALLENGES

The title of this chapter was deliberately chosen. It would be an illusion to assume that institutional challenges to Arctic environmental governance can be 'alleviated' or even 'done away with' in any easy way. The Arctic governance architecture will need to 'cope' with the challenges in the sense that the latter will remain for the foreseeable future and cannot be solved straightforwardly due to their dilemmatic character. Yet, the AC has managed to create commitment to regional environmental governance and mobilise respective actors successfully. Within a relatively short time, an impressive deliberative periphery surrounding regional governance has emerged. The Arctic is not only an embedded and embedding space in the geographical sense or in regard to its governance architecture. The governance of the region is also embedded in and embedding a huge and wide-reaching array of actor networks. These might provide a basis for coping with institutional challenges: The deliberative processes which these networks carry and connect can help to meet governance tasks without stumbling into the dilemmas Arctic state governments and the AC's PPs are facing. This, however, requires that the respective actor networks and events become more mindful *of* and more consciously reflect *on* the fragmented nature of the Arctic governance architecture. They could then engage in more goal-oriented and coordinated action to tackle the

challenges of environmental governance in the Arctic as an embedded and embedding region.

NOTES

1. The topic is among the expressly stated goals of the US chairmanship until 2017.
2. The wording from the United States' Arctic policy documents from 1994 (United States 1994) and from its successor (United States 2009) is revealing. The former does not yet make a distinction between the Arctic and Antarctic as spheres of interest to US foreign policy, the latter by contrast frames the US 'as an Arctic nation'. In 2010, it surprisingly was the US which was most insistent that the exclusive meetings of the five Arctic Ocean littoral states should remain the exception and that the Arctic Council was the primary governance forum (Pedersen 2012, p. 152).
3. In regard to Arctic governance, Young (1996) was sceptical about the merits of sustainable development from the beginning. In regard to global environmental politics, more recently Bernstein (2012) and Viñuales (2013) have concluded that sustainable development is not able to maintain sufficient commitment for implementation.
4. This has been the case for instance in the Arctic Ocean Review as well as in the Arctic Marine Shipping Assessment (AMSA).
5. See the 'status of implementation' reports for the AMSA follow-up on the PAME homepage: <http://www.pame.is/index.php/projects/arctic-marine-shipping/amsa/amsa-documents> (last accessed 15 October 2015).

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Global Environmental Governance and Treaty-Making: The Arctic's Fragmented Voice

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INTRODUCTION

The Arctic has witnessed a considerable increase in cooperation over the past three decades (Young 1998; Byers 2013). Since the early 1990s, environmental issues with important human health and developmental consequences have entered the pantheon of high-level circumpolar politics and policy-making. Alongside these regional actions, the Arctic attracts attention in many forums outside the region. As a result of the Arctic being a 'globally embedded space' (see Chap. 1 by Keil and Knecht, this volume), circumpolar environmental issues and actors are part of debates and decision-making in multiple arenas of global multilevel governance.

Analysts and policy-makers point to the importance of the Arctic as the metaphorical canary in the coalmine of global climate change and other environmental trends (Nilsson 2009; Duyck 2012). Others invoke the idea of an 'Arctic Messenger' issuing warnings of human folly and hubris of ignoring evidence and consequences of Arctic environmental change

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(Stone 2015). Arctic countries and non-state groups invoke the fact that the Arctic is a highly ecologically sensitive place where signs of important changes can be detected early to expand regional cooperation to reduce environmental and human health risks from hazardous substances and climate change. In parallel, they seek to promote an Arctic agenda in international forums. However, the success of these external efforts has been mixed at best.

The variation in Arctic influence across international issue areas—and its consequences for the ability to address Arctic environmental problems—warrants more attention. With its focus on the Arctic in environmental governance, this chapter examines the role of Arctic issues and actors in two global treaties on dangerous chemicals and heavy metals—the 2001 Stockholm Convention on Persistent Organic Pollutants (POPs) and the 2013 Minamata Convention on Mercury—and the 1992 United Nations Framework Convention on Climate Change (UNFCCC) and its related agreements. It pays particular attention to the roles and activities of the Arctic Council members (eight Arctic countries and six indigenous peoples groups), including different levels of collaboration and disagreements under the three conventions.

The chapter begins with an overview of Arctic environmental governance. Next, it examines Arctic Council members' influence on treaties on POPs, mercury, and climate change based on a combination of three factors: (i) the degree to which they can develop shared interests in preferred policy responses (*shared Arctic interests*); (ii) their ability to advance a policy approach that fits global political agendas and the interests of countries in other regions (*policy approach that fits global political agendas*); and (iii) their capacity to find consensus on treaty-specific policy issues with other countries (*treaty-specific consensus with other countries*). The chapter ends with a few remarks on the Arctic's fragmented voice, comparing similarities and differences across the three empirical cases.

ARCTIC ENVIRONMENTAL GOVERNANCE

The highly charged military situation during the Cold War prevented the development of meaningful circumpolar institutions until the East–West conflict ended that had dominated much of the post-World War II period (Young and Osherenko 1993; Young 1998). This momentous and sweeping political shift allowed for expanding Arctic cooperation across several policy areas. One of the more prominent ones concerns environmental

and human health issues associated with hazardous substances and climate change in a broader context of sustainable development. In fact, today this is one of the areas where we see the highest degree of institutionalised governance in the Arctic, and where Arctic actors most actively engage external forums alongside radioactive waste management in the Barents Sea (Stokke 2000).

Starting in the late 1980s, Arctic countries in close collaboration with non-state groups have established a set of institutionally comprehensive programmes and forums to address technical, scientific, and political issues of circumpolar importance. Many of these initiatives have been deliberately linked and financed by leader states in support of policy change, a strategy also visible in other cases of regional environmental cooperation on, for example, air pollution abatement and regional seas management (Selin and VanDeveer 2011, 2004; Mitchell et al. 2006). Arctic leaders involved in scientific and socio-economic assessments use these initiatives strategically to generate shared information and understandings about ecological and human health conditions, upon which different actors build greater political trust and cooperation over time (Stone 2015).

The origin of Arctic environmental cooperation is often traced back to a pioneering speech by the Soviet leader Mikhail Gorbachev in Murmansk in 1987, calling for greater collaboration on environmental issues. Building on this speech, Finnish foreign and environmental ministers in 1989 initiated the political and administrative process of creating new circumpolar programmes and bodies (Stone 2015, p. 25). These expanded quickly in the immediate years following the end of the Cold War. In 1991, the environment ministers of the eight Arctic countries of Canada, Denmark, Iceland, Finland, Norway, Russia, Sweden, and the USA met in Rovaniemi, Finland. There they adopted the Declaration on the Protection of the Arctic Environment and created the Arctic Environmental Protection Strategy (AEPS).

Activities under the AEPS were initially divided into four permanent Working Groups. Of these, the Arctic Monitoring and Assessment Programme (AMAP) is often seen as the most influential (Koivurova 2012; Kankaanpää and Young 2012; Stone 2015). It serves important information-gathering and agenda-setting functions through collecting, reviewing, and presenting data on environmental and human health issues in extensive technical and scientific reports as well as in shorter summaries for policy-makers. The other three original Working Groups are the Conservation of Arctic Flora and Fauna (CAFF), the Protection of the

Arctic Marine Environment, and Emergency Prevention, Preparedness and Response in the Arctic. A fifth Working Group, the Sustainable Development Working Group, was created in 1998, and a sixth one, the Arctic Contaminants Action Program, became operational in 2006 (having existed as a ‘steering committee’ since 2000).

The first AMAP report was published in 1998 (AMAP 1998), followed by several issue-specific reports. These assessments and reports have been critical to generate and communicate data on POPs as a category of particularly dangerous chemicals, risks of methylmercury at relatively low exposure levels, and consequences of climatic changes across the circumpolar region. Building on AMAP and other Working Group activities and publications, Arctic cooperation has also resulted in more overtly political actions. This includes declarations in support of policy change and encouraging members to act on particular issues as well as adopting legally binding agreements such as the one on Cooperation on Marine Oil Pollution, Preparedness, and Response in the Arctic in 2013.

In 1996, the Arctic Council was created as a ‘high-level forum’ replacing the AEPS, including as the body overseeing all Working Group activities. Importantly, the Arctic Council expanded participation to six indigenous peoples groups, giving the title of Permanent Participants (PPs) to: the Arctic Athabaskan Council, the Aleut International Association, the Gwich’in Council International, the Inuit Circumpolar Council (ICC), the Russian Association of Indigenous Peoples of the North, and the Saami Council. The PPs have consultation rights on all Arctic Council activities, but lack the same formal decision-making powers as state members (see Chap. 3 by Shadian, this volume). Even before gaining such status, indigenous peoples groups were involved in AMAP, shaping the focus and content of environmental assessments (Stone 2015).

Increased political interest in the Arctic is reflected in a growing number of states and organisations seeking observer status in the Arctic Council (see also Chap. 9 by Knecht, Chap. 10 by Wehrmann, and Chap. 11 by Coates and Holroyd, this volume). Another way in which Arctic issues are linked with external actors and activities is through Arctic scientific reports feeding into international assessments and policy-making, as the Arctic Council and individual members in different ways support multilateral programmes and agreements. There are, however, significant differences in Arctic influence in international forums. The next sections trace efforts and discuss variations in the ability of Arctic actors to promote Arctic perspectives and issues under global treaties on POPs, mercury, and climate

change by looking at three factors: the abilities to develop *shared Arctic interests*, to advance *a policy approach that fits global political agendas*, and to find *treaty-specific consensus with other countries*.

THE STOCKHOLM CONVENTION ON POPs

The discovery of the POPs problem is deeply connected to the Arctic (Downie and Fenge 2003; Selin 2006). POPs are chemicals that are prone to long-range atmospheric transport, remain for long periods in the environment, are toxic at low concentrations, and build up in individuals over time (bioaccumulation) with increasing concentrations in higher levels of the food chain (biomagnification). This creates significant ecological and human health problems. Humans (as top predators) are exposed to POPs mainly through dietary intake of fish and marine mammals (AMAP 2010, p. xii). Some POPs were sold commercially already in the 1920s. The hazardousness of individual POPs like dichlorodiphenyltrichloroethane and polychlorinated biphenyls has been known since the 1960s, but it was not until the 1980s that scientists and policy-makers started to view POPs as a separate category of problematic substances in the Arctic and elsewhere. Of the three cases, POPs are the one where Arctic Council members have most successfully promoted Arctic perspectives and issues in external forums.

The Stockholm Convention seeks to ‘protect human health and the environment from persistent organic pollutants’ (UNEP 2001, Art. 1). It was adopted in 2001 and entered into force in 2004. All Arctic countries are parties except for the USA because of lacking approval by the US Senate. The Stockholm Convention regulates the production, use, trade, and disposal of POPs that are pesticides and industrial chemicals, and sets technology-based standards for the minimisation of releases of POPs by-products from industrial practices. It also outlines a mechanism for adding other chemicals. Initially, 12 POPs were covered by the convention. In 2009, 2011, 2013, and 2015, the parties added 14 more substances, resulting in a total of 26 globally regulated POPs. More chemicals will likely be controlled in the future. The Arctic Council and AMAP reports continue to stress the dangers of POPs as the convention is implemented and further developed (AMAP 2010).

Early Arctic scientific work was critical for Arctic Council members to develop *shared Arctic interests* on POPs. A first set of AMAP reports documented extensive environmental and human health problems with POPs throughout the Arctic (AMAP 1998, 2003, 2004). The POPs issue’s

strong links to traditional dietary habits around fish and marine mammals in local communities is tied with concerns about indigenous peoples' rights and health. The scientific discovery of high levels of POPs in body samples in the 1980s motivated many indigenous groups to take a particularly strong stance (Stone 2015). The production and use of most early POPs were phased out in Arctic countries by the 1990s, limiting their domestic economic importance. However, many POPs were still used in other parts of the world, and much Arctic exposure to POPs came from outside sources, creating a common desire to limit this inflow.

The sense of having a basic set of shared interests created a foundation for the Arctic Council to advocate for international POPs controls (Selin 2003; Koivurova 2012). Canada and Sweden took on early leadership positions, both inside and outside the Arctic, by co-chairing assessments and pushing political initiatives in the 1990s. The USA provided much human and material support for assessments and treaty negotiations. Denmark, Finland, Norway, and Iceland backed efforts to address POPs also in conjunction with other European Union (EU) members. Russia engaged in most initiatives with individual scientists contributing to assessments. Among the indigenous groups, the ICC was especially active in coordinating advocacy efforts, including for incorporating a specific mention of the Arctic in the Stockholm Convention (Fenge 2003; Watt-Cloutier 2003; Selin and Selin 2008).

To advance *a policy approach that fits global political agendas*, the Arctic Council used scientific and political action under the 1979 Convention on Long-Range Transboundary Air Pollution (CLRTAP) as a stepping stone between Arctic and global actions. CLRTAP operates under the auspices of the United Nations Economic Commission for Europe (UNECE). All Arctic countries are UNECE members alongside others in Europe and the area of the former Soviet Union. In turn, the UNECE holds observer status in the Arctic Council. AMAP's creation and structure were also influenced by how the CLRTAP monitoring body operates (Koivurova 2012). Previously, CLRTAP had acted on sulphur dioxide, nitrogen oxide, and volatile organic compounds (Selin and VanDeveer 2011). CLRTAP assessments on POPs, which began in 1989, were closely connected with AMAP, as several national officials worked in both bodies (Stone 2015, pp. 116–122). The CLRTAP assessments led to a political process that resulted in the adoption of a POPs Protocol covering the production, use, emissions, and waste management of 16 chemicals in 1998 (Selin 2003). Further, as a result of Arctic indigenous groups' activism—with country backing—the Protocol acknowledges that 'Arctic ecosystems and

especially its indigenous people, who subsist on Arctic fish and mammals, are particularly at risk' (UNECE 1998, Preamble).

The CLRTAP assessments and negotiations allowed Arctic countries to reach principal agreement on an initial set of POPs that warranted international controls; all Arctic countries except the USA and Russia are formal parties to the CLRTAP POPs Protocol. The CLRTAP process also established the idea of having a formal mechanism for evaluating more POPs during treaty implementation. In addition, the CLRTAP work helped policy advocates create political momentum for elevating the POPs issue onto the agenda of the United Nations Environment Programme (UNEP) Governing Council in 1995 (Selin 2010). This started a global process leading to the negotiations and adoption of the Stockholm Convention. At present, many of the same POPs are regulated under both the CLRTAP POPs Protocol and the Stockholm Convention.

To establish POPs as a global issue, Arctic Council members and other leaders helped position POPs as an appropriate continuation of earlier treaties on hazardous wastes and substances, including the 1989 Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal and the 1998 Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade (Krueger and Selin 2002). The adoption of the Basel and Rotterdam Conventions was largely driven by developing countries' desire to control the domestic inflow of toxic materials (Selin 2010). As such, northern policy advocates benefited from developing countries' interests in combining international and national mechanisms for chemicals management. At the same time, the start of the global POPs negotiations was briefly delayed to first conclude the Rotterdam Convention, as many countries did not want to engage in parallel treaty talks.

The introduction of the POPs issue on the global agenda happened at the same time as a heightening of disagreement between the Global North and the Global South around broader responsibilities and commitments based on the principle of common but differentiated responsibility after the 1992 Rio Earth Summit (Najam 2015). Cooperation under the Basel and Rotterdam Conventions, however, aided the POPs negotiations by allowing countries from all over the world to build on earlier compromises on broader regulatory and management issues for dealing with hazardous chemicals. Furthermore, as countries expanded global policy into the POPs area, the CLRTAP idea of having a dedicated treaty mechanism for reviewing additional substances fed into the global negotiations

(Stone 2015). Yet, some differences between industrialised and developing countries on mechanisms for supporting treaty implementation carried over into the POPs negotiations, which made finding agreements on these issues more difficult (Selin 2010).

In evidence of Arctic Council members' ability to merge Arctic interests with those of other regions, the Stockholm Convention acknowledges that 'Arctic ecosystems and indigenous communities are particularly at risk because of the biomagnification of persistent organic pollutants and that contamination of their traditional foods is a public health issue' (UNEP 2001, Preamble). The capacity to find *treaty-specific consensus with other countries* was facilitated by several factors. Before the convention negotiations began, Arctic countries together with others politically and financially supported global assessments in 1995–96 and a series of regional workshops in 1997–98 that raised awareness among countries outside CLRTAP (with experts presenting AMAP and CLRTAP data but also broadening the focus to conditions in other regions). These helped inform developing countries that expressed concerns about POPs, but often lacked information about specific industrial chemicals and pesticides and their related domestic management needs.

Critically, the workshops added a stronger local management dimension to the focus on long-range transport of emissions that dominated much of the Arctic and CLRTAP debates (Selin 2006). This combined focus on long-range transport and local management needs as well as the design of international trade controls on POPs helped bring together Arctic and non-Arctic countries around one global convention. Yet, many final compromises during the convention negotiations left developing countries more dissatisfied with the outcome than industrialised countries, especially on the lack of a dedicated, mandatory financing mechanism under the Stockholm Convention (Selin 2010). Some disagreements on assistance and compliance issues continued during the implementation phase, but parties have expanded management efforts and controls. This includes regulating several additional POPs found in the Arctic under the Stockholm Convention (as well as the CLRTAP POPs Protocol).

THE MINAMATA CONVENTION ON MERCURY

Mercury, having been mined from the Earth's crust for millennia, is a critical Arctic contaminant (Stone 2015). It was first believed to be harmless and even beneficial to humans via its use in medicine, but the toxicity of

mercury is now well established. Mercury is released into the environment through its application in artisanal and small-scale gold mining (ASGM), by burning coal, and as part of its use in different industrial production processes and products (UNEP 2013a, p. 6). After release, mercury can cause significant environmental and human health problems near point sources, but elemental mercury also travels long distances through the atmosphere before oxidising and depositing in ecosystems (Selin 2009). In aquatic systems, it is converted by biological activity into methylmercury, a potent neurotoxin, putting humans at risk mainly through dietary intake. Compared to POPs, Arctic mercury issues have been less politically prominent internationally, as Arctic Council members have shown rather little political engagement.

The Minamata Convention aims to ‘protect human health and the environment from anthropogenic emissions and releases of mercury and mercury compounds’ (UNEP 2013b, Art. 1). It was adopted in 2013 and is expected to enter into force sometime in 2016–17. The USA, through acceptance by the executive branch, became the first party in 2013. Other Arctic countries (and the EU) are expected to follow (all but Iceland had signed the treaty by October 2016). The Minamata Convention bans primary mercury mining, phases out or restricts mercury use in products, reduces mercury use in industrial processes, and seeks the elimination of mercury use in ASGM. It further outlines requirements for the application of best available techniques and best environmental practices to control atmospheric mercury emissions (mainly from coal-fired power plants but also from other industrial sources) as well as mercury releases to land and water.

Similar to POPs, AMAP assessments were critical to document extensive long-range transport of mercury emissions into the Arctic (AMAP 2005, 2011). However, Arctic countries were less unified on taking political action on mercury than on POPs. Arctic Council members, struggling to develop *shared Arctic interests*, expressed diverging opinions on how to best address mercury internationally (Selin and Selin 2006). The Nordic countries in the early 1990s favoured advancing international policy on mercury and other heavy metals alongside the early POPs work, which received some support from the USA. However, Canada and Russia were sceptical of international controls and thus less interested in focusing on heavy metals due to large national mining and industrial interests. Many indigenous peoples groups saw mercury as an important health topic also connected to broader issues of indigenous rights, but their international

advocacy work focused predominantly on POPs as those policy developments progressed more rapidly (Selin and Selin 2008).

Hampered by their inability to formulate a common strategy, Arctic Council members early on failed to advance a *policy approach that fit global political agendas*. Some Arctic countries such as Sweden and Norway that favoured international heavy metals controls attempted to mimic the political strategy used on POPs of utilising CLRTAP as a regional forum through which to set important policy precedents, including by creating a multilateral legally binding agreement. As CLRTAP heavy metals assessments began in the early 1990s in parallel to the POPs work, AMAP data again fed directly into the CLRTAP report through national officials working in both bodies (Stone 2015, pp. 129–141). As on POPs, the combined AMAP and CLRTAP efforts helped establish mercury as an important environmental and human health issue with strong transnational aspects requiring greater international cooperation.

At the same meeting where the CLRTAP parties adopted the POPs Protocol in 1998, they also approved a separate Heavy Metals Protocol that had been negotiated simultaneously. Due to initiatives by Arctic countries and indigenous peoples groups, the vulnerability of the circumpolar region is recognised also in the Heavy Metals Protocol, but in slightly less strong language than the POPs Protocol—‘control on heavy metals contribute to the protection of the environment and human health in areas outside the UNECE region, including the Arctic and international waters’ (UNECE 1998, Preamble). The Heavy Metals Protocol regulates emissions and use of three substances: mercury, cadmium, and lead. Most Arctic countries including the USA, which joined through acceptance by the executive branch during the Clinton Administration, are parties, but Iceland and Russia have not ratified the Protocol.

As a result of members’ different interests and policy preferences, the Arctic Council (2000) in the 2000 Barrow Declaration merely agreed to call upon UNEP to initiate a global mercury assessment that ‘could form the basis for appropriate international action in which the Arctic States would participate actively’, without specifying what such action should be. The first global UNEP-led mercury assessment published in 2002 drew extensively on AMAP and also included people who had participated in AMAP meetings (UNEP 2002; Stone 2015, p. 163). It established mercury as a pollutant of global concern warranting political action, but countries both inside and outside of the Arctic were deeply divided over how to best move forward politically under UNEP.

Norway and Switzerland took on an early leadership role advocating for a global treaty on heavy metals (Eriksen and Perrez 2014). Sweden was very active on mercury within the EU together with Finland and Denmark, as the EU as a whole similarly expressed support for establishing a convention. In contrast, the USA under the George W. Bush Administration, backed by Canada and Russia, argued that it would be too costly and time-consuming to develop a new treaty, also expressing economic fears of expanded environmental controls (Selin and Selin 2006). Also leading developing countries including China and India rejected the idea of a treaty due to development concerns, fearing internationally mandated controls on their energy and manufacturing sectors. As a result, countries were only able to agree on a UNEP-led voluntary mercury programme starting in 2003. This disagreement over a legally binding versus a voluntary approach stalled the start of treaty negotiations for almost a decade.

During the UNEP Governing Council meeting in 2009, the USA was central in breaking the political deadlock that prevented a move towards a global convention (Selin 2014). As the new Obama Administration came out in support of treaty negotiations on mercury (but no other heavy metals) together with the EU and many developing countries, this pushed Canada, China, India, and other sceptics of a legally binding agreement in the same direction. Once the UNEP Governing Council approved starting treaty negotiations, the USA and the EU (where Arctic members were vocal) played central roles working with other countries in developing the convention. In contrast, Canada under the Harper Administration played a much less dominant role than during the Stockholm Convention process. Both Russia and Iceland kept a low profile throughout the mercury negotiations. Indigenous peoples groups strongly supported global treaty-based action on mercury, but were less active on site during the negotiations of the Minamata Convention compared to the Stockholm Convention negotiations.

Reflecting both Arctic and outside concerns, the Minamata Convention notes ‘the particular vulnerabilities of Arctic ecosystems and indigenous communities because of the biomagnification of mercury and contamination of traditional foods, and concerned about indigenous communities more generally with respect to the effects of mercury’ while at the same time being aware ‘of the health concerns, especially in developing countries, resulting from exposure to mercury of vulnerable populations, especially women, children, and, through them, future generations’ (UNEP 2013b, Preamble). In support of finding *treaty-specific consensus with other*

countries, the USA, Norway, and the EU provided human and financial assistance for the negotiations. Similar to the POPs case, the mercury negotiations drew on language and compromises in earlier treaties on hazardous substances. A combined focus on long-range transport of emissions and local management needs in developing countries together with international trade controls was central to finding agreement among countries from different parts of the world also on mercury (Selin 2014).

On emissions, processes, and products, Arctic countries were relatively well positioned to accept global mandates. Countries in Latin America, Africa, and Asia welcomed a convention that would help address trade and local mercury use and contamination problems including ASGM (Sippl and Selin 2012). It was more politically difficult to address emissions from stationary sources, including coal-fired power plants. In particular India and China, the world's two largest emitters, resisted stringent controls, and they also opposed some restrictions on mercury use in processes and products. Other contested issues concerned disagreements between industrialised and developing countries on principles and mechanisms for funding and assistance for mercury abatement, but a compromise was feasible (again often leaving developing countries more disappointed than industrialised countries). Because the Minamata Convention is quite new, it is too early to assess implementation, but many parties are likely to strengthen management efforts and controls (Selin 2014).

THE UNITED NATIONS FRAMEWORK CONVENTION ON CLIMATE CHANGE

Arctic images and conditions feature prominently in climate change debates. Largely driven by anthropogenic emissions of greenhouse gases (GHGs), temperatures in the Arctic have increased more than the global average over the past 50 years (IPCC 2013). This contributes to melting of sea ice and glaciers and thawing of permafrost. It impacts ecosystems, animal habitats, and migration patterns (including through increased ocean acidification). It threatens infrastructure and traditional life styles and local traditions that have evolved over thousands of years. Climate change also opens up new circumpolar shipping lanes and accessibility to natural resources (see Chap. 13 by Moe and Chap. 14 by Keil, this volume). In addition, climatic changes may contribute to increased atmospheric re-release of POPs and mercury stored in oceans, sediments, and soils. Climate change is the one of the three cases where there are most

open disagreements in the Arctic Council, as member's opinions differ greatly about how to appropriately address climate change mitigation and adaptation.

The UNFCCC sets the objective of 'stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system' (United Nations 1992, Art. 2). It was adopted in 1992 and entered into force in 1994. The 1997 Kyoto Protocol set GHG reduction targets for industrialised countries mostly from 1990 levels by 2012. Plans to adopt a second protocol in 2009 failed, as countries merely agreed on voluntary measures under the Copenhagen Accord for the period up to 2020. Some industrial countries also expanded their Kyoto commitments up to 2020 in 2012. The 2015 Paris Agreement introduced the system of nationally determined contributions where parties voluntarily set their own targets and measures, initially for 2030. In addition, the Paris Agreement included the goal of '[h]olding the increase in the global average temperature to well below 2 °C above pre-industrial levels and to pursue efforts to limit the temperature increase to 1.5 °C above pre-industrial levels' (United Nations 2015, Art. 2).

Climate change is an issue where Arctic Council members have struggled to formulate *shared Arctic interests* despite joint statements in support of greater regional cooperation and the global climate change regime (Duyck 2012). Collectively, the five sets of assessment reports by the Intergovernmental Panel on Climate Change (IPCC) draw much attention to the Arctic as central to understand drivers and consequences of global climate change. Building on the IPCC process, the International Arctic Science Committee and others acting through the AMAP and CAFF working groups launched the Arctic Climate Impact Assessment (ACIA) in 2000. This initiative resulted in the publication of an Arctic-specific assessment report in 2005—the first such multi-country regionally focused report anywhere in the world (ACIA 2005). The ACIA report documented major unfolding climate-related changes and discussed many serious and widespread ecological risks and vulnerabilities of indigenous communities throughout the circumpolar region.

Importantly, the ACIA process involved several non-state groups including the PPs. ACIA also used both peer-reviewed publications and traditional knowledge to document climate-related changes and community vulnerabilities. However, ACIA did little to foster greater political unity in the Arctic Council. While the USA under the Clinton Administration

initially took a leadership role, ACIA attracted much more Arctic Council controversy than the AMAP reports because of the highly politicised nature of climate change during the following George W. Bush Administration that was in place when the report was released (Nilsson 2009). In addition, ACIA did not feed into international political action the same way as AMAP reports on POPs and mercury did. However, Arctic cooperation around black carbon and methane has intensified recently, also shaping international climate change debates (see Chap. 12 by Cavazos-Guerra et al., this volume).

Arctic countries have taken very different national policy approaches to climate change mitigation, as their respective sixth national communications on climate change to the UNFCCC secretariat show diverging trends in national GHG emissions excluding forestry and land-use changes between 1990 and 2011. Denmark (–18 per cent), Sweden (–16 per cent), and Finland (–5 per cent) saw decreases in emissions. In part, as EU members, these countries have initiated a range of regulatory initiatives to reduce GHG emissions, improve energy efficiency, and expand renewable energy production (Selin and VanDeveer 2015). Iceland (+26 per cent) and Norway (+6 per cent) experienced emissions increases, but are actively working to bring them down, including under the EU Emissions Trading System and as members of the European Economic Area. All five countries also have relatively low per capita emissions when compared to other industrialised countries and rising economies such as China.

In contrast, Canadian and US federal governments have long been climate change policy laggards (Selin and VanDeveer 2009). Canada, in large part due to the oil sands boom in Alberta and limited national political action, witnessed a 19 per cent increase in GHG emissions. With US Congress refusing to act on climate change and only limited action by the Executive Branch, US national emissions rose by 8 per cent. The two countries also have relatively high per capita emissions. In both Canada and the USA, however, some provinces and states have enacted ambitious climate change agendas on par with those of European countries. Russia's GHG emissions decreased by 31 per cent, but largely as a result of economic restructuring, and climate change is a minor national political issue (Afionis and Chatzopoulos 2010). In addition, the eight Arctic countries continue to show different levels of ambitions in their Paris commitments for 2030.

Arctic Council members have also floundered to advance *a policy approach that fits global political agendas*. The approach set out in the

UNFCCC and the Kyoto Protocol based on the principle of common but differentiated responsibility for assigning GHG targets to industrialised countries (including all those in the Arctic) was finalised before the Arctic Council initiated much high-level debate on climate change and before the ACIA report came out. Thus, unlike POPs and mercury where Arctic assessments and political initiatives fed directly into the creation of respective global conventions, international climate change law had already been substantially developed by the time the Arctic Council started to address climate change mitigation and adaptation issues. This provided Arctic Council members less opportunity to shape an already entrenched international agenda together with being hamstrung by strong energy, economic, and political forces resisting change. Tellingly, none of the climate change treaties make any explicit reference to the Arctic, instead having only a strong developing country and low-lying island focus with respect to climate change vulnerabilities (Duyck 2012).

The relationship between Arctic perspectives and the development of international climate change policy is further complicated by the fact that climate change quickly became a principal arena for deep-seated conflicts between the Global North and the Global South on environment and development (Najam 2015). The ability to fashion global compromises from the late 1990s and onwards has been severely hampered by major north–south disagreements on the importance of historical contributions to the climate change problem, guiding principles for formulating obligations for different sets of countries, and what constitutes appropriate mechanisms for supporting mitigation and adaptation in developing countries. The inability to overcome these fundamental political differences prevented the adoption of a second legally binding protocol in Copenhagen in 2009. The Paris Agreement represents an important political change in that all countries for the first time took on some commitments, but the content and stringency of these voluntary pledges differ tremendously.

During global negotiations, Arctic countries have found it difficult to reach *treaty-specific consensus with non-Arctic actors* as their opinions differ of what they expect others to do. Since the UNFCCC, the EU including the Arctic member states together with Norway and Iceland has favoured setting legally binding GHG commitments based on the principle of common but differentiated responsibility. In contrast, Canada, Russia, and the USA have resisted the setting of mandatory targets based on this principle. The USA never joined the Kyoto Protocol. Canada ratified the Kyoto Protocol in 2002, but departed in 2011 as a result of the inability to meet

its 2012 reduction target. Russia joined the first Kyoto Protocol commitment period for 2012 but refused to join the second one for 2020. North American and Russian opposition to mandatory national targets, together with that of major developing countries such as China and India, was a major reason the Copenhagen meeting failed to produce a protocol. The Paris Agreement's use of nationally determined contributions is a victory for those who prefer voluntary commitments.

In addition, funding and other forms of support for mitigation are contentious. Climate funding debates concern considerably higher sums of money than those on POPs and mercury. The target for the Green Climate Fund is to generate USD 100 billion a year by 2020, but it is unclear how this will be done. Developing countries also stress their growing adaptation needs, seeking assistance. Arctic indigenous peoples groups also have strong interests in adaptation and have helped raise the profile of this issue, but Arctic adaptation needs are different from those in tropical and sub-tropical countries (and will largely be supported by Arctic countries rather than global sources). The identification of the 1.5 °C goal in the Paris Agreement is critical from the perspective of taking more aggressive mitigation action to reduce future adaptation demands. Yet, countries' collective Paris commitments fall well short of what is needed to meet even the 2 °C target. This has significant adaptation consequences for the Arctic, which will likely continue to warm at twice the rate of the global average.

THE ARCTIC'S FRAGMENTED VOICE

The Arctic attracts growing political attention. Many countries in other parts of the world are interested in the Arctic mostly for purposes of maritime transportation, natural resource extraction, and scientific research—issues deeply affected by ecological and climate change (see also Chap. 11 by Coates and Holroyd; Chap. 13 by Moe; and Chap. 14 by Keil, this volume). In addition, POPs, mercury, and climate change remain a central focus of the Arctic Council, including in its external relations with other countries and forums. On all these issues, Arctic actors may desire to speak with one voice; however, in reality the Arctic's voice is often fragmented.

Across the three cases, the capacity of the Arctic Council to develop *shared Arctic interests* was most clear on POPs, which is also the issue where Arctic countries and indigenous peoples groups have exhibited most leadership and influence in international forums. While individual Arctic countries and indigenous peoples groups are also strong advocates for regional and global mercury treaties, this is an issue where there have

been notable national disagreements over preferred international policy responses. Climate change policy is an area ripe with fundamental differences among Arctic Council members in their support for individual agreements and how they seek to advance national and international policy more broadly. The three cases have shown that when Arctic Council members do not agree on a preferred strategy, it becomes much more difficult to advance Arctic interests internationally.

There are major variations in Arctic Council members' ability to advance a shared *policy approach that fits global political agendas*. On POPs, it was possible to combine Arctic concerns about long-range transport of emissions with the interests of developing countries in controlling trade and strengthen local management of hazardous pesticides and industrial chemicals under the Stockholm Convention. After extensive global debates, a similar combination of addressing countries' overlapping concerns with transboundary transport of emissions, international trade controls, and local management needs underpins the relatively new Minamata Convention. It has been more difficult to find common ground between the countries in the Global North and the Global South on climate change mitigation and adaptation, even as a global agreement was adopted in Paris.

Some successful efforts to find *treaty-specific consensus with non-Arctic actors* were aided by cooperation under earlier conventions, but the carrying over of disagreements from other treaty forums also made policy-making more difficult. On POPs and mercury, it was possible to build on language and compromises in other treaties to move forward under the Stockholm and Minamata Conventions. Yet, efforts to address capacity building, technology transfer, and funding were complicated by persistent differences in preferences between industrialised and developing countries. To an even higher degree, deep divisions around regulatory and financial issues have crippled negotiations on follow-up agreements to the UNFCCC. The Paris Agreement is a small step forward, but it leaves many difficult financial and capacity issues open.

The continued protection of the Arctic environment and human health would benefit from the Arctic Council formulating more ambitious policies and initiatives in support of Arctic and global governance. The POPs and mercury cases illustrate that it is possible to move towards greater multilevel cooperation over time, but it has been much less feasible to do so on climate change. The Arctic may be a messenger that the world would be wise to listen to more carefully (Stone 2015), but the Arctic is also increasingly impacted by outside activities and decisions. As such, a central question remains unanswered: As the need for a clear and resilient

Arctic voice in global environmental governance will only grow, can the Arctic Council respond and emerge as a stronger circumpolar forum with international governance reach?

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Preparing for the Global Rush: The Arctic Council, Institutional Norms, and Socialisation of Observer Behaviour

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INTRODUCTION

The Arctic has become a region of global importance, not least because of the growing interest from non-Arctic actors towards the region. The central forum for intergovernmental cooperation in the region—the Arctic Council (AC)—has naturally grasped plenty of attention and interest both within and beyond the Arctic. For the eight Arctic states, it is a major venue to discuss and address common regional issues, while for outside entities articulating their interest in Arctic economic and research

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potential it appears as the most important forum for continuous political involvement (Graczyk and Koivurova 2014, p. 229).

Many of the recent debates revolving around the AC focus on the issue of observers to the Council; an interest that to a great extent was generated by granting observer status to major global powers such as China, Japan, and India at the AC Ministerial meeting in May 2013 in Kiruna, Sweden. Certainly, the media frenzy, perceptions of an alleged scramble for Arctic resources, and renewed concerns over the security in the region fed much of those discussions, going far beyond the mere observer question. There was an intense sense on the part of the Arctic states and Permanent Participants (PPs) that these powerful new applicants for observer status do not fully understand what the AC is, and their real motivation would be to try to change the AC system so as to increase their status in whatever regime of governance would come to be accepted for the region. Since the admission of six new observer states at the Ministerial meeting in Kiruna (besides China, Japan, and India, these were Singapore, South Korea, and Italy), the focus has turned to the question of how to involve observers most effectively in the functioning of the Council.

In order to handle the observer issue, the Arctic states set up a normative framework composed of a set of rules and criteria for admission and integration of interested non-Arctic actors. This chapter explores how the Arctic states attempt to socialise observer behaviour through mechanisms of conditionality contained in the observer rules and the manner in which they are implemented. Our analysis is organised as follows. First, we briefly introduce the socialisation concept, which forms the theoretical framework for the study. The next section explains how the observer status in the AC evolved and what it implies today given the specific rules for observers adopted by the Arctic states. Then we turn to the cases of Poland, China, and the European Union (EU), which is a *de facto* observer, to examine how different actors have acted in response to these rules, and whether norms promoted by the AC have been followed or internalised, and if so, under what logic of action. The final section offers conclusions about the key mechanisms of socialisation, which are at play at the AC. It further demonstrates how certain rules and norms are perceived and interpreted by observers and how they use their capacity to exert influence on the institution (see also Chap. 10 by Wehrmann, this volume).

We will take a closer look at two related requirements placed on observers, namely respect for the rights, values, and traditions of Arctic indigenous peoples¹ and willingness to contribute to the work of PPs.

These requirements can be seen as the manifestation of well-established norms recognised within Arctic regional cooperation, that is of the special role of indigenous peoples in Arctic cooperation, the need for their involvement in decision-making, and respect for their values and livelihoods when engaging in various activities in the region.² The acknowledgment of these clear norms by observers, while difficult to evaluate, can be analysed based on declaratory statements, as well as instances of engagement and interaction with PPs. One challenge is that indigenous representatives themselves are not clear on what they expect from observers in terms of respect and support (personal communication with ICC and Saami Council representatives, October 2014).

FROM NORM COMPLIANCE TO NORM INTERNALISATION

A large body of International Relations literature, from bargaining and regime theory to rationalism and constructivism, has addressed the question of why actors comply with norms promoted by international institutions (for instance Checkel 2001). In the rationalist perspective, agents follow the rules under coercion, and/or as a result of cost-benefit calculation, material incentives, and threat of sanctions, whereas constructivism accentuates social norms, social learning, and socialisation (Checkel 2001, p. 553). To a large extent, these two theoretical concepts correspond to the key notions in organisational and institutional studies—the logic of consequences (LoC) and the logic of appropriateness (LoA) (March and Olsen 1989; March and Simon 1993). These logics of action refer to decision-making procedures adopted by rational actors such as individuals, states, or organisations. Accordingly, LoC coincides with rationalist and subjective cost-benefit calculation, and LoA resembles the constructivist emphasis on social learning and socialisation (March and Olsen 2009). To some extent, the concepts helped to close the gaps of scope conditions, empirical measurement, and operationalisation in the constructivist analysis of compliance (Checkel 2001, p. 557) by introducing systematic requirements for detection of a logic of action and boundary conditions to identify which logic is in operation in a given case.

In terms of theory and methodology, this chapter draws largely on Jeffrey Checkel's (2007) framework for analysis of socialisation mechanisms in international institutions. This approach, designed to understand the mechanisms and processes in which international institutions create senses of community and recognition of common values beyond a nation

state (Checkel 2007, p. 7), is used to expose reasons that drive observers in their adaptation to an institutional environment. Our use of socialisation theory is, however, slightly different from its original purpose of explaining how an institution socialises its member states. Instead, we focus on how these socialising conditions, created by member states for non-member actors in the institution (observers), cause the latter ones to internalise norms and rules of the community (Checkel 2007, pp. 4–5). To address the question whether socialisation actually takes place under given conditions, we examine performances of individual actors that are subject to the specific rules of the institution. Empirically, we base our inquiry primarily on official documents, especially actors' Arctic policy statements that in parts pertain to the AC and specifically the norms invoked in the observer rules, interviews with AC representatives of observers, and participatory observation. Nonetheless, even the most thorough study will not reveal all the reasons behind certain actions—to some extent, it will always remain a 'black box', which may only be 'shrunk' (Checkel 2001, p. 579).

The Arctic states have introduced both positive incentives (e.g. influence on decisions, sponsoring projects, and participation in negotiations) and negative consequences (potential expulsion from the institution) to socialise outside agents. Different observer behaviour may be driven by either mechanism or both, corresponding to the two logics of action as outlined above.

Initially, LoC may be prevailing, because applicants to the status must accept the norms to be admitted. Under certain circumstances, for instance in reference to disparate norms especially in the early stages of observership and/or when a given actor's participation in the AC is less focused, the two logics may operate in parallel (March and Olsen 1989). If we follow the constructivist assumption that norms shape interests, compliant behaviour might result from 'internalised identities and norms of appropriate behaviour acquired in the process of socialisation and following the logic of appropriateness' (Raustiala and Slaughter 2002, p. 540), and not as an effect of conscious instrumental calculation (Checkel 2007, p. 10). The socialisation and ensuing internalisation of norms in the AC context may emanate from different sources and motivations. Nonetheless, by focusing on institutional factors and norms postulated in the observer rules, the key elements facilitating such a behaviour seem to be shared knowledge and discourse and, to some extent, the normative power of rules (Raustiala and Slaughter 2002, p. 540).

In the most developed form, these considerations lead to embedding an international institution's norm in an internal setting of a given actor, for instance in domestic regulations and state or organisational policies, and to making it a policy instrument to advance own interests. An illustrative example here is the status that the Council holds in the World Wide Fund for Nature's (WWF) Arctic conservation policy, demonstrating that the non-governmental organisation (NGO) perceives the AC as a viable venue for its own solutions. This approach is less visible among observer states and other actors, and therefore, it may be concluded that the WWF is probably the most socialised observer in the AC system, even if the NGO has also commissioned reports that explore new ways of governing the Arctic (Huebert and Yeager 2007; Koivurova and Molenaar 2010).

The success of socialisation depends on several scope conditions for the rules of appropriateness to apply (March and Olsen 2009, pp. 492–493), which can be also observed within the AC. Acting according to the logics is determined by capabilities and resources. Fewer capabilities and time constraints are likely to induce following the rules, while calculation of expected utility is more time and resource demanding (March and Simon 1993, p. 11). The temporal dimension plays a decisive role in considering the socialising power of an institution, which can be detected only after longer engagement and more frequent interaction (Checkel 2007, p. 10). Moreover, behavioural adaptation and internalisation of norms and identities usually take place in phases, which follow different logics according to specific experiences. It is normally not an act of intentional adoption of certain rules but rather a learning process (March and Olsen 2009, p. 489). The accumulated experience within a particular institutional setting over a longer period of time may induce the adoption of appropriate behaviour. Accordingly, one scope condition for the LoA and socialisation at the AC includes longer involvement in the specific institutional environment based on shared information and experiences, which can lead to shared institutionalised memories (March and Olsen 2009, p. 493).

Another particularly important aspect of socialisation is institutional memory- and knowledge-building, which refers to the ability of a state or an organisation to accumulate and preserve history of interactions, experiences, and know-how related to an international institution. Particularly, in the AC context, the existence or lack of such memory significantly affects the success of observer involvement. Memory-building is less likely to occur when representation is organised in rotation without continued attendance of the same individuals to institutional meetings.

Hence, whether socialisation will be successful depends on both actor characteristics and effective institutional mechanisms for engagement that ensure social learning of particular roles and building memory, which can then be adequately transmitted to succeeding representatives.

In most instances, AC observers, Arctic states, and PPs do not share the same experiences, histories, and cultural traditions, but are rather connected with each other by common problems, debates, interests, and a general agreement on essential principles for resolving differences (March and Olsen 2009, p. 488). Furthermore, AC observers are very diverse and are not a cohesive group. The set of rules for international cooperation provided by the Council is a prerequisite for building a common identity and sense of belonging that allows for integration of differences into a cooperative system combining unity and diversity (March and Olsen 2009, p. 485). Accordingly, observers at the AC are there not only to observe. In fact, they are expected to become a part of the Arctic community (certainly with different levels of such an identity formation) and to share concerns and interests with the Arctic actors, which they do in many cases with regard to climate change or economic opportunities in the North. Observer status has been designed in a manner that in fact requires observers to find a useful role within the institutional structure, which would help internalising the AC's norms and, in consequence, also in advancing their own interests. If the assumed role was consistent with an observing actor's expectations and interests in a longer time perspective, LoC would be replaced with LoA in accepting institutional norms (Checkel 2007, p. 6; March and Olsen 2009) and would lead to compliance with these incorporated set of rules over time (Checkel 2007, p. 5).

OBSERVER STATUS IN THE ARCTIC COUNCIL

The origins of observer status in Arctic governance date back to the Arctic Environmental Protection Strategy (AEPS), the predecessor of the AC, which was signed by the eight Arctic states in Rovaniemi in June 1991 (AEPS 1991). The 1996 Ottawa Declaration establishing the AC defined the status as open to non-Arctic states, global, and regional intergovernmental and interparliamentary organisations as well as NGOs. At the same time, it was agreed that states and organisations already accredited as observers to the AEPS shall retain their status in the AC (Russell 1996). The other provisions ruling the conduct of observers were included in the AC Rules of Procedure, which were agreed and adopted at the 1998

Ministerial meeting in Iqaluit, Canada. Especially contentious was the observer status for environmental NGOs. The USA was a strong proponent of their involvement in contrast to Norway, Iceland, and Denmark/Greenland who did not want to provide another platform for animal rights' activists opposing the utilisation of Arctic marine resources. While recognising valuable contributions made by organisations such as the WWF Arctic Programme as ad-hoc observers in the AEPS, the Nordic countries pushed for a clause allowing the withdrawal of observer accreditation between Ministerial meetings in case the observer would engage in activities 'at odds with the Council's Declaration' (Arctic Council 1998, Art. 37; Bloom 1999; see also Scrivener 1999, p. 56). As there was no consensus among the Arctic countries over the access criteria for potential observer candidates, no precise procedures and evaluation guidelines were specified, and the only qualification became the capacity of the applicant to contribute to AC work, to be determined by the Council (Arctic Council 1998, Art. 36; see also Graczyk and Koivurova 2014; Graczyk 2011). The AC members thus left themselves considerable discretion in granting observer status, as they did also with regard to deciding over observers' involvement in particular activities of the Council. Such a formulation 'enabled a virtually unrestricted display of national interests within the observer assessment process' (Graczyk and Koivurova 2014, p. 227).

It was not until the 2011 Ministerial meeting in Nuuk, Greenland, that more specific provisions for admission of observers were proposed by the Senior Arctic Officials (SAOs), adopted by the Ministers and eventually incorporated into the revised AC Rules of Procedure at the Ministerial session in Kiruna in 2013 (Śmieszek and Kankaanpää 2015). This development was to a large extent motivated by the change in perception of the region, which was brought to the world's attention by a series of events including the release of the synthesis report *Impacts of a Warming Arctic* of the Arctic Climate Impact Assessment (ACIA) in 2004 (ACIA 2004), the planting of a Russian flag on the seabed underneath the North Pole in August 2007, the announcement of the record Arctic sea ice minimum in September of the same year, and eventually the release of the US Geological Survey report on the Arctic's potentially vast oil and gas resources in early 2008 (Gautier et al. 2009). This worldwide attention translated into expressions of interest of various non-Arctic states and actors to join the AC and acquire observer status.

The response of the Arctic countries to this upsurge of interest was, first, the Ilulissat Declaration signed by the five Arctic coastal states in 2008,³

followed by efforts within AC structures to clarify provisions regarding the conduct of observers. The ministers adopted a set of criteria for evaluating pending applications and in 2013 issued the Observer Manual for AC subsidiary bodies to apply more uniform rules for observers in WGs and Task Forces, which was added as Annex 2 to the revised AC Rules of Procedure. The applicant (as well as the accredited observer) is expected to *inter alia* accept and support the objectives of the AC defined in the Ottawa Declaration and recognise Arctic states' sovereignty, sovereign rights, and jurisdiction in the Arctic as well as an extensive legal framework that applies to the Arctic Ocean, including the United Nations Convention on the Law of the Sea. Observers shall also prove 'their Arctic interests and expertise relevant to the work of the Arctic Council' and demonstrate 'a concrete interest and ability to support the work of the Arctic Council [...] bringing Arctic concerns to global decision-making bodies' (Arctic Council 2013, Annex 2, Art. 6). Finally, observers shall further respect the 'values, interests, culture and traditions of Arctic indigenous peoples and other Arctic inhabitants' and demonstrate 'a political willingness as well as financial ability to contribute to the work of the Permanent Participants and other Arctic indigenous peoples' (Arctic Council 2013, Annex 2, Art. 6). The latter requirement is discussed in this chapter in greater depth.

Those criteria are, however, not exhaustive, and decisions on observers still remain a matter of political consensus among the AC members. Moreover, observer status continues only as long as consensus on it exists among Arctic ministers. Decisions made at the two Ministerial meetings that took place after the adoption of the observer rules in 2011 offer some insights into how the Arctic states understand their implementation. At the Kiruna meeting in 2013, all state applicants were approved, while the EU application was received 'affirmatively' and the final implementation of the decision has been made dependent upon resolution of the dispute with Canada on the EU's ban of trade in commercial seal products (Stępień and Koivurova 2016, p. 36; Graczyk and Koivurova 2015, pp. 319–320). However, after difficult discussions and reaching consensus on the six non-Arctic states and the EU, the ministers failed to decide on the applications from seven non-state organisations (Steinberg and Dodds 2015). Regardless of the clear signals sent by the AC that admitting new observers continues to be a contentious issue, new applications have not been discouraged. In addition to the seven non-state organisations' re-submissions, another eight applications were again deferred at the Ministerial meeting in Iqaluit that ended the Canadian chairmanship in April 2015, including,

for example, those of Greece, Mongolia, Switzerland, and Turkey, the International Council for the Exploration of the Sea, the International Chamber of Shipping, the US National Oceanic and Atmospheric Administration and the West Nordic Council.

From these two Ministerial meetings, it has become clear that the mere fulfilment of the admission criteria set by the Council does not guarantee an automatic accreditation of the observer status—to a large extent it is still a political decision. Meeting the requirements is, therefore, a necessary but insufficient condition for receiving accredited observer status. Also, the Arctic states have avoided giving any signal that whoever applies will be admitted, and therefore, applicants risk rejection that may be harmful for their reputation. This, in turn, may enhance the observer status' exclusiveness, which is likely to strengthen the socialising power of institutional norms by creating a sense that the status was earned, not given. Even though it may seem that the admission process is somewhat arbitrary given the defined criteria and putative political calculus of the Arctic states, applicants still have to put some effort into demonstrating that they fulfil these criteria and are qualified candidates for observers, for instance, through research activities, relevant know-how, readiness to support PPs, and the like.

BEYOND CONDITIONED BEHAVIOUR: OBSERVERS' OWN STORIES OF ADOPTING AC RULES

Since the AC observer rules are more a loose framework than a full-fledged enforceable rulebook, it is no surprise that there are various modes of observers' performance even though the rules are the same for everyone. Most observers do not make full use of their status and all the possibilities that are given to them (see Chap. 9 by Knecht, this volume); therefore, it may be premature to make definitive conclusions on whether the institutionalised framework for observer involvement is insufficient or ineffective. One method to assess how these rules are put into practice and used by observers, and thus how they shape relations between Arctic and non-Arctic actors at the AC, is to delve into individual stories of observer performances and how they respond to AC's norms and institutional incentives to adopt them (see also Chap. 10 by Wehrmann, this volume), in particular those requiring observers to respect the rights, values, and traditions of indigenous peoples. The resulting picture will certainly be incomplete, but the key purpose of this exercise is to demonstrate different ways

of utilising the AC's framework for individual purposes, which in turn results in varying levels of socialisation. This effort is aimed at identifying the key features of the institutional mechanism to socialise observers with AC norms, and producing evidence for the socialising power of observer rules among different observer groups: 'old' observer states (Poland), 'new' observer states (China), and intergovernmental organisations (EU) with a special status of being a *de facto* observer.

Poland

Due to long-standing Arctic research activity dating back to the 1930s, Poland engaged in the formation of regional scientific cooperation structures from the outset. Poland was among the first non-Arctic full members joining the International Arctic Science Committee in 1991 and has become an AC observer state in 1996 as a result of a transfer of observer status from the AEPS to the newly established AC (along with Germany, the Netherlands, and the UK). However, it took until 2006 for Polish Arctic diplomacy and AC engagement to solidify (see Graczyk 2012; Łuszczuk 2015). Since then, Polish high-level representatives on several occasions presented key interests ('pillars') of Polish engagement in the Arctic. These include (1) the recognition that existing international legal frameworks, including the United Nations Convention on the Law of the Sea and the principle of freedom of scientific research, apply in the Arctic; (2) the active engagement in developing an EU Arctic policy and ensuring the inclusion of Polish interests; (3) cooperation with regional institutions and organisations, primarily the AC; and (4) public diplomacy (Borkowski 2011, see also Łuszczuk 2015, p. 578). Furthermore, Poland formulated its policy priorities with respect to the AC, which are primarily focused on deepened involvement in AC Working Group (WG) activities. Poland seeks more opportunities to participate in AC projects and underscores freedom of scientific research as the principle that should guide the AC's work. Finally, it is essential for Poland to maintain and develop favourable relations between Arctic states and observers (Kremer 2008), and Poland has been fairly active in putting these points into action, even though it has not been successful in all respects.

On the practical side, Poland regularly uses existent opportunities to commit to the work of the AC and in some cases develops own initiatives beyond the scope of the normative framework for observers. Such initiatives include the organisation of meetings between the SAO Chair and

observers in the so-called *Warsaw Format* (Graczyk 2011, pp. 625–628)⁴ and inviting AC WGs to hold their meetings in Poland.⁵

The limited involvement of Poland before 2006 and focus on research interests had also meant a lack of substantial interaction with indigenous peoples. Only following the adoption of the Nuuk Observer Rules, Polish officials expressed their interest in understanding PPs' interests (personal communication, Polish MFA official, November 2012), but no declaration on dialogue with indigenous peoples has been included in the rare official statements. However, in March 2013, Poland invited representatives of indigenous peoples to a meeting between observers and the AC chair (Chief Gary Harrison from the Arctic Athabaskan Council attended). The aim was to avoid the perception that PPs are left out from relevant discussions of the AC and to debate PPs' expectations regarding observers. As a good practice, the meeting format has been re-established in 2016 during the US Chairmanship of the AC.

China

China was granted ad-hoc observer status in the AC for the first time in 2007 and became an accredited observer in 2013. It seems that before 2013, there were concerns among Chinese officials about the Nuuk criteria, as interviews by Jakobson and Peng (2012, p. 14) demonstrate:

While Chinese officials have not publicly commented on these, officials have privately expressed displeasure with some of the criteria: the stipulations that an applicant must have demonstrated the “political willingness and financial ability to contribute to the work of the Permanent Participants” and “recognize Arctic states' sovereignty, sovereign rights and jurisdiction in the Arctic”.

Academic commentators have also suggested that with the current criteria, it would be better for China to influence Arctic governance via other means (Guo 2012). Yet, according to a recent research project where Chinese officials were interviewed and Chinese participation in the AC was studied, the trend from 2007 on had been a steady representation of Chinese participants in SAO and Ministerial meetings. On the other hand, China has not participated much on the Working Group level, although observers are capable of influencing these meetings the most (Koivurova et al. forthcoming 2016). Chinese experts have been involved comprehensively only in one project, the Arctic Migratory Birds Initiative of the

Conservation of Arctic Flora and Fauna WG, and have partially contributed to the work of the Arctic Contaminants Action Program (ACAP). Currently, they are devising a more systematic system of participating in the work of the Council.

China has thus far made little reference to indigenous peoples in its statements and declarations, apart from acknowledging PPs' important role within Arctic regional cooperation (Lan 2012). Following the adoption of the Nuuk observer rules, Chinese officials approached indigenous leaders during AC meetings and contacted the Saami Council (one of the PPs), the Sámi parliaments, and the Indigenous Peoples' Secretariat (IPS) about indigenous expectations towards observers (personal communication with IPS staff, April 2013, and Saami Council staff, October 2014). However, it appears there has been no substantial follow-up on these interactions after the 2013 Kiruna Ministerial meeting (Stepien, forthcoming 2016). One tangible sign of acknowledging the norm of respect for Arctic indigenous values and rights is a draft for an *Arctic Research Management Regulation*, which instructs Chinese institutions to respect customs of Arctic indigenous communities while carrying out research activities (Ren forthcoming 2016). Further, work among Chinese policy-makers and scholars to better understand Arctic indigenous perspectives is ongoing (personal communication with Dr Haiwen Zhang, Director General of the Department of International Cooperation at China's State Oceanic Administration, and Dr Fu Yu, China Institute for Marine Affairs, Beijing, October 2014).

The European Union

Although the EU does not officially enjoy accredited observer status, it has been one of the most active participants in the AC's Working Groups and Task Forces (see Chap. 9 by Knecht, this volume) as an observer-in-principle, and contributed a lot to polar research and science cooperation through its various funding schemes. It has been also one of the more controversial applicants for the status due to the EU's 2009 ban on commercial seal products (Fenge and Funston 2015, p. 17).

The EU began to develop its Arctic policy only in 2008 (European Commission 2008). In November that year, the Union for the first time applied for AC observer status and participated in the SAO meeting in Kautokeino, Norway. Since then, representatives of the European Commission or the European External Action Service took part in SAO

and Ministerial meetings. Moreover, EU officials regularly participate in WG and Task Force meetings, where appointed experts from relevant Directorates-General (DGs) or EU agencies contribute to AC projects. The EU has been particularly active in the field of maritime safety through participation in the Protection of the Arctic Marine Environment (PAME) WG. For instance, specialists from the European Maritime Safety Agency attended the Task Force on Arctic Marine Oil Pollution Prevention during 2014, and EU experts provided comments on PAME's *Draft Arctic Offshore Oil and Gas Guidelines: Systems Safety Management and Safety Culture* and the *Framework for a Pan-Arctic Marine Protected Areas Network*. It is through contributions to such projects in several WGs and Task Forces that the EU is able to bring expertise and information to the Council, primarily at the level of WGs as observers are encouraged to do.

In addition to that, the EU facilitates parts of the AC's work through devoting large scale funds to scientific and cooperation programmes like the ArcRisk project (*Arctic Health Risks: Impacts on health in the Arctic and Europe owing to climate-induced changes in contaminant cycling*) that ran from 2009 to 2013, the *Arctic Climate Change Economy and Society* project from 2011 to 2015, and EU-PolarNet launched in 2015. All this shows that the official observership title is not a prerequisite for engaging with the AC and gaining recognition as a meaningful and valuable actor.

Among the three analysed observers, the EU—as an 'observer-in-principle'—has proven to be the most active in interacting with Arctic indigenous peoples. The EU's performance can be primarily explained by the reactions to the ban on placing seal products on the EU market (Regulation [EC] 1007/2009, amended in 2015). Although the regulation includes an exception for products originating from indigenous subsistence harvesting, the Inuit expressed strong resentment due to resulting market collapse and post-colonial views of Arctic livelihoods conveyed by the ban (for instance Cambou 2013). The EU-targeted statements of indigenous leaders supported by Arctic states (in particular Canada) verbalised the norms referring to Arctic indigenous peoples well before they were codified in 2011.

The consideration for Arctic indigenous interests was highlighted already in the first EU Arctic policy documents. This is largely owing to the criticism of EU Arctic-relevant policies on, for instance, sealing and whaling, and in line with the EU's commitment to indigenous rights internationally. The 2008 Communication from the European Commission

specified ‘Protecting and preserving the Arctic in unison with its population’ as one of the EU’s objectives in the Arctic and enumerated a number of issues relevant to an EU-indigenous nexus (also reiterated in other documents adopted by EU institutions).

Since 2010, the EU has been inviting Arctic indigenous representatives to so-called Arctic Dialogue meetings, which from 2013 on have acquired more regular and substantial character. While concrete outputs remain to be seen, the forum allows indigenous peoples to convey their concerns. In a similar vein, a proposal for autonomous representation of Nordic Sámi parliaments in Brussels is being considered (Stepien forthcoming 2016).

The seal ban backlash can be seen as a ‘blessing in disguise’ (Stępień and Koivurova 2016), as it enhanced the EU’s sensitivity towards indigenous concerns compared to other observers (personal communication with DG Mare official, Brussels, May 2014). One example of such a socialisation process is the EU position in the discussion on banning international trade in polar bear products within the Convention on International Trade in Endangered Species of Flora and Fauna in 2013 that is sensitive to Inuit views (CITES 2013).

CONCLUSION

Even if there have been observers and candidates for that position criticising the AC observer rules, it is clear that current observers have more or less become socialised into the practices of the AC and do not challenge their status in the forum anymore. By giving observers the opportunity to be fully integrated in projects and decision-shaping processes mostly on the Working Group level, and thus to influence both the institution and regional governance, the Arctic states have equipped observers with an important instrument in regional governance.

This opportunity has not, however, been fully utilised by many observers, who still focus on participation in SAO and Ministerial meetings, where their role and socialisation power are limited. Deeper socialisation and internalisation of norms leading to a greater common understanding between Arctic and non-Arctic actors substantiate and increase the impact of observers on AC projects and processes. Socialisation takes place even more effectively when actors make the institutional norm an element of their own policy and embed the Council as the primary foreign policy instrument for achieving national or organisational goals in the Arctic.

The opportunity to advance interests and influence decisions pertaining to the region is arguably the key gain from observer status, although this may still raise questions about the costs of being an AC observer (see Molenaar 2012; Graczyk and Koivurova 2014).

The explicit statement of the norms related to Arctic indigenous peoples in the Nuuk observer rules (earlier and implicit for the EU) resulted in a learning process and enhanced engagement. Socialisation depends here partly on the prior awareness and involvement in indigenous affairs globally. China and EU have been strong supporters of indigenous rights in the United Nations (Stepien forthcoming 2016), which could translate into easier acceptance of the norms of respect and support in the Arctic context.

The EU is certainly the most socialised of the analysed observers as regards the norms relevant to indigenous peoples, and it has gone the furthest in its declarations and practices. This should be primarily attributed to the seal ban issue, which clearly influenced the way the EU organised its work towards PPs. The EU's relatively better performance continues to be encouraged by the EU's unclear status in the AC.

Only after the adoption of the Nuuk requirements did China and Poland make statements or carried out (very limited) actions regarding indigenous peoples, suggesting that sanctions (suspension of observer status) were the main concern at that stage. It remains to be seen whether the current endeavour to learn about and engage with PPs—especially in the case of China—evolves towards a stage of internalisation of the norm that is not as superficial (or only declaratory) as it is at present.

There is no easy answer to the normative discussion on how to improve the relationships between AC member states, PPs, and non-Arctic actors, and thus the observer status itself. Is there, for instance, one single criterion for assessing whether AC provisions are appropriate for all observers? The evidence indicates that some observers perform better than others within the same framework despite having the same possibilities to interact with the AC. To what extent then should different actors' interests and individual challenges be taken into account when improving the entire system?

Yet, it is also the case that the observer system of the AC contains already seeds for making observers behave more actively and uniformly. The revised 2013 AC Rules of Procedure include also the review of observers, which is to take place every four years starting from 2013. Moreover, observers are requested to report to the AC chairmanship on their relevant activities and contributions to the works of the Council no later than 120 days before each Ministerial meeting, if they want to retain their observer

status. It seems logical that by scrutinising observer behaviour via these new rules, the AC member states and PPs give a strong signal that they expect observers to act on their status. While this requires more resources from the AC to perform this monitoring task, we should also expect more active observer behaviour on the working level. If the AC would demonstrate that it takes observer behaviour seriously, this may well translate into observers committing to their status more rigorously.

NOTES

1. The requirement refers also to 'other Arctic inhabitants' but the focus in this chapter is on indigenous peoples and in particular PPs organisations.
2. The president of Iceland, Ólafur Ragnar Grímsson (2013, p. 23), underlined that the respect given to the region's indigenous peoples and their involvement internationally constitutes one of the 'Arctic house rules' for the newcomers to Arctic regional cooperation.
3. The Ilulissat Declaration was largely a reaction from the Arctic coastal states to the increased interest in the Arctic and the discourse in the media and by scholars that states were competing over Arctic offshore resources, which could lead to serious conflict situations. As they explained in the Declaration, they were only following the Law of the Sea.
4. Meetings of this kind were organised by the Polish Ministry of Foreign Affairs in 2010, 2013, and 2015 with three consecutive AC chairmanships (Danish, Swedish, and Canadian).
5. The Polish Academy of Sciences' Institute of Oceanology in Sopot hosted the ACAP II meeting in September 2014. This instance provoked an influx of similar invitations from other observer states (for instance, South Korea invited PAME), and compelled the Arctic Council to formulate a policy on meeting locations at the first executive SAO meeting under the US chairmanship in Washington, DC, in June 2015. According to this policy, Working Groups are not allowed to accept such invitations anymore (SAO 2015). Observers may only host project-specific, expert-level workshops or gatherings as approved by SAOs on a case-by-case basis.

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Bazaar Governance: Situating the Arctic Circle

Duncan Depledge and Klaus Dodds

INTRODUCTION

On 15 April 2013, President Ólafur Ragnar Grímsson of Iceland attended a National Press Club luncheon in New York. He was there to present his vision of a new international assembly for the Arctic, to be known as the ‘Arctic Circle’. The primary aim of the assembly would be to ‘strengthen the policymaking process by bringing together as many Arctic and international players as possible under one large tent’ (Webb 2013). The analogy of the ‘tent’ was intriguing because it raised interesting questions about how large the tent would be, how stable it might be and how it would be accessed (including who or what would control this access). Moreover, if, as President Grímsson claimed, the Assembly was to be an ‘open tent’, then it raised further questions about whether there were ‘closed tents’ elsewhere, populating the international polar landscape. In other words, there was, according to the President, evidence elsewhere that ‘the Arctic

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has suffered from a lack of global awareness and, as a result, a lack of effective governance' (Webb 2013).

Participants in this new vista of the 'open tent' were to be drawn from 'institutional and governmental representatives, political and policy leaders, scientists and experts, activists, and indigenous peoples from the Arctic countries, as well as Asia, Europe and other parts of the world' (Webb 2013). In short, the Arctic Circle Assembly was to be a forum where virtually anyone who had something to say about the future of the Arctic could have a voice. As President Grímsson elaborated in conversation with Scott Borgerson, who has penned a number of provocative essays about the future of the Arctic in the journal *Foreign Affairs* (for instance, Borgerson 2008), just after the National Press Club luncheon:

It will, for example, be a testing ground where South Korea can justify, why is it so interested in the Arctic? Why does the leadership of South Korea visit Greenland? Why does the prime minister of China talk about the Arctic when he comes to Iceland? What is the agenda? I was in India a few weeks ago. The first item on the meeting with the foreign minister of India was India's desire to be a member of the Arctic Council. It's kind of crazy, paradoxical, that now I have to discuss in Delhi their membership in the Arctic Council. So in order to take the pressure off the Arctic Council membership, so to speak, this gathering—which we call The Arctic Circle, is partly a play of words of geographical location and having everybody sitting around the table, irrespective of protocol of [sic] power position—to broaden this dialogue and make it more inclusive and more effective. (Council on Foreign Relations 2013)

The timing of Grímsson's announcement posed an important provocation to the Arctic Council, the primary intergovernmental forum for the Arctic region, which was due to convene for its eighth Ministerial meeting in Kiruna, Sweden, only four weeks later (Steinberg and Dodds 2015). The Ministerial was expected to rule on whether a consensus could be reached among the eight Arctic states to expand the list of accredited observers to the Arctic Council to include China, Japan, Singapore, South Korea, India, Italy and the European Union (EU) (as well as a number of non-governmental organisations and other interest groups such as Greenpeace and the Oil and Gas Producers Association). There was a palpable feeling at the time that Grímsson was challenging the Arctic Council to take on a more global profile, with a view that should the Arctic Council reject the observer applicants, then the Arctic

Circle would be prepared to provide an alternative platform for global interest to be expressed in the Arctic (Koring 2013). As the Canadian *Globe and Mail* newspaper concluded,

Mr. Grímsson was careful to say that the Arctic Circle was not intended as a rival or replacement for the Arctic Council. But just as Davos—the high-profile annual gathering of political and business leaders, celebrities and NGOs—often eclipses more staid and official fora, it is clear that the Arctic Circle is intended as a high-profile, dynamic conference where India and Google and Greenpeace—and countless others with a stake in the Arctic—need not wait for years hoping they may be allowed to speak. (Koring 2013; see also Quaile 2013)

What Grímsson did not say (but might have been thinking) was that the Arctic Circle initiative also had the potential to reposition Iceland as a gateway for the expression of global interests in the Arctic. On the same day that Grímsson presented his initiative, the Icelandic government signed a free trade agreement with China (Ministry of Foreign Affairs 2013). The agreement followed a period of deepening economic relations (promoted by Grímsson) between Iceland and China, spurred on by the US military withdrawal in 2006 and the Icelandic banking crisis between 2008 and 2011 which led to a breakdown in relations with the EU. Iceland–China relations were further symbolised in 2012 by moves such as the visit of China’s Premier Wen Jiabao, the signing of a bilateral Framework Agreement on Arctic Cooperation, the opening of a new Chinese embassy building in Reykjavik and the visit of the *Snow Dragon*, China’s only icebreaker, which had been carrying a Chinese Arctic science expedition (CHINARE 5) through the Northeast Passage (Tatlow 2012). Two months after the announcement of the Arctic Circle initiative, news broke that the Icelandic firm Eykon Energy was teaming up with China National Offshore Oil Corporation to explore for oil in the Arctic around the island of Jan Mayen.¹

Yet the involvement of Alaskan and Greenlandic partners (and less explicitly, the Faroe Islands) suggests the Arctic Circle initiative was about more than Iceland’s blossoming relationship with China—it also positioned Iceland as the gateway to what we might describe as a ‘network of the marginalised’. Among the founding partners was Alice Rogoff, who founded *Alaska Dispatch*, a leading newspaper in Alaska, the USA’s only state with Arctic territory. One of Alaska’s two senators, Lisa Murkowski, was also appointed to the Arctic Circle’s honorary advisory board. Both

Lisa Murkowski and Alaska's other Senator, Mark Begich, gave presentations at the inaugural meeting of the Arctic Circle in October 2013. Alaskan involvement in the Arctic Circle from the outset is suggestive of concerns that Alaska has historically had a limited voice in Arctic affairs, with US Arctic policy being directed at the federal level in Washington, DC (McGwin 2015). The other founding partner from the Arctic was the former Greenlandic Premier Kuupik Kleist. Greenlandic officials have also been actively seeking an independent voice in Arctic affairs, distinct from that of the Danish government (Nunatsiaq News 2013). Alaskan, Greenlandic and Icelandic stakeholders therefore had common cause to support the Arctic Circle initiative as a way to reposition themselves geopolitically as important Arctic players willing to reach out to Asian states, on the one hand, and to Western corporations, such as Google, on the other. For Iceland, Greenland and the Faroe Islands, the Arctic Circle would also provide a space to bring greater attention to the West Nordic Council, a parliamentary forum established in 1985 which has recently called for the three governments to align their Arctic policy interests and create a West Nordic free trade area to strengthen the regional economy and expand export capabilities in order to reach global markets, ending their traditional reliance on European markets (Gudjonsson and Nielsson 2015).

The attempt to use the Arctic Circle initiative to reposition Iceland as a gateway for the expression of both global and marginalised interests in the Arctic is indicative, moreover, of concerns within the country that its own influence in the region is under threat (Dodds and Ingimundarson 2012). Iceland was, for example, excluded from meetings of the so-called Arctic Five in 2008 and 2009, and more recently the Arctic Five fisheries discussions in 2014, because it was not considered to be an Arctic Ocean littoral state (Ministry of Foreign Affairs 2010). Having rejected EU membership for the foreseeable future, and lacking the financial muscle and littoral geography of Norway, Iceland appears alone in Europe (unlike Sweden, Denmark and Finland) (Lund 2015). Canada, the USA, and Russia meanwhile are all large enough to act independently. It is perhaps unsurprising then that Iceland has looked to make common cause with other isolated actors in Alaska, Greenland and the Faroe Islands in order to collectively boost their profile, while at the same time nurturing relationships with Arctic stakeholders in the wider international community (including Prince Albert II of Monaco, Abu Dhabi, China, the UK, Google, Guggenheim and the MacArthur Foundation, among many others).²

If indeed the Arctic Circle initiative is an attempt to reposition Iceland (and to a much lesser extent Alaska, Greenland and the Faroe Islands) geopolitically as a gateway for the expression of global and marginalised interests in the Arctic, then it is not an unusual approach to take. The number of international forums where Arctic issues are discussed has increased dramatically in recent years (including, e.g., *Arctic Frontiers*, the *International Arctic Forum*, *Arctic Imperative* and *Arctic Encounters*). However, the significance of these forums remains relatively understudied in the literature on Arctic governance, reflecting the traditional preoccupation of International Relations (IR) theory with state actors and state-based institutions, intergovernmental forums such as the Arctic Council and the Barents-Euro Arctic Council (BEAC), and sub-governmental organisations such as the Northern Forum (NF). Yet such conferences blur the lines between governance and dialogue—while the Arctic Circle and other initiatives do not ‘govern’ in the traditional sense, they have emerged as important sites for the sharing and contesting of ideas and practices about the present and future geopolitical make-up of the Arctic.

This blurring is evident from the close involvement of national governments in these forums. Both Norway (*Arctic Frontiers*) and Russia (*International Arctic Forum*), for example, directly fund annual international conferences on the Arctic which are positioned as critical to setting the terms of debate about the future of the Arctic. Such meetings also take place internationally—in London alone, Norway, Sweden, Finland, Canada and the USA have all funded workshops and conferences on Arctic geopolitics through their diplomatic missions.³ In addition to the opportunities to exchange ideas directly between stakeholders, such forums also provide a performance space for government officials to project their national interests in the Arctic in a certain light, either, for example, to remind others of the primacy of Arctic states and peoples or to demonstrate the legitimate interests of other stakeholders from beyond the region.

What is interesting to us in this chapter, then, is not the fact that yet another forum for dialogue about Arctic governance has been created, but more that the Arctic Circle offers an explicit example of the oft-ignored ‘bazaar-like’ features of Arctic governance, broadly understood as an assemblage of intergovernmental institutions, international forums, and international/national/sub-national stakeholders. While such an assemblage may sound bizarre to some, our point is that initiatives such as the Arctic Circle are important for the exchange (i.e., buying and selling) of

knowledge and ideas between different international, national and sub-national stakeholders about what kind of space the Arctic is, and how it should be governed, even though they are not defined as ‘institutions’ in the formal sense traditionally associated with IR Theory.

Our notion of the ‘bazaar’ is also suggestive of the way in which, contrary to how the Arctic governance regime has traditionally been imagined by IR scholars (Young 2008, 2012), initiatives such as the Arctic Circle provide different sites of performance and practice wherein stakeholders might seek to influence the Arctic governance regime in ways which might not be permissible elsewhere, for example, at the Arctic Council where non-Arctic states and other organisations have no voice in decision-making. By this, we are not trying to argue that the Arctic Circle and similar initiatives are competing with the Arctic Council for the right to govern Arctic affairs, only that they are collectively part of an unregulated marketplace of ideas which could influence the Arctic governance regime from within (Ingimundarson 2014, pp.186–187).

In this chapter, we use empirical data gathered at the Arctic Circle meeting in October 2014 to further investigate our claims about the bazaar-like qualities of Arctic governance. The first part of the chapter briefly reviews the recent literature on Arctic governance and shows that the dominant interpretation of the current regime is that the Arctic is a region governed by a ‘patchwork’ or ‘mosaic’ of institutions and legal instruments operating at multiple levels, while at the same time retaining some semblance of common purpose—namely to promote peace and cooperation in the Arctic. In accordance with this view, the Arctic Circle might simply be regarded as another piece of the jigsaw that produces this coherent whole. The second part of the chapter introduces our concept of the ‘bazaar’, which we have adapted from the work of the American anthropologist Clifford Geertz on the ‘bazaar economy’ (Geertz 1978). The third part of the chapter illustrates our argument about the bazaar-like features of Arctic governance from the perspective of the UK (one of the authors was fortunate enough to be part of the UK delegation to the Arctic Circle in 2014)⁴, which has been engaged as an outsider in key Arctic governance structures since the late 1980s (Depledge 2013). The fourth part situates the Arctic Circle within the broader assemblage of Arctic governance. We conclude by considering how thinking about ‘bazaar’ governance enlivens our understanding of the emerging Arctic governance regime, and how a process-tracing approach might shed light on the circulation of knowledge and ideas within this bazaar arrangement.

ARCTIC GOVERNANCE: A MOSAIC OF COOPERATION?

The first circumpolar Arctic agreement was signed in 1973 by Canada, Denmark, Norway, the Soviet Union, and the USA to promote international cooperation for the sustainable management of polar bear populations. This was followed in the late 1980s and early 1990s by a host of institutional developments primarily centred on promoting international scientific cooperation and environmental protection, including the International Arctic Science Committee (1990), the International Arctic Social Sciences Association (1990), the NF (1991), the Arctic Environmental Protection Strategy (1991), the BEAC (1993) and the Arctic Council (1996). In addition to these regional and sub-regional instruments, parts of the Arctic are also subject to a number of international governance regimes including the 1982 UN Convention on the Law of the Sea (UNCLOS), the 1920 Treaty of Spitsbergen, the International Convention for the Prevention of Pollution from Ships and its 1978 Protocol (MARPOL), the Oslo–Paris agreements on marine pollution (OSPAR), the 1975 Convention on International Trade in Endangered Species of Wild Fauna and Flora and the International Maritime Organization (IMO)’s Polar Code, which is expected to enter into force in January 2017.⁵

This dizzying array of international agreements, policy declarations, legal instruments and sub-regional/sub-national organisations together constitute what Oran Young (2005, p. 10) has called a ‘mosaic of issue-specific arrangements’, which collectively constitute the prevailing Arctic governance regime complex (Young 2012). Other scholars have offered similar ways of framing Arctic governance as a patchwork of formal and informal arrangements that operate at different levels (international, regional, sub-regional, national, sub-national) (Stokke 2011). The broad ambition of these international institutionalists was summed up in the final report of the Arctic Governance Project, which called for greater efforts to ensure that ‘all these entities are joined together in a mutually supportive manner to form an interlocking suite of governance systems for the Arctic’ (Arctic Governance Project 2010, p. 13; see also Chap. 5 by Humrich, this volume).

Such an understanding of the prevailing Arctic governance regime complex emphasises the complementarity that exists between its constituent parts, as well as the possibility of developing new issue-specific arrangements to plug any remaining gaps (Koivurova and Molenaar 2009).

The core logic to grasp here is that the Arctic governance regime complex is constructed from the sum of its parts. As such, despite the very different arrangements that exist from the international level to the sub-national level, they are all understood to retain some semblance of common purpose—namely, to promote peace and cooperation in the Arctic.

While such an approach is useful for making sense of the way in which the prevailing Arctic governance regime complex is constituted, we argue that the debate around Arctic governance could be enlivened in two ways. The first is to emphasise the possibility that different governance arrangements may facilitate, interfere with, and contest one another (see also Ingimundarson 2014). The most obvious example of this came when the five Arctic Ocean littoral states (USA, Canada, Russia, Denmark and Norway), independently of the other three Arctic states (Finland, Sweden, Iceland), jointly issued the 2008 ‘Ilulissat Declaration’. While the Declaration itself was intended to reinforce the maritime rights of the five littoral states at a time of growing global interest in the Arctic, others questioned whether such a move might undermine the cohesion of the Arctic Council by excluding three Arctic states, let alone others who had a legitimate interest in the high seas of the central Arctic Ocean (Staalesen 2010; Weidemann 2014). Similarly, while all of the Arctic states have since emphasised the primacy of the Arctic Council in Arctic governance arrangements, its power to determine outcomes in the Arctic is severely restricted by its ‘soft’ law and forum-like character, and the need to defer to other international regimes on key aspects of governance relating, for example, to shipping, fisheries and pollution (Ingimundarson 2014; see also Chap. 6 by Selin, this volume).

In highlighting these conflicts, we do not mean to suggest that Arctic governance is chaotic, only to emphasise that there are multiple sites of action (and inaction) in the Arctic and we should be careful about over-determining the role of formal institutions and legal regimes, such as the Arctic Council and UNCLOS, *per se*. Related to this, the second way in which we hope to enliven the debate around Arctic governance is by highlighting the need to explore a wider array of arrangements, which emphasises the role of both performance and place, and not just an ill-defined set of actors and institutions. In describing actors and institutions relevant to Arctic governance, it seems normal to invoke a laundry list of international regimes such as UNCLOS, circumpolar bodies such as the Arctic Council, sub-regional groupings such as BEAC, and non-state organisations such as the Inuit Circumpolar Council (ICC). The broad array of actors included

under the umbrella of ‘Arctic governance’ has also been extended to include the University of the Arctic, which is described on its website as a cooperative network of universities, colleges, research institutes and other organisations concerned with education and research in and about the North. However, international forums such as the annual *Arctic Frontiers* are rarely, if ever, acknowledged, despite the fact that they are regular sites of interaction and performance, involving an array of Arctic stakeholders, including government officials from Arctic and non-Arctic states. At the same time, such forums often refer to themselves as distinct sites. For example, the 2016 Arctic Frontiers conference website contends that ‘The Arctic is a global crossroads between commercial and environmental interests’,⁶ and pointedly does not refer to the Arctic Council.

The emergence of the *Arctic Circle* has further complicated this picture as many seem to regard it as a rival organisation to the Arctic Council, even though it is essentially just another site for the exchange of knowledge and ideas about the future of the Arctic, albeit one which receives far more media attention due to the presence of high-profile individuals such as a President Grímsson and major sponsors (e.g., Google). Again, we are not trying to argue that we should understand every site and space of discussion about the Arctic as part of Arctic governance—while this might be the case, boundaries always need to be delimited. At the same time, however, we must be careful not to adopt a ‘pick and mix’ approach whereby the *Arctic Circle*, for example, is treated as an institution of Arctic governance, while *Arctic Frontiers* is ignored. Here too, our notion of ‘bazaar’ governance could be useful as it emphasises form over function—what is common to the multiple sites of Arctic governance is that they all function as sites in which ideas are more or less effectively exchanged. Our examination of the *Arctic Circle*, as with other sites of Arctic governance, then, should therefore perhaps be more concerned with the form in which different ideas about the Arctic are exchanged.

BAZAAR GOVERNANCE

In 1978, Clifford Geertz explored how ideas from anthropology and economics could be combined to shed further light on the study of peasant market systems, or what Geertz calls ‘bazaar economies’ (Geertz 1978). In his discussion of bazaars in Morocco, he highlights two types of bazaar—the permanent (consisting of a designated trade quarter) and the periodic (which is more mobile and product specific)—which individuals are free

to move between in order to secure the best deal on various traded items. The bazaar has a number of distinctive characteristics which relate to form rather than function—it is not simply the exchange of goods that matters but the ways in which information about prices flows through the bazaar affecting choices about what prices to buy and sell at. As Geertz (1978, p. 29) notes, in the bazaar, ‘information is poor, scarce, mal-distributed, inefficiently communicated and intensely valued’. Participation in the bazaar requires a search ‘for information that one lacks and the protection of information one has’ as buyers and sellers contend with known unknowns such as market demand, pricing and product provenance (Geertz 1978, p. 29). Luck and privileged information play important roles in managing these uncertainties, as do skilful bargaining (which may initially involve price/supply testing and become more intensive when it comes to actual transaction), experienced brokers and trusted client/supplier relationships.

To navigate the bazaar, participants must therefore search for signs and clues about what is about to happen and where. This search can be made more or less difficult by the structure of the bazaar, but is also shaped by processes of clientalisation. This relates to the potential for lasting relationships to emerge between buyers and sellers on the basis of mutual trust. This also enables the seller to direct more energy towards ‘potential’ buyers, as he or she already has a number of secure customers, while the buyer can also spend less energy searching for the best price. However, it also partitions the bazaar by creating relationships between buyers and sellers based on ‘those in the know’, meaning that new arrivals to the bazaar may be far more exposed than regular participants to the vagaries of information flows.

In the context of the contemporary governance of the Arctic region, we posit the idea that the Arctic Circle is ‘bazaar-like’ in that it too involves imperfect exchanges of information, which in turn have the potential to impact the extent to which certain kinds of knowledge (or knowledge about certain things) gain currency at the expense of others. To reflect on the earlier quote from Grímsson, when forums such as the Arctic Circle bring together ‘institutional and governmental representatives, political and policy leaders, scientists and experts, activists and indigenous peoples’, it is not so that these actors can negotiate a common voice, but rather to give different stakeholders the opportunity to set out their ‘stalls’ and market themselves as legitimate Arctic actors capable of offering key insights into indigenous, economic, cultural, technological and political activities

in the region. At the Arctic Circle, these stalls take a variety of forms, from plenaries to workshops, breakout sessions, private meetings, drinks receptions, and dinners in restaurants. Each year, the build-up to *Arctic Circle* begins with various interested stakeholders attempting to secure their stall for the forthcoming conference—to become ‘stall-holders’. This is achieved by submitting proposals to the ‘organisers’, which itself requires would-be stall-holders to convince the organisers that there will be a market at the *Arctic Circle* for their ideas.⁷

In terms of the ideas being marketed and exchanged, a number of countries including the UK, France, Japan and Italy were present to market themselves as legitimate and engaged Arctic actors. Businesses such as *Polarisk* (a political risk research and consultancy firm) advertised more traditional wares such as consultancy services and technologies, and highlighted commercial opportunities for investment, infrastructure and trade. Other organisations such as the West Nordic Council and the World Economic Forum attended to promote awareness about their activities in the Arctic. Academics also held a number of sessions to present and debate their research findings, hoping perhaps that the *Arctic Circle* would increase their exposure to other potentially interested actors.

For those who win the right to set out their stalls at the *Arctic Circle*, the next challenge is to gain attention. Stall *placement* matters and it is in negotiating these placements that a stall-holder’s capital, skill, industriousness, luck and privilege are tested. The biggest prize on offer is to make it into the plenary programme (especially for the morning sessions) where stall-holders will likely gain the most coverage. Here, there is a clear advantage for those stall-holders who already have close relationships with the organisers (who may be long-standing clients) or been able to market their ideas effectively in advance. Countries such as the UK, China, Japan and France can also offer other ‘sweeteners’ to the organisers, such as the attendance of VIP diplomats who can enhance the reputation of the Bazaar (e.g., the *Arctic Circle* in 2015 was attended by President François Hollande of France), as well as other kinds of endorsements (e.g., letters of support⁸).

Plenary sessions are held in the atmospheric main auditorium of the *Harpa* conference centre in Reykjavik on the basis that these sessions are expected to generate the most interest. The main auditorium is the largest and busiest area of the Arctic Circle ‘bazaar’, and also the best furnished in terms of décor and lighting. The auditorium is also well-positioned to pick up ‘passing trade’ as free food and drink is made available just outside.

At the same time, it is expected that buyers will look at the plenary sessions first on the understanding that this is where the premium information will be sold. One is more likely to encounter a VIP, such as a government minister, in the plenary session, and this in turn may attract other high-profile audience members (indeed it is perhaps less likely that high-profile figures would bother to attend the *Arctic Circle* without an attractive audience to engage). The symbolism of the plenary therefore creates a mutual understanding between buyers and sellers that this is where the best information will be made available. For those that do not make it into the plenary, the risk they face is that their own stalls will be marginalised, sited somewhere else on the multiple floors of the *Harpa* building, or in other buildings altogether.

The stall-holders have to adopt different marketing strategies to ensure information about what they are selling is made available across the bazaar. Social media, word of mouth, enticing session titles and signposting (directing people to their stalls), all assume far greater importance, while a degree of luck is also needed. Of course, the 'buyers' also face an information challenge. Upon arriving at *Arctic Circle*, everyone is presented with a programme containing a list of all the stalls (sessions) that will be open over the course of the conference. At an event the size of *Arctic Circle*, participants are forced to choose between multiple stalls (there were 78 sessions across the three days) as they cannot attend them all. Here too, information is at a premium as the programme only details titles, timings, sites and speakers. With only imperfect information available, social media, word of mouth, title wording, and speaker reputations all assume greater importance as buyers navigate the bazaar in search of the most valuable information. At the same time, sellers are forced into thinking about how best to attract key buyers to their stalls (i.e., those people they are most keen to influence with their information).

THE UK DELEGATION IN REYKJAVIK: A BIZARRE PERFORMANCE IN OCTOBER 2014?

The strategies and performances elicited from those attending the *Arctic Circle*, whether as stall-holders or buyers (in many cases participants actually play both roles in the course of the conference) are critical to the flow and exchange of information in the bazaar. In the build-up to the 2014 *Arctic Circle*, the UK delegation was particularly successful, managing to

secure two stalls to be open on different days during Arctic Circle, while most other participants only managed to get one stall. Moreover, one of these stalls had gained a prized plenary position. The UK was not unique in this regard as national delegations from France, Singapore, and Japan were also given plenary stalls. Here, privilege appeared to play an important role. Since these delegations represented states, there was a need for the organisers to recognise their primacy as holders of premium information (with states still regarded as the primary actors in IR).

However, the UK was unique among these countries in being granted a second stall in a 'breakout' session, which would give the UK delegation a further opportunity to sell their wares. Among these 'wares' was the claim that the UK was a legitimate and active player in the Arctic. The sessions were also used to demonstrate the contributions that UK commercial actors and scientists/social scientists could make in the Arctic. To have those two sessions, moreover, was a privilege that one might surmise was either related to the close relationship between the head of the UK delegation, James Gray MP, and President Grímsson or to the fact that the UK delegation was able to convince the organisers that it had more information to sell (or most likely some measure of both). What was perhaps not anticipated by the UK delegation was that this second stall would be sited in a difficult-to-find room at the back of the *Harpa* building. Given the impression made by the UK delegation during the plenary (discussed below), there was also a palpable sense of fatigue about the UK delegation among other Arctic participants—or at the very least, a sense that all the 'good stuff' had already been sold during the plenary. In terms of audience numbers, the 'breakout' stall attracted far less interest than the 'plenary' stall. Of those that did turn up, there was a sense within the UK delegation that these were not necessarily the people that they were primarily interested in selling to.

The actual performance of the UK delegation at the *Arctic Circle* is also worthy of note. It is fair to say that the UK delegation made a big impression, especially during the plenary session. The strategy adopted by the UK delegation had multiple dimensions to it, involving nine speakers representing the UK government, UK parliament and British businesses giving quick-fire presentations; a projection of a giant Union Jack emblazoned on a screen behind them; the setting up of multiple banners by the stage advertising the UK as 'Great'; and the handing out of glossy brochures (also emblazoned with the Union Jack) to prospective buyers in the audience.

Somewhat controversially perhaps, the poppy worn by many UK citizens each year in the run-up to Armistice Day in the UK (which coincided with the *Arctic Circle*) also ended up being enrolled in the performance of marking out the size of the British delegation/stall which dwarfed all others. All of these actions were part of a broader strategy to sell the view that the UK had both a legitimate and an active interest in the environmental, social, economic and geopolitical changes currently affecting the Arctic region—essentially as a response to a gauntlet thrown down by President Grímsson in 2013 when he told an audience in London that the UK was not doing enough to be taken seriously as a player in Arctic affairs, reflecting broader criticism that the UK has not always been as engaged with Arctic affairs as it could have been (Morrell 2013).

But how was this performance received by others attending the *Arctic Circle*? In other words, did the idea sell? In the coffee breaks and networking events that followed the UK ‘plenary’, participants at the *Arctic Circle* could be heard joking that the UK delegation might have lacked subtlety and maybe even went a little too far in trying to sell itself in Reykjavik. After the event, somewhat ironically, one academic blogger observed that the UK delegation had come across as a ‘trade mission’—a peddler of more traditional goods and services rather than of the sorts of knowledge and ideas that stall-holders at the *Arctic Circle* were supposed to be selling according to Grímsson’s vision (Exner-Pirot 2014). Nevertheless, the official feedback from within the UK delegation was that the UK had performed well, achieving its mission to sell the idea that the UK was an important actor in the Arctic, and creating the conditions going forward for the UK to continue participating in the marketplace of ideas about what the future should hold for the region.

At the same time, it was impossible to avoid the feeling that delegations from other countries, Arctic as well as non-Arctic, were also reflecting on the fact that they had perhaps missed an opportunity to set out a bigger stall in Reykjavik. A delegate from Japan (which opened its own ‘plenary’ stall the next day) even commented that Japanese parliamentarians would follow the UK example when the *Arctic Circle* next convened in October 2015, suggesting that the strategy used by the UK delegation had sold, even if the content had not. At the 2015 *Arctic Circle* meeting, for example, Japan released its first Arctic policy and undertook a provisional translation of the policy so that it could reach a wider international audience (Government of Japan 2015). A further measure of the degree to which the UK delegation was seen to have adopted a successful

strategy would be to see whether other delegations use the UK model when setting out their stalls at the next *Arctic Circle* meeting in 2015. Shortly after the *Arctic Circle* meeting in 2014, France announced and subsequently confirmed that President François Hollande would lead the French delegation to the *Arctic Circle* in 2015. The French president ended up delivering the keynote speech to the 2015 meeting. In contrast, the UK went for a far more discrete presence, perhaps reflecting that there is only so much buying and selling one can do in the Arctic from year to year, at least until there is a further significant increase in human activity in the region.

SITUATING THE ARCTIC CIRCLE IN AN ARCTIC GOVERNANCE BAZAAR

Finally, it is worth commenting on one other dimension to the Arctic Circle ‘bazaar’. In this chapter, we have primarily focused on the actors that brought their stalls to Reykjavik. However, in the broader contexts of debates about Arctic governance, it is worth noting that the *Arctic Circle* also constitutes a stall within the wider bazaar in which Arctic governance is negotiated; a bazaar in which the Arctic Circle ‘stall’ sits alongside other stalls ranging from the intergovernmental (e.g., the Arctic Council), to the international (e.g., the IMO), the sub-regional (e.g., the BEAC), the sub-national (e.g., the ICC), and other forums such as *Arctic Frontiers* and the *International Arctic Forum*. In fact, at the Arctic Council Ministerial meeting in 2013, the Swedish Foreign Minister, Carl Bildt, responded with his own sales pitch when he argued that the Kiruna Declaration, as it pertained to new observers, had confirmed the Arctic Council’s primacy globally (Myers 2013).

Nevertheless, while most would acknowledge that the Arctic Council is indeed the primary ‘stall’ in the Arctic bazaar, it is not the only purveyor of relevance to Arctic governance. Although the Arctic Council has sought to transform its stall by becoming less exclusive, for instance, by accrediting more observers and establishing the Arctic Economic Council (AEC) in September 2014, there are political limits to what the Arctic Council can sell (including discussions on defence and security), creating demand for other stalls—such as the *Arctic Circle* and *Arctic Frontiers*—which are capable of building different networks of information exchange between international, national, sub-national, non-governmental and commercial actors (Steinberg and Dodds 2015).

While we have used the term ‘bazaar governance’ to analytically grasp what we think is at stake when it comes to making sense of Arctic governance, it is also motivated by a desire to return to some first-order principles in terms of why governance matters. From setting out ‘grounding rules’ for participants to decision-making processes, terms like ‘Arctic governance’ should be treated cautiously not only because the word ‘governance’ is contested as is ‘Arctic’ in terms of what it encapsulates and whether there are some parties (often assumed to be state parties) more than others who have a right/capacity to appropriate/inhabit that space in the first place. As the Government of Japan’s Arctic policy notes,

‘Some Arctic states, with a view toward securing their national interests and protecting their territories, have become active in the area of national defense. Moves toward expanding military presence may have an impact on the international security environment. In this way, changes in the Arctic environment have political, economic, and social effects, not only in the Arctic but also globally. Resulting opportunities and issues are attracting the attention of the global community, both of Arctic and non-Arctic states’ (Government of Japan 2015, pp. 1–2).

CONCLUSION

In this chapter, we have sought to introduce the idea that the *Arctic Circle* Assembly has taken the form of an annual ‘bazaar’ where knowledge and ideas about the Arctic are ‘bought’ and ‘sold’ by a wide range of stakeholders from both within and beyond the Arctic region. Within the bazaar, these stakeholders become ‘stall-holders’, competing with one another for attention in order to position themselves as key knowledge brokers in the debate about the future of the Arctic region. They must rely on a combination of capital, skill, industriousness, luck, and privilege. After all, while it is expensive to attend *Arctic Circle* (unless you are speaking, a volunteer, a student, or part of the media), it is cheaper to attend than other Arctic events such as *Arctic Frontiers* in Norway. Moreover, although stalls must be negotiated with the organisers, the conference is open to everyone (in contrast to the Arctic Council where participation is strictly limited to member states, indigenous Permanent Participants, and observers).

At the same time, privilege still matters since having good relations with key figures such as President Grímsson and major sponsors help to ensure maximum exposure and exclusive access (Guggenheim, e.g., hosted an

invite-only drinks reception on one evening). In 2014, the UK delegation experienced both sides of this coin, gaining a high-level exposure in the plenary session, but attracting far less attention during the breakout session. The overall view from within the delegation was that the experience was a positive one. Despite existing commercial, cultural and political ties to the region, the UK is still worried about being perceived as an ‘outsider’, especially in those contexts where the UK has either commercial interests or domestic environmental opinion to contend with. Thus, although the UK has been careful to respect the sovereignty of the Arctic states and the primacy of the Arctic Council (where the UK’s own voice is limited), the *Arctic Circle* provided a valuable opportunity for the UK to ‘market’ its Arctic credentials in a display of flag-waving and showmanship that would have been impossible in nearly every other Arctic forum.

At the same time, we have also argued that the *Arctic Circle* is emerging as a stall in its own right, as part of a broader bazaar of Arctic governance in which the *Arctic Circle* competes with all kinds of other institutions and forums to push forward ideas about Arctic governance. The leadership of President Grímsson, with support from the Icelandic government, has helped to promote the *Arctic Circle* as the stall of choice for both global and marginalised stakeholders who have been excluded from other stalls such as the Arctic Council. Already, the Arctic Council has countered this challenge (whether intentionally or not): first by granting observer status to an increasing number of states, and second by establishing the AEC. In Norway, the organisers of *Arctic Frontiers* may be feeling the pressure as well, not least because Reykjavik is more accessible than Tromsø both geographically and financially. It seems noteworthy that in 2013, there was no official Norwegian, Swedish, or Finnish representation (at least in the plenary sessions) at *Arctic Circle*. In 2014, Norway was absent again. As this chapter suggests, this kind of bargaining and competition (and the dynamism implied), both between Arctic stakeholders and sites of Arctic stakeholder interaction, appear as neglected aspects of Arctic governance.

We suggest that an avenue for further research of the *Arctic Circle* ‘bazaar’ would be to explore how far ideas and relations that have been ‘bought’ and ‘sold’ in Reykjavik since 2013 have travelled since. A second avenue for future research would be to survey both stall-holders and attendees about their experiences at the *Arctic Circle*, in order to delimit more clearly what it is they are seeking to ‘buy’ or ‘sell’ at the forum, the strategies they deploy and the difficulties they face in achieving desired outcomes. The emergence of the *Arctic Circle* has helped to foreground these concerns, while adopting a concept of the ‘bazaar’ seems to us a useful way to begin addressing their neglect.

NOTES

1. Others in Iceland have, however, been sceptical about strengthening ties with China as indicated by the government's decision to reject a proposal by a multimillionaire Chinese property developer to build a huge tourist resort on a large tract of unused land in the northeast corner of Iceland.
2. A full list of Arctic Circle partners is available on the initiative's webpages at <http://arcticcircle.org/> (last accessed 08 December 2015).
3. Examples include the Norwegian-funded 'Geopolitics in the Arctic: A Changing International Landscape', London: Royal United Services Institute (RUSI), 14 April 2015; the joint Swedish/Finnish-funded 'Forum: Arctic Climate Change & Security', London: International Institute for Security Studies (IISS), 2012–2014; and the US-funded 'The Future of the Arctic', London: The British Library, 16 March 2015.
4. Duncan Depledge gratefully acknowledges the financial support provided by the Mamont Foundation for this.
5. For a full list of Arctic governance agreements, readers should consult the webpages of the Arctic Governance Project at <http://arcticgovernance.cus-tompublish.com/compendium.137742.en.html> (last accessed 08 December 2015).
6. See <http://www.arcticfrontiers.com/> (last accessed 08 December 2015).
7. The Arctic Circle organisers emphasise a determination to be as inclusive as possible in this regard, in contrast to other conferences such as *Arctic Frontiers* which set a specific 'theme' each year.
8. The News section of the Arctic Circle is littered with examples of letters of support, including recently, from President Xi Jiping of China and Chancellor Angela Merkel of Germany.

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PART 3

Involvement: Who Participates in
Global Arctic Governance?

Exploring Different Levels of Stakeholder Activity in International Institutions: Late Bloomers, Regular Visitors, and Overachievers in Arctic Council Working Groups

Sebastian Knecht

INTRODUCTION

Since its establishment in September 1996, the Arctic Council (AC) has opened up to involve currently 32 non-Arctic states, intergovernmental and interparliamentary, as well as non-governmental organisations (NGOs) under the label ‘observer’, and has hence taken a similar path as the majority of international institutions that grant access to various actors beyond the exclusive club of member states (Tallberg et al. 2013). More interested actors are lining up to join the group of observers, with 17 applications being filed at the 2015 Ministerial meeting of the AC in Iqaluit. All of these applications were deferred at that meeting, mainly as a result of discussions between AC member states about how to enhance the

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integration and contribution of those observers already accredited before further enlargement.

Much of the scholarship on third-actor participation in international institutions has investigated the causes and consequences of their engagement in these institutions, with a strong focus on how particularly non-state actors may facilitate more effective, transparent, and legitimate policy-making in global governance (Raustiala 1997; Jönsson and Tallberg 2010; Steffek et al. 2008). Widely disregarded, though, are questions about the conditions of third-actor participation, whether state or non-state actors, in international institutions to which they have access. Not all actors admitted to these institutions also make use of their participatory rights and in the end abstain from meetings, bodies or voting (Hanegraaff et al. 2011; Panke 2014, 2016; Uhre 2014). Also in the case of the AC, which is believed by many to have emerged as a forum for the articulation and contestation of global interests in regional developments, many observers do not regularly attend Council meetings or participate in Working Group (WG) projects, while other observers are more active. What accounts for this variation in observer participation at the AC?

This chapter argues that current debates on observer engagement in the AC have been dominated, and ultimately distracted, by a too narrow focus on the sheer number of applications for and accreditation of observer status, much to the detriment of analysing their actual presence, participation and impact in Council structures and processes. While one of the chapters in this volume takes a closer look at how two non-governmental actors with observer status in the Council, the World Wide Fund for Nature (WWF) and the Circumpolar Conservation Union (CCU), have had an impact on AC WGs, and Task Forces (TFs) (Chap. 10 by Wehrmann, this volume), this contribution explores observer performance in a broader sense. Using data from a recent analysis of Stakeholder Participation in Arctic Council (STAPAC) meetings between 1998 and 2015 (Knecht 2016a), this chapter (a) demonstrates extremely high variation in attendance of observers at AC WG meetings, and (b) compares the cases of three state observers—Germany, the Netherlands and South Korea—to shed light on the conditions behind their attendance or absence in these bodies.

This contribution proceeds in the following order: After reviewing the relevance of observer participation in the AC in the era of the ‘global Arctic’ (see Chap. 1 by Keil and Knecht, this volume), the chapter introduces the dataset and methodology on which the analysis of participation

records in AC meetings is based. The chapter then moves on to identify different ‘worlds of commitment’ by observers in AC WG meetings, and discusses the three case studies in more detail.

OBSERVER PARTICIPATION IN AC GOVERNANCE

The AC is an interesting case for the analysis of participation levels in international negotiations. For a regional body founded in 1996 with a mandate to ‘provide a means for promoting cooperation, coordination and interaction *among the Arctic states, with the involvement of the Arctic indigenous communities and other Arctic inhabitants on common Arctic issues*, in particular issues of sustainable development and environmental protection in the Arctic’ (Arctic Council 1996, Article 1, emphasis added), it is not a given to open up to such a high number and diversity of outside entities with an interest or stakes in regional affairs. Observer status is currently held by 12 European and Asian states, 9 intergovernmental and interparliamentary organisations (hereinafter IGOs) and 11 NGOs. Twenty actors in this pool were already admitted at Ministerial meetings in 1998 and 2000, and the other twelve followed in subsequent years with six non-Arctic states being the last to join in 2013 (see Fig. 9.1 below).

Back in May 2008, the five Arctic Ocean coastal states (A5) still proclaimed that ‘[b]y virtue of their sovereignty, sovereign rights and

	Admitted	Deferred
1998	Germany, Netherlands, Poland, UK (1); Nordic Council of Ministers, SCPAR, UNEP, UNECE (2); Northern Forum, IASC, WWF, IUCH (3)	
2000	France (1); NAMMCO (2); ACOPS, AWRH, CCU, IASSA, IFRC, IUCN (3)	
2002	UNDP (2); IWGIA, UArctic (3)	
2004	NEFCO (2); AINA (3)	
2006	Spain (1)	
2009		China, Italy, South Korea (1); EU (2)
2011		China, Italy, Japan, South Korea (1); EU (2)
2013	China, India, Italy, Japan, Singapore, South Korea (1)	EU, IHO, OSPAR Commission, WMO (2); APECS, Greenpeace, IOGP, Oceana
2015		Greece, Mongolia, Switzerland, Turkey (1); EU, ICES, ICS, IHO, OSPAR Commission, WNC, WMO (2); APECS, Greenpeace, IOGP, NVP, Oceana (3); NGS

Fig. 9.1 Access of observers to the Arctic Council (*Source:* author’s own compilation) [Categories: (1) state observer, (2) IGO observer, (3) NGO observer]

jurisdiction in large areas of the Arctic Ocean the five coastal states are in a unique position to address these possibilities and challenges' associated with climate change, sea-ice retreat, changing living conditions for local and indigenous inhabitants as well as the exploitation of living and nonliving resources (Arctic Five 2008). Since then, Arctic states have paid a great deal of attention to keeping the circle of participants for Arctic-related agreements only 'as big as necessary' rather than pursuing a policy of 'the more the merrier' (Keil 2014). Both legally binding agreements negotiated under the auspices of the AC, the 2011 *Agreement on Cooperation on Aeronautical and Maritime Search and Rescue in the Arctic* and the 2013 *Agreement on Cooperation on Marine Oil Pollution Preparedness and Response in the Arctic*, have the eight AC member states as signatories, as will have the science cooperation agreement currently developed in the Council's Scientific Cooperation Task Force. A joint *Declaration Concerning the Prevention of Unregulated High Seas Fishing in the Central Arctic Ocean* signed in July 2015 is even narrower in scope and only comprises the five coastal states, much to the irritation of Iceland. For the time being, the country is together with China, Japan, South Korea and the European Union (EU) invited to participate in a 'Five-plus-Five' format to work towards a regional fisheries management arrangement for the central Arctic Ocean. Such an agreement shall secure wider commitment beyond the A5, whereas '[I]miting participation in this way may also serve to ensure that the Arctic Five are not outnumbered by non-Arctic Ocean coastal states and entities' (Molenaar 2015, p. 429).

Compared to these efforts at establishing hard law in specific regional domains to which so far only Arctic states commit, the AC retains its primary role of a soft-law, decision-shaping forum (see Rottem 2015, p. 56). Institutionalised cooperation in the AC with four times more observers than member states hence does not violate the principle of keeping Arctic cooperation 'as big as necessary'. The Arctic states admit those actors that 'the Council determines can contribute to its work' (Arctic Council 2013, Article 36) in order to fulfil its mandate more effectively, and which these actors further have to demonstrate. So despite the adoption of exclusive regional agreements, it well makes sense for the Council to enlarge. In doing so, the forum has adopted a non-discriminative policy in its Rules of Procedure towards third actors with respect to admission criteria and participatory rights and obligations after accession. The same conditionality measures are applied on all actors interested to access the Council and shall facilitate uniform practices with regard to their involvement in

all subsidiary bodies in which ‘the Arctic Council has not been able to integrate Non-Arctic experts into its projects, as efficiently as there may be capacity for it’ (Kankaanpää 2012, p. 75). An Observer Manual introduced in 2013, and amended in 2015, provides detailed guidelines for observers and WG chairs on how observers can contribute to the work of the Council, and which Arctic states have connected with the hope that non-Arctic actors would perform more alike in Council meetings and projects (Knecht 2016b). With regard to participation behaviour, this equalising policy towards all actors with observer status does not only allow for comparison of actors that are highly dissimilar in kind (states, NGOs, IGOs, and interparliamentary organisations). It also requires a better understanding of how third actors participate and perform in the AC once they have been granted access, and the reasons for the high variation in attendance identified further below under conditions of equality.

The AC today is a hub for international partnerships and scientific networks on Arctic-related issues spanning much of the northern hemisphere. These international networks have gained in importance over the years as the extent and severity of climate and environmental interdependencies between Arctic and global systems have become more and more apparent. In this context, AC observers play an important double-role as co-producers and co-consumers of AC output (Lamers et al. 2016). With regard to their role as co-producers of Arctic knowledge, the socio-economic, environmental, and political linkages of the ‘global Arctic’ require a broadened understanding of transnational environmental and climate processes. Because many drivers of Arctic change such as greenhouse gas emissions, persistent organic pollutants, or black carbon originate in industrialised and emerging market economies outside the Arctic (see Chap. 12 by Cavazos-Guerra et al., this volume), knowledge and expertise from outside the Arctic region is a necessary source of information to connect the dots between causes and consequences of Arctic change. The admission of China, India, Japan, Singapore, and South Korea (together with Italy) as observers to the AC at the 2013 Ministerial meeting in Kiruna hence was a major step forward in formalising science cooperation between major emitters of some hazardous substances, as for instance mercury, and those affected by them (UNEP 2013). In turn, Arctic climate change has severe repercussions on societies, landscapes, and weather patterns further south.

International stakeholders do not only help in the creation of knowledge about Arctic environmental processes and their global sources and

effects, but also play an important role as co-consumers of the ‘numerous scientific studies that have been instrumental in waking the world to the transboundary pollution and climate change challenges facing the Arctic’ (Koivurova and VanderZwaag 2007, p. 191). Observers serve as both recipients and multipliers of this knowledge and can help making the work of the AC more effective by ‘bringing Arctic concerns to global decision-making bodies’ (Arctic Council 2013, Annex 2, Article 6). Strengthening the science–policy interface and distributing Arctic knowledge world-wide to raise public and political awareness for a changing North has become one of the main priorities of the AC and is also reflected in its Communication Strategy that distinguishes between six ‘external target groups’ consisting of policy-makers, Arctic inhabitants, NGOs, the scientific and research community, the business sector, and the media (Arctic Council 2012, pp. 6–7). Several AC WGs have further intensified their collaboration with outside actors or observers to influence other institutions and environmental negotiations at the international level (see also Chap. 6 by Selin, this volume).

ASSESSING LEVELS OF STAKEHOLDER ACTIVITY IN THE AC SYSTEM

The AC today has six WGs of which four were already an integral part of the Council’s predecessor, the Arctic Environmental Protection Strategy (AEPS) founded in 1991, namely the Arctic Monitoring and Assessment Programme (AMAP), the Conservation of Arctic Flora and Fauna (CAFF) WG, the Emergency Prevention, Preparedness and Response (EPPR) WG, and the Protection of the Arctic Marine Environment (PAME) WG. The Sustainable Development Working Group (SDWG) was added at the first Ministerial meeting in Iqaluit in 1998, and the Arctic Contaminants Action Program, initiated in 2000 as an implementation programme to address pollution problems identified by AMAP, was in 2006 turned into a permanent WG.

The following analysis includes those AC WGs for which more than 50 per cent of the data on meeting participants were available for the period from 1998, when the first observers were officially admitted and the Rules of Procedure laying down their rights and duties in Council meetings were adopted, until 2015. These are AMAP, EPPR, PAME, and SDWG. Data on each observer’s participation record in these WGs were taken from the STAPAC dataset (Knecht 2016a) that is based on meeting records and

participant lists found in the online document archives of the AC and its WGs.¹ The analysis covers attendance records for all eligible actors in 75 per cent of the SDWG meetings (24 out of 32) and 96 per cent of EPPR WG meetings (23 out of 24), in addition to all 18 AMAP and 29 PAME WG meetings over the entire period. Presence or absence from WG meetings was measured from the year on the actor was formally granted the status of observer by the eight Arctic states at a Ministerial meeting (see Fig. 9.1 above).

Analysing observers' vocality in WGs instead of higher-level Senior Arctic Officials (SAOs) or Ministerial meetings is a reasonable choice on the following grounds. In the Council's institutional design, in which Ministerial and SAO meetings have the purpose to provide political steering and supervision of the overall guidelines agreed between Arctic states and make sure that the Council's agenda is properly put into practise, the WGs together with the TFs² form the linchpin of Arctic cooperation through the intensive study and evaluation of short- and long-term Arctic-related concerns within the mandate of the Council. It is also at this level that observers are granted far-reaching participatory rights compared to SAO and Ministerial meetings where they are given a chance to speak only on rare occasions. In contrast, in WG meetings observers are encouraged to make oral or distribute written statements of their views as well as relevant documents, and to further make organisational, financial, and scientific contributions to existing WG projects or propose new ones with the backing of an Arctic state or a Permanent Participant (PP) (Arctic Council 2015, pp. 12–13). This is in line with the Council's Rules of Procedure that state in Article 38 that the 'primary role of Observers is to observe the work of the Arctic Council. Observers contribute through their engagement in the Arctic Council primarily at the level of working groups' (Arctic Council 2013, Article 38). All this makes the WGs a strategic access point for direct interventions by observers in order to get their voice heard and push for own policy objectives in the AC system, whereas in SAO and Ministerial meetings they would mainly have to rely on informal talks with the Arctic community in between sessions.

The result of the analysis is an additive participation quota for meetings of all four WGs in per cent relative to the total number of meetings that took place since accession of the observer. To put observers' performances in comparative perspective to the eight AC member states and six indigenous peoples' organisations holding PP status, their attendance quotas were collected for the period from 1998 until 2015 too. For illustrative

reasons, the record of the EU was further added and comprises attendances by representatives from the European Commission as well as from the European Environment Agency, and the European Maritime Safety Agency. The EU is a special case and has received a fair amount of attention in recent years, because it is a well-integrated Arctic player without observer status in the AC system. Between 2009 and 2015, its request for formal accreditation has been deferred in practice, though not denied in principle, four times due to high-level disputes especially with Canada over a 2009 EU regulation banning the trade in seal products from the internal market (Regulation [EC] No 1007/2009). Even though Article 3(1) of the regulation already contained an exception for seal products traditionally hunted in Inuit and other indigenous communities, it took until October 2014 for Canada and the EU to negotiate a framework for cooperation to secure indigenous seal hunters access to the EU market, illustrating the EU's willingness to respect and comply with 'Arctic norms' (see Chap. 7 by Graczyk et al., this volume).

For this roster of 47 actors, a total of 3789 observations have been made over the entire period of 17 years. Each individual actor's activity level in the four AC WG meetings is shown in Fig. 9.2 below.

Before investigating observer attendance at WG meetings in more detail, a few comments on the variation of attendance records are in order. First, the variation in attendance across all actors is enormous and ranges from full attendance in every meeting over the entire period (USA, Canada) to quasi-absence from AC subsidiary bodies (over the entire period, United Nations Economic Commission for Europe [UNECE] attended one EPPR meeting in 2015 and United Nations Development Programme [UNDP] one SDWG meeting in 2003). Overall, international commitment to WGs is relatively low. South Korea and the WWF are the only observers to have attended more than 50 per cent of all WG meetings. In turn, almost one third of the observers have participated in less than ten per cent of all WG meetings, and comprise state, IGO, and NGO observers. If analysed in groups of actors (see Fig. 9.1 above), not only the USA and Canada but all member states unsurprisingly participate at high and regular levels and have been present as an entire group in 94 per cent of all WG meetings since 1998. PPs fall already much behind with an overall participation quota of 42 per cent, but still perform much better than the observers. The Arctic Athabaskan Council's quota of 21 per cent, though the lowest among all PPs, is about the average attendance quota of the group of state observers (22 per cent)

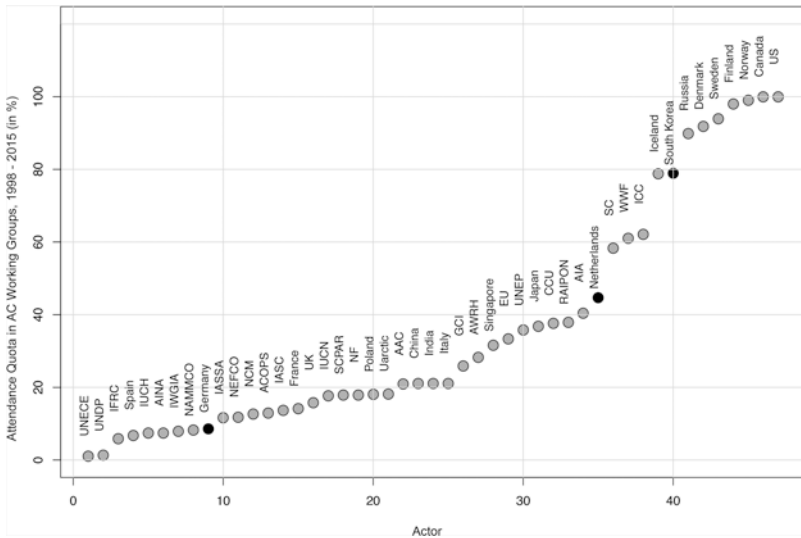


Fig. 9.2 Participation in AC WG meetings (*Source:* Author's own compilation)

and the group of NGO observers (20 per cent). IGO observers reach the lowest average quota of 13 per cent.

Second, performances of individual actors within these five different groups also vary significantly. Those member states that score comparatively low abstain generally from meetings of one particular WG rather than occasionally from all WGs. In the case of Russia (overall quota of 90 per cent), this is the SDWG to which a Russian delegation has not been present in six out of 28 meetings, while in the cases of Denmark (92 per cent) and Iceland (79 per cent) it is the EPPR WG. For the PPs, the Inuit Circumpolar Council reaches the highest quota of 62 per cent, which is still much below that of the member states. Given the special status of indigenous peoples' organisations at the Council with a right to be consulted at any stage of the negotiations, their overall performance should be a cause for concern regarding indigenous representation in the forum.

However, in contrast to arguments that saw the rising numbers of observers posing a threat to the indigenous voice at the Arctic table, observers rarely outnumber PPs on a large scale, irrespective of the type

of observer and their timing of access. There are state, IGO and NGO observers that attend WG meetings fairly regularly (for instance, South Korea [79 per cent], the Netherlands [45 per cent], Japan [37 per cent], United Nations Environment Programme [UNEP] [36 per cent], the WWF [61 per cent] and the CCU [38 per cent]) as well as those that are largely absent from this level of the AC system (for instance, Spain, Germany, UNECE, UNDP, North Atlantic Marine Mammal Commission [NAMMCO], International Union for Circumpolar Health [IUCH], International Federation of Red Cross and Red Crescent Societies [IFRC], International Work Group for Indigenous Affairs [IWGIA] and Arctic Institute of North America [AINA]). This does not necessarily mean that these actors are less interested or even less active in Arctic governance *per se* since to some of them like NAMMCO, IUCH, or AINA northern concerns are their *raison d'être*, but that they may use alternative political forums or other channels for collaborative efforts with Arctic partners outside the institutionalised setting of AC WGs.

Third, despite its non-status of a fully accredited observer, the European Commission and EU agencies have participated on average in every third AC WG meeting giving the EU a voice in the absence of official observer status. For most of the years between 1998 and 2015, the EU has attended WG meetings on an *ad hoc* basis or as an invited guest, but even after the decision was taken by the Arctic states in 2013 to abandon *ad hoc* observer status, the EU has continued to participate regularly and most actively in AMAP, PAME, and SDWG meetings.

DIFFERENT WORLDS OF COMMITMENT

Full and permanent attendance by all observers in all WGs would be an ideal state from the perspective of participatory politics and the production of public goods such as knowledge about Arctic environmental and climate change. However, low participation quotas do not necessarily indicate a defective governance system in the same way as they are not necessarily associated with a lack of interest or willingness on behalf of the observer to support the work of the AC. Rather, the high variation in attendances point to different logics behind contributions by international stakeholders or, put differently, different 'worlds of commitment'.

A closer look at the STAPAC dataset suggests that there are at least three different worlds of commitment in AC subsidiary bodies. A small group of observers, among which are the WWF and South Korea, seek to

be omnipresent and highly visible in Council proceedings, and frequently participate in several or even all WGs. A second group of observers, among them the Netherlands, Japan, Singapore, UNEP, and the EU, is more selective with regard to the bodies in which they attend and generally focus on one or two WGs rather than addressing as many as possible. Then again, a third group of stakeholders very irregularly attends WG meetings either across the various WGs or in one particular WG only.

These different ‘worlds of commitment’ will be investigated in more detail further below. The comparative analysis will discuss the cases of South Korea, the Netherlands, and Germany (all marked black in Fig. 9.2 above) all of which are typical cases of these distinct worlds of commitment. The three cases have also been chosen to control for the type of actor (all state observers) as well as for available resources. While the non-discriminative policy of the AC towards different observer groups would allow for inter-type comparison of the conditions under which state, IGO, and NGO observers (not) attend WG meetings, the incentives to do so might be well different for all observers and particularly across observer groups, while they are certainly distinct in the case of state observers (for instance, Stokke 2014).

With regard to resources, the financial, organisation, and staff capacity without a doubt matters when it comes to representation in international institutions, and likely affects the degree of a state’s vocality in international negotiations: Weaker states struggle to develop national positions towards international negotiations and in consequence tend to be less active than more powerful ones (Panke 2016). Already a glimpse at Fig. 9.2 may indicate that resources may not be the only explanatory factor for the presence or absence of an actor at AC WG meetings. Some of the observers with high organisational capacity and available financial and staff resources such as UNDP or states like Spain, Germany, the UK, and France score relatively low, while other actors that are more limited in their resources and capacities are more regularly present, for instance, the Association of World Reindeer Herders (AWRH), the University of the Arctic and all PPs. The following comparative case-study analysis will show that resources indeed matter, but play only a minor role in explaining variation in attendance of state observers in AC WG meetings. Particularly those state observers able to define policy priorities for the Arctic region, align these to the Council’s political agenda, have high interministerial coordination, and consider the AC as a viable gateway to further own interests in the region have a stronger voice in its WGs.

The Late Bloomer: Germany

Germany has been an observer to the AC from the very start and was already involved in the AEPS. Despite its long history of involvement in Arctic science and exploration dating back to the mid-eighteenth century, with regard to its Arctic policy Germany has been described as a ‘bystander’ (Haftendorn 2011), a ‘slow train coming’ (Steinicke 2014) and pursuing a ‘more discrete approach based on scientific research, technical expertise, and promotion of commercial interests’ (Pelaudeix and Rodon 2014, p. 59). There is something true about all of these descriptions if one empirically assesses Berlin’s performance at the AC. In all four WGs covered here, Germany has had no delegation attending for most of the time between 1998 and 2015. Highest records were reached in the SDWG, where representatives have been present in four out of 24 meetings (17 per cent), followed by EPPR (2 out of 23/9 per cent), AMAP (1 out of 17/6 per cent), and PAME (1 out of 29/3 per cent). With an overall quota of about nine per cent, Germany has the second-lowest record of all state observers, with only Spain being less present in this period (seven per cent). When the state observers gave a joint statement to the 2008 SAO meeting in Svalvaer in which they listed a number of positive examples of their interactions with the AC and their contribution to the Arctic region in general, the list comprised examples from the UK, the Netherlands, Poland, Italy, France, Spain, and China, but not Germany (ACSAO 2008).

Remarkably, except for two SDWG gatherings in 2003 and 2009, all of these meetings where German delegations attended took place since 2013, making Germany a late bloomer in the AC system and one that is not particularly focused on any specific WG. Germany’s increase in attendance in recent years coincides with the release of the ‘Guidelines of the German Arctic policy’ in September 2013, in which the Federal Foreign Office sees Germany ‘prepared to do its share as an observer country’ and ‘interested in increasing Germany’s ad hoc participation in AC working groups’ (Federal Foreign Office 2013, p. 13). What has inhibited sustained participation in the past, and partly continues to do so, is (a) a lack of sufficient funding for German delegations to participate in Council WGs, (b) a lack of policy coordination between Federal Ministries and agencies, and, most importantly, (c) a lack of overall interest to pursue national priorities in the region through the AC system.

With regard to organisational capacity, coordination between Federal Ministries and main partners is overall weakly institutionalised. The Federal

Foreign Office is in charge of drafting and communicating the German Arctic policy and understands itself as the coordinator of German AC participation, though there is no permanent mechanism for coordination with other Ministries or relevant partners. Impetus for broader coordination and policy science dialogue has come from outside the Federal Foreign Office in 2012 when the Alfred Wegener Institute for Polar and Marine Research in Bremerhaven in collaboration with the Institute for Advanced Sustainability Studies Potsdam and the German Institute for International and Security Affairs in Berlin initiated regular ‘Arctic Dialogue’ workshops at which officials from Federal Ministries and Arctic researchers meet and discuss (Keil 2015). As do most observers, so do German ministries generally outsource participation in AC subsidiary bodies to such research institutions as they certainly hold more expertise with relevance for the respective WG, but which in the case of Germany also have to carry the costs of attendance alone.

Germany’s quite unambitious stance on participation in AC WGs is mainly the consequence of the third inhibiting factor, a lack of interest to pursue its policy priorities in the region actively through the AC. Two reasons account for this. First, there is little overlap between Germany’s policy priorities and the AC’s mandate in the areas of environmental protection and sustainable development. The subtitle of Germany’s Arctic policy guidelines reads ‘Assume responsibility, seize opportunity’, while more emphasis is clearly put on the latter aspect. Germany, which continues to be dependent on oil and gas supplies from Norway and Russia, regards the Arctic primarily as a resource base that ‘Germany and its companies have an interest in gaining access to’ (Federal Foreign Office 2013, p. 7). In addition to oil, gas, and mineral exploration, ‘[t]he Federal Government actively backs the opening of new shipping routes in the Arctic. As one of the world’s largest importing and exporting nations, Germany has a strong interest in new passageways to East Asian trading centres’ (Federal Foreign Office 2013, p. 8).

Second, Germany has been overall unsatisfied with the participatory rights and possibilities observers are granted in the AC system, and regards the Council as a rather inappropriate forum to further its national interests in the region. At a conference on *The EU, Canada, and the Arctic: Challenges of International Governance* in Ottawa in September 2011, then-German ambassador to Canada, Georg Witschel, openly criticised the Nuuk observer rules that were adopted by the Arctic states earlier that year for putting too many constraints on observers (Witschel 2011a, cited

in: Pelaudeix and Rodon 2014, p. 19). Germany particularly calls for more speaking time at AC meetings (Auswärtiges Amt 2013), and suggests ‘to extend observer countries’ participation rights on a case-by-case basis, if an observer can substantially contribute to resolving an issue’ (Federal Foreign Office 2013, p. 13).

As a consequence, the country has considered other diplomatic channels to be more worthwhile to engage in on Arctic issues, including bilateral relations with Arctic states and other global powers such as China, but also multilateral institutions. Germany’s guidelines state that ‘[f]or all issues concerning shipping in the Arctic, the International Maritime Organization (IMO) is the foremost body for multilateral cooperation’ (Federal Foreign Office 2013, p. 13) as is the EU in the areas of environmental politics, science and research, economic policy and energy security, fisheries and transport (Federal Foreign Office 2013, p. 15; see also Dolata-Kreutzkamp 2008).

The Regular Visitor: The Netherlands

The Netherlands is perhaps among the most underestimated and certainly most understudied state observers to the AC. Among the ‘old’ European observer states, however, the country is also among the best adapted and effective participants in the work of the AC and in its self-description an ‘important, sought after and clearly visible research and discussion partner with respect to polar activities’ (NWO 2014a, p. 6). The STAPAC dataset shows that the Netherlands is very active in AC WGs with an overall quota of 45 per cent that is reached through participation in three WGs particularly. Between 1998 and 2015, a Dutch delegation was present at all AMAP WG meetings (except for one in 2007) and in 88 per cent of all SDWG meetings (21 out of 24). In the other two WGs under investigation here, the Dutch record is substantially lower with only one attendance at an EPPR WG meeting in 2010 and three attendances at PAME WG meetings between 2009 and 2010. According to official documents, the Netherlands further actively contributes to CAFF (ACSAO 2002, p. 1; Ministry of Foreign Affairs 2016a, p. 20).

Like in the case of Germany, the Dutch historical footprint in the polar regions can be traced back centuries (Braat 1984). From the mid-1980s onwards, Dutch polar policy was primarily concerned with the South Pole region where the Netherlands received consultative status to the Antarctic Treaty in November 1990, but soon after the country widened its polar

focus to take into account an Arctic dimension as well (Ministry of Foreign Affairs 2012, p. 1). Since the early days of circumpolar cooperation in the post-Cold War period, it has been an observer of Arctic affairs first in the AEPS and since 1998 also officially in the AC. The country took a different path than Germany, though, and can today be well considered to have a highly coordinated, well-aligned, sufficiently funded, and effective voice at the AC table.

Already in 2001, the Netherlands began to review their involvement in the polar regions and in April 2002 approved a policy paper outlining key areas for the Dutch Arctic Programme for the first time (Ministry of Foreign Affairs 2002). The new Arctic initiative was to complement the country's earlier Antarctic Programme and centred on four key issues: the role of the Arctic (a) in the global climate system, (b) in global biological systems, (c) in global biogeochemical cycles, as well as (d) research on indigenous peoples in the North (ACSAO 2002).

The Arctic and Antarctic programmes were merged into the Netherlands Polar Programme (NPP) which until today finances, organises, and implements Dutch scientific research at both poles but also explicitly seeks to 'strengthen the Dutch position in the Arctic Council' (NWO 2015, p. 1). To this end, the NPP received annual funds of 3.7 million EUR in the period from 2011 until 2015 from the Netherlands Organisation for Scientific Research (NWO) and four ministries, namely the Ministry of Foreign Affairs; the Ministry of Economic Affairs; the Ministry of Infrastructure and the Environment; and the Ministry of Education, Culture and Science (NWO 2014b, p. 27).

Other than in Germany, policy coordination and formulation between these ministries is institutionalised in the Interdepartmental Polar Consultative Body (Dutch: IPO) chaired by the Ministry of Foreign Affairs. All of the financiers of the NPP have a seat in this body. Moreover, external coordination with the Dutch research community takes place in the Netherlands Polar Committee since 2010. In the body sit representatives from several research institutes and universities such as the Arctic Centre at the University of Groningen and the Royal Netherlands Institute of Sea Research, as well as a liaison from the IPO. Among others, the body shall assist the work of the IPO and is in charge of 'representing and promoting the interests of Dutch polar research in national and international committees and organisations; monitoring the progress of NPP research; [...] encouraging, initiating and coordinating national and international scientific activities in the polar regions; [and]

functioning as a national point of contact for issues related to the NPP' (NWO 2014b, p. 29).

Since the first polar policy programme of 2002, the Dutch policy framework for both regions has been reviewed and updated at regular intervals (Ministry of Foreign Affairs 2006, 2012). The 2012 framework for the polar regions (2011–2015) was the 'first to devote more attention to the North Pole region than to the South' (Ministry of Foreign Affairs 2012, p. 1), and listed altogether ten policy principles that shall guide the Dutch Arctic policy. Among these are the support for the multilateral Arctic governance system, promoting implementation of existing and new international agreements and treaties for protecting the Arctic environment, the creation of a network of protected marine areas, opposition to any fishing activity in the North Pole region, and support for oil and gas exploitation only under strict environmental and security standards. Even though the document also mentions Dutch economic interests, environmental protection is above all defined as the 'top priority of Dutch polar policy' (Ministry of Foreign Affairs 2012, p. 2) and, to that end, the AC is viewed as 'the most important forum for the Netherlands to realize its policy goals' (Ministry of Foreign Affairs 2016b).

The most recent follow-up framework for the period from 2016 to 2020 released in April 2016 (Ministry of Foreign Affairs 2016a) by and large continues the policy objectives outlined in the previous framework, but is also more strategic in tone following recent events in East–West relations over the course of political turmoil in Ukraine since late 2013 and Russia's annexation of Crimea in March 2014. A month earlier, the Dutch Ministry of Foreign Affairs and the Ministry of Defence had requested a report from the Dutch Advisory Council on International Affairs (AIV) in order to assess the geopolitical, security and foreign policy aspects in relation to increased economic activity and Russian military presence in the Arctic, and their possible implications for the Netherlands. The Advisory Council should further investigate the potential roles that the United Nations, NATO, the EU, and the AC could play in the region as providers of an order of security and stability (Advisory Council on International Affairs 2014: Annexe 1). The AIV, chaired by former NATO Secretary General Jaap de Hoop Scheffer, half a year later issued their report on 'The Future of the Arctic Region: Cooperation or Confrontation?' (Advisory Council on International Affairs 2014). The report remained rather vague on the issues raised above and acknowledged that the Netherlands would have, if at all, only

indirect security interests in the Arctic with regard to energy security, maritime trade, and the possibility of rising sea levels as a consequence of the Greenland ice sheet melting. Dutch stakes in Arctic security, the report concluded, were also relatively low because the ‘Dutch government has paid only limited attention to geopolitical and economic prospects in the Arctic. The Dutch contribution to Arctic research gives the Netherlands access to the region, and is important on those grounds alone’ (Advisory Council on International Affairs 2014, p. 33).

The Overachiever: South Korea

Among the six new state observers granted access to the AC at the 2013 Ministerial meeting, South Korea is an exceptional case that merits more in-depth discussion. While all others—China, India, Italy, Japan, and Singapore—have participated in WGs only little more than the ‘old’ European state observers (between 21 and 37 per cent for all WG meetings between 2013 and 2015), South Korea has an outstanding attendance quota of 79 per cent (15 out of 19 meetings). In this relatively short period of time, the country sent a delegation to all three AMAP and five SDWG meetings and missed only two EPPR meetings between 2013 and 2014 and two PAME meetings in 2013. That makes South Korea in the description of Iceland’s President Ólafur Grímsson a ‘model observer member of the Arctic Council’ (Byung-se 2015) and the only one to have a record similar to that of an AC member state (namely Iceland) and higher than all PPs.

Following admission in May 2013, South Korea was the quickest among the new observers to formulate an Arctic policy, with only Japan in October 2015 (Headquarters for Ocean Policy 2015) and Italy in December 2015 (Ministry of Foreign Affairs and International Cooperation 2015) having published their policy frameworks, too. Already two months after accession as observer, South Korea adopted its ‘Arctic Policy Framework Plan’ and in December of the same year announced its more detailed ‘Master Plan for Arctic Policy’ for the period from 2013 until 2017. The release of South Korea’s policy at this early stage was not unexpected. The country had applied for observer status as early as 2008 and already half a year ahead of the 2013 Ministerial meeting created a ‘Plan for the Advancement of Arctic policy’ (Kim 2015, p. 265).

The Framework and Master Plan are more or less identical in purpose and scope, except for a list of 31 Korean Arctic-related projects listed in the

latter (Kim 2015, pp. 266–267). Both documents delineate one broader vision and three more concrete goals for South Korea's Arctic policy that shall be achieved mainly through four strategies:

Korea's vision is to be a state working toward a sustainable future in the Arctic. The policy aims are building Arctic partnerships to contribute to the international community, enhancing scientific research to resolve common issues of mankind, and developing new industry in the Arctic by participating in economic activities. The four strategic challenges, which constitute the most important part of the plan, are strengthening international cooperation, enhancing scientific survey and research activities, developing Arctic-related businesses, and establishing an institutional basis. (Park 2014, pp. 63–64)

Korea's broader vision to commit to a sustainable Arctic future was endorsed by Iceland for its visionary character and leading by example (Byung-se 2015) and makes the AC quite a natural partner in this endeavour. In fact, South Korea seeks to implement its Master Plan first and foremost through participating in AC structures (Kim 2015, p. 270). Also is Korea's Arctic policy characterised by broad governmental consensus and high interministerial coordination, and is since summer 2015 further supported by a newly appointed 'Arctic ambassador'. Six ministries and one government agency were involved in drafting and announcing the Plan: the Ministry of Science, ICT [Information and Communications Technology] and Future Planning, the Ministry of Foreign Affairs, the Ministry of Oceans and Fisheries, the Ministry of Trade, Industry and Energy, the Ministry of Environment, the Ministry of Land, Infrastructure and Transport, and the Korea Meteorological Administration (Kim 2015, p. 268). Other than in the cases of Germany and the Netherlands, however, it is not the Ministry of Foreign Affairs that is in a coordinating role, but the Ministry of Oceans and Fisheries.

CONCLUSION

Observer participation in AC WGs is anything but a uniform process. Despite the fact that the number of accredited observers has risen from 12 in 1998 to 32 in 2013, not all of these actors also make use of their participatory rights. This finding sheds new light on ongoing discussions about the admission and integration of state, IGO, and NGO observers in Council structures as the forum moves on to reform to better address

the challenges associated with a changing Arctic. Incorporating observers at high and regular levels and strengthening their financial, technical, and expert contributions has become one of the core themes for a ‘global Arctic’.

Based on a dataset covering the attendance of all stakeholders in AC WGs for the period from 1998 until 2015, the chapter was able to show that the average attendance by observers is rather low compared to the eight Arctic states, but also the six PPs. Most observers only attend very irregularly in Council WGs and hence cannot assume their roles as co-producers and co-consumers of knowledge about Arctic climate and environmental change to the extent possible. Few observers in fact participate at significant levels, whereas many are absent from WG meetings most of the time.

The case studies of Germany, the Netherlands, and South Korea have made explicit that observers behave very differently with regard to participation in the AC and that their record may be overall dependent on the ability to formulate Arctic policy priorities based on broad ministerial consent and in conformity with the Council’s mandate. Strengthening the links between the Arctic Community and non-Arctic actors is not a one-way street, though. Institutions can set important incentives to stimulate state participation in international institutions (see Panke 2016). The AC continues to struggle with that task and takes only small steps with no grand vision for its observer policy in sight. The more detailed Addendum recently adopted to the guidelines of the original 2013 Observer Manual, making more transparent how exactly Arctic states expect observers can conduce to the success of the AC, may nevertheless prove to be an important intermediate step towards furthering observers’ engagement with the Council (Knecht 2016b).

NOTES

1. The document archives of the AC and its WGs can be accessed here: <http://www.arctic-council.org/index.php/en/documents> [last accessed 29 March 2016].
2. Compared to WGs, Task Forces shall develop concrete assessments and recommendations on a specific issue or policy at which point they become inactive, in most cases within a few years’ time at the end of an AC chairmanship. For a detailed analysis of participatory patterns in the Council’s Task Force on Arctic Marine Oil Pollution Prevention between January and September 2014, see Chap. 10 by Wehrmann, this volume.

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Non-State Actors in Arctic Council Governance

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INTRODUCTION

In recent years, the changing Arctic and the manifold global impacts of Arctic change have increased the interest of various actors—also from outside the Arctic region—to become involved in Arctic affairs. The thereto related intensifying internationalisation of the Arctic region has been much addressed in latest studies on Arctic governance (Heininen and Southcott 2010; Koivurova and VanderZwaag 2007; Young 2010). While mostly the relationships between Arctic and non-Arctic (predominantly Asian) states with interests in the North, and the aim of the latter to participate as observers in the Arctic Council (AC), are currently discussed by scholars (see also Chap. 11 by Coates and Holroyd, this volume), few studies have concentrated on the significance of non-state actors in Arctic politics (e.g. Duyck 2012, 2015; Makki 2012).

The purpose of this chapter is to address this gap in contemporary Arctic governance research. In particular, it explores the extent to which non-state actors shape Arctic politics in the main regional governance institution, the AC, and it evaluates the role and impact of non-state actors in two distinct

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subsidiary bodies: the Emergency Prevention, Preparedness and Response Working Group (EPPR) and the related Task Force on Arctic Marine Oil Pollution Prevention (TFOPP). This chapter pays specific attention to the group of non-state actors with observer status as well as to those who participate as Invited Experts in the AC, and sheds light on their different possibilities to exert influence in policy-shaping and formulation processes. The role of indigenous Permanent Participants (PPs) is not examined in-depth here but is scrutinised in Chap. 3 (Shadian, this volume). The chapter's main argument is that although the final say in AC politics remains in the hands of the member states (the Arctic Eight), non-state actors' involvement exemplifies a shift in AC governance towards more cooperation with distinct actor groups and an enhanced co-production of knowledge. Related to this shift, however, new forums such as the Arctic Economic Council (AEC) and the Arctic Offshore Regulators Forum (AORF) are formed to allow exclusive deliberations among selected actor groups, which thereby contribute to growing asymmetries among actors and limit their possibilities to influence Arctic politics.

In presenting the case for non-state actors' significance in the AC, this chapter proceeds as follows: First, it focuses on the general role ascribed to non-state actors in International Relations literature and in Arctic governance. Second, it takes a closer look at the governance structure of the AC and sheds light on the involvement of non-state actors in the two subsidiary bodies EPPR and TFOPP. Third, this chapter assesses the significance of non-state actors with observer status and Invited Experts in concrete terms and traces the performance of two non-state actors, the Circumpolar Conservation Union (CCU) and the World Wide Fund for Nature (WWF), at the different stages of deliberations in the EPPR and TFOPP. In the concluding section, the chapter evaluates the significance and challenges of non-state actor involvement in AC governance. The empirical material for this analysis is composed of interviews conducted in August 2015 with TFOPP participants and observer delegation members, meeting summaries and reports as well as of official statements provided by the two non-state actor organisations.

THE ROLE OF NON-STATE ACTORS IN ARCTIC GOVERNANCE

Not only in the AC but in most international forums states remain the only actors with decision-making rights. At the different stages of deliberations (problem formulation, agenda-setting, policy formulation,

implementation and monitoring), however, and before an agreement is reached, non-state actors ‘play crucial roles’ (Koch 2011, p. 203) and are able to participate and to introduce their aims and interests to different degrees (Franz 2000; Koch 2015). At all stages, they may act as experts and share information, which are provided for example from their linkages ‘between different levels of governance by monitoring and reporting on domestic implementation or by building public support for policies in their national context’ (Duyck 2012, p. 101). They may also connect and represent different actors, as many non-state actors operate at both the domestic and international level, partner with minorities or take the role of financial investors. Thereby, and particularly at the stages of problem formulation and agenda-setting, non-state actors may become ‘*catalysts* by lobbying for and advocating change’ (Heyse 2011, p. 277, emphasis in the original). Finally, in the process of monitoring, non-state actors may act as watchdogs demanding states to comply with international agreements (Koch 2015, p. 116).

In the Arctic, the significance of non-state actors increased with the enhanced collaboration between state and non-state actors after 1989, during the negotiations of the Arctic Environmental Protection Strategy (AEPS) and particularly with the formation of the AC in 1996. Also the Exxon Valdez supertanker oil spill that occurred off the Alaskan coast in March 1989 is regarded as crucial for laying ground to the involvement of non-state actors in the AC later on (Graczyk and Koivurova 2014) as it led to a significant rise of environmental organisations’ interests and involvement—particularly of the WWF—in Arctic politics.

At present, non-state actors are involved in various institutions and forums in the Arctic region, such as the Barents Euro-Arctic Council, the Arctic Circle Assembly (see Chap. 8 by Depledge and Dodds, this volume) or the newly established AEC. However, particularly the AC is regarded as a ‘pioneer in providing opportunities for non-state actors to participate in efforts to address policy issues’ (Young 2009, p. 79): Non-state actors with observer status as well as Invited Experts are able to exert influence as participants of Working Groups, Task Forces, and Expert Groups. Although in general the AC is a soft-law forum (agreements commit states only politically, not legally) at which all decisions are reached by consensus of the eight member states, in the recent past also two legally binding agreements were negotiated under its auspices: *The Agreement on Cooperation on Aeronautical and Maritime Search and Rescue in the Arctic* (2011) and the *Agreement on Cooperation on Marine Oil Pollution*,

Preparedness and Response in the Arctic (2013a). Kankaanpää and Young (2012, p. 1) further point out that the AC ‘has achieved considerable success in identifying emerging issues, framing them for consideration in policy venues and raising their visibility on the policy agenda’, and at the ninth Ministerial meeting in Iqaluit, the Danish Foreign Minister even declared the ‘Arctic Council as the primary forum for policy making in the region’ (Arctic Council 2015a).

Identifying the Plethora of Non-State Actors Participating in the Arctic Council

The AC, according to the Ottawa Declaration, primarily aims at providing ‘a means for promoting cooperation, coordination and interaction among the Arctic States, with the involvement of the Arctic indigenous communities and other Arctic inhabitants on common Arctic issues’ (Arctic Council 1996, Art. 1a). While increased cooperation has been particularly envisioned among ‘Arctic’ actor groups, the observer or Invited Expert status also allows non-Arctic countries and organisations to participate in the AC.

At the Kiruna Ministerial meeting in 2013, the AC adopted a new Observer Manual, which re-affirmed the previous observer policy regarding the actor groups observer status can be given to, namely non-Arctic states, intergovernmental and inter-parliamentary organisations, and non-governmental organisations (NGOs) if the ministers of the member states determine that they can contribute to the work of the AC (Arctic Council 2013b, p. 5; see also Chap. 7 by Graczyk et al., this volume). The participation of observers may range from the attendance in Working Group, Task Force and Expert Group meetings to the active introduction of positions and critical comments to projects carried out on all subsidiary levels (Arctic Council 2013b, pp. 3–9). Before receiving observer status, applicants have to prove that their interests and expertise are relevant to the work of the AC and to demonstrate ‘a concrete interest and ability to support the work of the Arctic Council, including through partnerships with member states and Permanent Participants bringing Arctic concerns to global decision-making bodies’ (Arctic Council 2013c, p. 14). Observers keep their status as long as they are not suspended, and although in the history of the AC there has never been an observer suspension, they can lose their status if there is no longer consensus among AC ministers about the inclusion of the actor or if the observer ‘engages in activities which are at odds with the Ottawa Declaration or with the Rules of Procedures’ (Arctic Council 2013b, p. 5).

Further, any person or organisation that is regarded as an expert can be invited to attend a specific meeting when ‘the Arctic Council, or the Arctic States participating on a working group, task force or other subsidiary body agree’ (Arctic Council 2013c, p. 9). In general, Invited Experts should share their expertise in the subsidiary body they are invited to but neither the Observer Manual nor the Rules of Procedure define their opportunities to engage and collaborate during AC meetings in more detail. Although their travel expenses ‘shall not be borne by the Arctic Council or its subsidiary bodies unless authorised in advance by a decision of the Arctic States’ (Arctic Council 2013c, p. 10), it is not prohibited for any state or non-state actor participating in the AC to provide funding for the attending experts. Observers, on the other hand, ‘are responsible for all costs associated with their attendance at a meeting of a subsidiary body’ (Arctic Council 2013b, p. 9).

To date, nine intergovernmental and inter-parliamentary organisations, for example, the Nordic Council of Ministers and the Standing Committee of the Parliamentarians of the Arctic Region, as well as 11 NGOs such as the CCU are accredited as observers to the AC. They all have distinct internal structures, differ in access to knowledge and material resources and therefore also vary regarding their own possibilities to influence AC governance. Thus, although currently the 20 non-state actors with observer status in the AC have similar rights and duties, their leverage differs.

So far, no corporate actor has received observer status in the AC. However, representatives for example from the International Oil and Gas Producers Association (IOGP) and from the International Association of Drilling Contractors (IADC) have been able to participate in the AC as Invited Experts or formed part of national delegations. Their involvement is generally regarded as critical as the resources of large corporations can exceed those of other actors, which is why they ‘are often seen as players in their own right whose activities should be monitored and regulated in different ways’ (Koch 2011, p. 202). In 2015, the IOGP applied for observer status but the ministers decided to defer decisions on pending observer issues until the next Ministerial meeting in 2017.

The Involvement of Non-State Actors in EPPR Working Group and TFOPP Meetings

At the 2013 Kiruna Ministerial meeting mentioned before, the binding agreement on *Cooperation on Marine Oil Pollution Preparedness and Response in the Arctic* was signed. As a follow-up to this agreement, which

was negotiated under the AC TFOPP, TFOPP received the mandate to also develop a legally binding *Action Plan for Oil Pollution Prevention* until the next AC Ministerial meeting. At the 2015 meeting in Iqaluit, however, only a non-binding *Framework Plan for Cooperation on Prevention of Oil Pollution from Petroleum and Maritime Activities in the Marine Areas of the Arctic* (henceforth *Framework Plan*) was presented as outcome of TFOPP (Arctic Council 2015b).

The following case studies scrutinise if this rather weak outcome can be related to a missing consensus particularly shaped by diverging positions introduced by non-state observers and Invited Experts, and therefore strengthens prevalent concerns regarding the inclusion of additional actors in the AC (as outlined, for instance, by Graczyk and Koivurova 2014, p. 229), or if non-state actors played a rather insignificant role during the negotiations in TFOPP. In order to then explore whether non-state actors have a different say in distinct subsidiary bodies of the AC, the case studies also focus on the participation of non-state actors in the EPPR, to which TFOPP is related, and consider particularly the dimensions of problem formulation, agenda setting and policy formulation (the Framework Plan was adopted quite recently, in 2015, it is thus not possible to assess its implementation and monitoring at this point).

EPPR was already formed under the AEPS in 1991 and became one of today's six Working Groups of the AC in 1996, whose work is directed by the ministers of the AC and the Senior Arctic Officials (SAOs). According to its mandate to deal with prevention, preparedness and response to environmental emergencies in the Arctic that are a result of human activities, EPPR used to focus mainly on oil pollution issues. In 2004, this mandate was expanded and since then also includes the prevention, preparedness and response to natural disasters. Although EPPR meetings have taken place biannually since 2009 and participants therefore have to invest more time and resources to attend meetings, the following illustration (Fig. 10.1) shows that the number of observers participating in EPPR meetings has significantly increased since 2010.

The reasons for the increasing participation cannot be explored in detail here. However, this trend indicates that the interest of non-state actors to be involved in AC governance has grown and relates to the before-mentioned shift towards more cooperation with distinct actor groups and an enhanced co-production of knowledge in the AC. This co-production of knowledge, which is an often stated intention behind stakeholder engagement, shall generally allow 'especially those commissioning the assessment

and those who are using its results to influence the assessment process and its outcome' (Kankaanpää and Śmieszek 2014, p. 44). However, as Fig. 10.1 and further below Fig. 10.2 exemplify, not all actors affected by the outcome of deliberation processes in the AC have been shaping these to similar degrees. For instance, PPs who are undoubtedly affected by the negotiation results did not send representatives to all TFOPP and EPPR meetings.

CASE STUDY: NON-STATE ACTORS IN TFOPP AND EPPR MEETINGS

In order to evaluate how the attending participants influenced the assessment processes and outcomes, their concrete contributions are examined. As Figs. 10.1 and 10.2 show, on a regular basis particularly the CCU and the WWF sent representatives to both subsidiary bodies. Furthermore, CCU already participated in EPPR meetings in 1994. The following case studies therefore first evaluate the participation of CCU and the WWF in TFOPP meetings. Then the results are compared to the contributions of CCU and WWF in EPPR meetings. Thereby, the following subsections explore how the before-mentioned non-state actors exerted influence at the different stages of deliberations (problem formulation, agenda-setting, policy formulation) and whether or not they had a different say in TFOPP and EPPR meetings.

Contributions of CCU and WWF to TFOPP

In 2014, the members of TFOPP met five times and discussed measures to prevent oil spills caused by maritime transportation and petroleum development in the Arctic.

As Fig. 10.2 shows, the meetings' constellations changed from meeting to meeting: Representatives did not attend every meeting nor did every organisation send a delegate to each meeting. Co-chaired by the SAOs from Russia and Norway, the member state delegations,¹ PPs, observers (state and non-state actors), and representatives from other Working Groups as well as experts from corporate actors presented their views. Non-state actors such as CCU and the WWF as well as representatives from the oil and gas industry (IOGP, Gazprom, Rosneft and Statoil) gave presentations at the first TFOPP meeting while at the third and fourth

2015/1	ALA	CCU, UNECE, WWF (and Singapore, South Korea)		
2014/2	ALA, ICC	CCU, WWF, NF (and Singapore, South Korea)		ACS, IOGP
2014/1	ALA, ICC	UNEP GRID-Arendal, CCU, WWF (and Germany, India, Italy, Japan, Poland, South Korea)		ACS, AMAP, PAME, SDWG
2013/2	ICC Greenland	CCU (and Germany, Italy, Poland, Singapore)		ACS
2013/1		WWF		AMAP
2012/2	ICC Greenland	(Poland)		AMAP, CAFF
2012/1		WWF		IPS
2011/2	AAC	WWF, UNEP GRID-Arendal, EMISA, Sea Alarm		
2011/1	AAC, ALA, GCI	CAFF, CCU, WWF (and South Korea)		
2010/2	ICC Alaska	CCU (and NOAA, PAME, U.S. Department of State, Pex, Langerberg)		
2010/1		WWF		IPS
2009/2	Saami Council	WWF		ACS, IPS, PAME
2009/1		NF		ACS
2008	Saami Council	NF		IPS
2007		NF		
2006		NF		
2005		NF		
2004	RAIPON, Saami Council			Hickling, Arthurs Low, IPS
2003	RAIPON, Saami Council			Ship Research Institute (Russia)
2002		NF, IFRC		ACS, IPS
2001	RAIPON			Iceland Coast Guard, PAME
2000				IPS
1999				
1998				
1997				
1996	ICC	ICC, RAIPON, UNEP/DHA		
1995		ICC, NF, CCU, IAEA		
1994				
Permanent Participants		Observers	Invited Experts ¹ Visitors	

Fig. 10.1 Non-state actor representation in EPPR meetings (1994–2014) (*Source*: Own illustration based on meeting protocols)

Meeting 5 11/2014	AIA, ICC-Greenland	CCU, WWF (and France, Germany, Italy, Japan, Singapore, South Korea)	ACS, EPPR, Lamor Corporation, Neste Jacobs, OGP Statoil, OGP Shell (Gazprom in Russian delegation)
Meeting 4 9/2014		(France, Germany, Italy, Japan)	ACS, EPPR, IADC, OGP Shell (Statoil in Norwegian delegation, Gazprom in Russian delegation)
Meeting 3 6/2014	AIA, ICC-Canada, ICC-Greenland	CCU, WWF	ACS, EPPR, IADC, OGP, PAME (Gazprom in Russian delegation)
Meeting 2 3/2014	AIA, ICC-Greenland	CCU, UArctic (and France, India)	ACS, EPPR, PAME (Gazprom, OAO Sovcomflot and Rosneft in Russian delegation)
Meeting 1 1/2014	AIA	CCU, NCM, SGPAP, WWF (and China, Germany, Italy, South Korea, Singapore)	ACS, EPPR, European Maritime Safety Agency, NCM, OGP (Gazprom and Rosneft in Russian delegation)
Permanent Participants		Observers	Invited Experts/Visitors

Fig. 10.2 Non-state actor representation in TFOPP meetings (2014) (*Source*: Own illustration based on meeting protocols)

meeting, IOGP and IADC representatives were invited to present their experience in the field of prevention. Although all of them had the possibility to state their views and to contribute to the meetings, the extent to which they influenced the outcome of the deliberations varied significantly.

To name two examples: During the negotiations of what became the TFOPP *Framework Plan*, CCU made submissions in advance of the second meeting addressing the liability of offshore oil spills, but their position and recommendations, as one TFOPP participant noted, ‘had no impact at all’ (Interview with TFOPP participant). And also the WWF introduced the idea of ecosystem-based management as a prevention measure as well as the concept of no-drill areas, which is based on the popular argument that ‘the best way to prevent a blowout from offshore oil drilling is [...] not to drill in the first place’ (Parker 2015). The AC member states rejected both ideas. While one obvious reason for the exclusion of these ideas in the policy formulation process is that TFOPP participants had different visions of how prevention measures of spills should and could be strengthened, interviewees also stated that how much influence non-state actors can exert in Task Forces often depends on who is chairing the meetings, and on the constellation of actors in Task Forces. Additionally, TFOPP participants said that in times of the Ukraine Crisis that started in early 2014 ‘the countries [Arctic Council member states] were bending over backwards simply to make sure that Russia stayed engaged in what was at the table’ (Interview), and therefore dismissed controversial issues brought forward by observers.

This contrasts with, for instance, CCU’s influence in the earlier phases of the TFOPP, in which CCU actively contributed to the policy formulation process, as its representative ‘provided the substantive suggestion and draft language for what eventually became Article 4 of the final text’ (CCU 2013; Interview) of the *Agreement on Cooperation on Marine Oil Pollution Preparedness and Response in the Arctic*. However, at that time, CCU formed part of the US delegation, thus did not attend TFOPP meetings as an observer. In the past, also representatives from WWF participated as members of US and Swedish delegations in Task Forces. Particularly before the new observer rules were adopted in 2013, some countries did not want observers to participate in Task Forces, arguing that Task Forces are independent of the AC and solely an organ for negotiations between governments. Countries such as the USA were in a bind then, as their domestic policies were much open to NGO involvement, ‘so their way around was to invite representatives from WWF and CCU

to form part of their delegations' (Interview). At that time, CCU and WWF contributed to the drafts under discussion by the US delegation and thus participated in problem formulation, agenda-setting and policy formulation processes. In TFOPP, the status of CCU and WWF as observers and not as member state delegates might also have made a difference, as participants stated that in TFOPP state representatives dominated the most active and detailed discussions—something not unusual in the Task Forces. Through collaboration with PPs, who shared a similar position regarding some concerns, however, CCU and WWF were able to increase their influence in the negotiations. This collaboration had also been fruitful in other AC meetings, as PPs have full consultation rights at all stages of deliberations in the AC, and environmental non-governmental organisations (ENGOS) provided additional expertise.

In spite of the 'limited access and ability to participate' (Interview), CCU and WWF continued to send representatives to TFOPP meetings in order to observe the deliberations and to later use their knowledge of what was discussed in the AC for domestic lobbying. As an interviewee stated, this is also one reason, among others, why non-state actors are generally interested in receiving observer status in the first place (see also Chap. 7 by Graczyk et al., this volume). In the case of CCU, for instance, often other US organisations such as Earthjustice, Oceana, Ocean Conservancy, and also the Canadian ENGO Ecojustice use CCU's observer status to send representatives. This cooperation serves CCU, an organisation without paid staff and which depends on volunteers, to not lose its observer status, while on the other hand, as an interviewee stated, this practice is also appreciated by AC member states 'who benefit from not having to deal with a number of organisations applying for observer status' (Interview).

With regard to the conflicting positions between TFOPP participants mentioned before, interviewees stated that CCU and Invited Experts discussed their positions not informally but mostly during the official TFOPP meetings. WWF, on the other hand, 'intervened both formally and informally in TFOPP and submitted proposals and comments on almost all iterations of the plan' (Interview). The expressed viewpoints differed particularly around the element of trust and of the role that the oil and gas industry should play. An industry actor experienced reservations, mentioning that not all TFOPP participants were willing to listen to the information shared by industry representatives while others seemed surprised by their commitment. Representatives from CCU and WWF and from the

industry particularly disagreed on fundamental issues regarding offshore oil development. However, no open argument occurred at these highly diplomatic proceedings. Different positions have played a role on domestic levels instead.

Also the ‘discourse promoted by some Arctic Council member states regarding the ability to drill safely in the offshore Arctic’ was regarded as ‘naive’ by some interviewees. Despite this perception, interviewees stated that CCU and also the WWF presented their views ‘less in an argumentative atmosphere but in order to raise an issue with the hope that a member state or Permanent Participant argued in favour of it’ (Interview). Sometimes, a strategy used by observers is to raise certain issues at every meeting, but the interviewees experienced that if not at least one government supported them, there would be no chance that their ideas were considered in the deliberative process. This experience also explains why non-state actors increasingly tried to work with governments in advance of a meeting.

According to the final TFOPP report, observers stated their opinions on the negotiated document and ‘indicated their support of the Framework Plan and the negotiation process, [...] though some observer organisations also expressed a wish to see stronger language in the document’ (Arctic Council 2014a, p. 2). CCU and WWF were among these organisations and considered the negotiated non-binding *Framework Plan* disappointing (Interview; WWF 2015a) since mostly vague language was used, intentions were stated instead of obligations and concrete measures and milestones remained undefined. WWF stated that TFOPP ‘has only delivered an intention for a plan’ (WWF 2015a), while interviewees also regarded the document as a ‘solid foundation to prevent oil spills’ but at the same time stated that a lot of work remains to be done and that further development of the plan is needed. Although at first sight particularly the non-bindingness of the plan seems to back up the impressions stated before, various interviewees argued against a binding document, because ‘a binding document with strong language might curtail future innovation and may not always lead to the safest practice’, which would ultimately hurt the credibility of the AC. And according to others, in so-called binding agreements ‘the wording of them is so loose that they are not really binding’ (Interviews, August 2015).

‘The overall aspirational result’ (Interview) of TFOPP, however, interviewees explained with the perception that some member states did not favour a far-reaching, stringent document, which would limit offshore

drilling in the region. 'It is very easy for one state to reject a proposition or water down bold proposals' (Interview), as decisions in the AC need to be reached by consensus. Further, it was explained that member states follow very distinct approaches in preventing spills and therefore argue on the basis of different experiences. TFOPP participants also said that the tight schedule and limited expertise caused problems: Binding agreements usually 'need a lot more thought and expertise at the table than possible when you are trying to negotiate an agreement in only four or five meetings [...] and in a very short period of time' (Interview). With regard to subject-matter expertise, interviewees who participated also in other Task Forces stated that although this 'is critically important in discussing matters of consequence', the number of participants with experience and expertise in highly complex issues is often very limited, which hinders the quality of debate 'and creates a situation where the loudest voice can dominate and potentially overwhelm fact and reason' (Interview). Interviewees highlighted particularly the general scarcity of Arctic offshore engineering expertise. Although some TFOPP participants argued that the number of voices and positions among the participants of TFOPP tempered the influence of some actors, others stated that 'the diverse viewpoints were important for arriving at a quality outcome'. However, a tight schedule and a high number of participants that wish to state their opinions obviously do not match well and very likely hinder in-depth discussions.

In order to meet the problems of missing expertise and time to negotiate, it was agreed during TFOPP deliberations that an industry workshop should be organised (Arctic Council 2014b, p. 2) and the USA proposed to form the AORF. Both forums provide possibilities for exclusive negotiations among selected actor groups. AORF, for instance, is presented as a technical forum outside the AC structure, which operates between the regulatory agencies of AC member states. A first meeting already took place in April 2015. The aim of AORF is to provide regulators a forum to discuss and share technical and operational information and experience. Members are supposed to meet and discuss repeatedly (also via virtual platforms), and regulators attending these meetings are able to share information in a confidential manner. A TFOPP participant explained that the

perhaps idealistic idea behind AORF has been that if regulators, who have actually expertise, experience and responsibility for caring out policies and make decisions, had their own forum and get together more frequently,

they would develop a mission to protect the Arctic and to share information confidentially with the possible effect that they would strengthen their hand against the industry.

While some interviewees from observer organisations regarded the establishment of AORF as a positive development, others had favoured the formation of an Expert Group under EPPR instead, in order to meet concerns regarding the accountability and transparency of AORF. With regard to the latter, TFOPP participants suggested a prior publication of AORF meeting agendas, so that other actors could submit comments. Interviewees also demanded the publication of meeting reports and some sort of coordination between AORF and EPPR. Although at this point it remains unclear whether or not non-regulators will be able to participate in AORF, interviewees expressed the hope that the AORF expands its membership and include organisations and individuals at least in some sessions.

In sum, interviewees stated that in TFOPP, it was possible to express their views on specific issues or documents. However, the extent to which the input of non-state actors was reflected differed from meeting to meeting and also from Task Force to Task Force. In TFOPP, reasons for the little say non-state actors such as CCU and WWF had in the outcome were related to

- the constellation of actors participating in TFOPP and particularly the chairs,
- disparate positions among TFOPP participants,
- the Ukraine Crisis,
- and the domination of discussions by member state representatives.

While as participants in other Task Forces, CCU and WWF were able to influence the different stages of deliberations ranging from problem formulation, agenda setting to policy formulation, in TFOPP, if at all, CCU's and WWF's viewpoints only inspired the problem formulation process. Interviewees mentioned the cooperation with PPs and other non-state actors, submission of position papers to state delegations and repeatedly raising issues at every meeting as strategies to meet the limited ability to influence the negotiations.

Although WWF stressed that 'further work on Arctic marine oil pollution prevention is needed at the pan-Arctic scale' (WWF 2015b, p. 3),

thereby particularly addressing Arctic states and demanding the development of concrete deliverables, at this point it remains unclear if a new cycle of deliberations will be started under the auspices of the AC. Instead, follow-up negotiations will likely be conducted in more exclusive Expert Groups, such as the AORF or the industry workshop mentioned before, which thereby contribute to growing asymmetries among actors and their possibilities to influence Arctic politics.

Comparison and Contributions of CCU and WWF to EPPR

In general, interviewees highlighted that rules of participation in Working Groups are less formal and strict than in Task Forces due to the fact that in Task Forces stakes tend to be higher as participants are working on a written document, ‘an agreement, which is highly political in nature’ (Interview), and governments are more protective of their role. Further, because there tend to be more observers also from other states attending Task Force than Working Group meetings, observers are often only permitted to speak at the very end of a topic discussion or at the end of a meeting, after all decisions are reached. In Working Groups, on the other hand, observers are usually able to participate in the discussion at any time, which is regarded to be much more effective because at that point it is less likely that governments have already adopted a position.

In past EPPR meetings, non-state actors were able to give presentations and to state their opinions in problem formulation, agenda-setting, policy formulation and monitoring processes. In contrast to Task Forces, interviewees pointed out that participants of EPPR meetings gather more often informally in breaks or during evening programmes in order to discuss ideas and contradicting positions. As Working Groups continue over time, they also offer more possibilities for in-depth discussions than Task Forces.

Although the observers interviewed stated that they feel regarded as trusted partners and receive invitations to meetings as well as documents in a timely manner, they sometimes ‘feel excluded from some debates happening behind closed doors, but as sovereign states it is expected that Arctic nations have the right and ability to exclude us’ (Interview with observer delegation member). Further, as Fig. 10.1 shows, of the 20 non-state actors with observer status only few attended past EPPR meetings, although the illustration also indicates that since 2010 their interest has increased.

Overall, CCU and the WWF can be regarded as most constant non-state participants in EPPR meetings, together with the Northern Forum. When participating, CCU and the WWF gave presentations and shared information in discussions. Most recently, for instance, CCU informed US delegates in the January 2013 EPPR workshop on the oil spill agreement operational guidelines (CCU 2013). The WWF, on the other hand, gave a presentation on ‘Lessons Learned from Modelling Oil Spills in the Bering, Beaufort and Barents Seas—Needs and Ways to Improve Transboundary Cooperation and Responses’ at the December 2014 EPPR meeting. With regard to TFOPP and recent EPPR meetings, interviewees stated that a similar group of experts was involved and that the quality of discussions was therefore at the same level.

CONCLUSIONS

The AC is a multilateral and a growing multi-actor body, in which non-state actors also from outside the Arctic region are increasingly involved. Against this background, this chapter explored the influence of non-state actors in AC governance. The outcomes of this investigation prove and exemplify that non-state actors have contributed differently in EPPR and TFOPP meetings and also at the different stages of deliberations. However, as has been stated before, the results of this analysis are not generalisable as the possibilities of non-state actors to influence AC governance differ from Task Force to Task Force, within the different Working Groups and from meeting to meeting.

The different impact non-state actors have in AC governance depends on whether they form part of negotiations as members of national delegations, as observers or as Invited Experts, on their general willingness to participate, on their internal structure and, accordingly, on the knowledge and financial resources they have. Also the constellation of participants in meetings makes a difference and, most of all, to what degree AC member states wish to include the opinions of non-state actors in their negotiations. Although general discussions in AC subsidiary bodies are dominated by representatives of member states, it also depends on the format of the subsidiary bodies inasmuch non-state actors are included in deliberation processes. Task Forces, for instance, tend to be more formal than Working Groups, in which observers are usually able to participate in the discussion at any time and not at a predefined point in the negotiation process.

This investigation proves that AC governance has changed from a rather traditional ‘one-way’ flow of information from member states and PPs to include other affected actors as well. The AC encourages the inclusion of non-state actors and a co-production of knowledge and thereby confirms the general tendency of non-state actors being increasingly involved in international forums (Zürn 2010). In the AC, however, this shift does not alter the hierarchical governance structure, as member states continue to dominate negotiations and remain the only actors with decision-making rights. Further, actors who share more of the risk and responsibility in the Arctic, particularly the PPs, often have ‘little resources and power’ to actively shape the work of the AC (Interview), and envision a better cooperation and integration of their knowledge (see also the distinction between stake- and rights holders in Chap. 3 by Shadian, this volume).

Although issues are more openly discussed in the AC, the formation of new forums, such as the AORF, which is only composed of selected members and aims at facilitating an internal, confidential exchange of information, entails a new form of actor exclusion. It seems as if in the future the very complex topic of offshore oil and gas development will be discussed ‘behind closed doors’. The formation of the AORF addresses two fundamental problems in AC governance, being (1) a lack of expertise in some subsidiary bodies and (2) a very tight time schedule that hinders in-depth discussions and successful deliberations, which is enforced by the growing number of participants in AC meetings.

Although the latter is often used as an argument to not expand the number of observers in the AC, interviewees stressed that the very complex topics under discussion require the inclusion of many different actors to come to a qualified outcome. This relates to the increasing co-production of knowledge in the AC, which is motivated by the need to include more expertise (see also Chap. 9 by Knecht, this volume), to take advantage of the ‘cross-pollination of ideas’ (Charron 2014), and to acquire additional material resources. This strategy to manage the complex processes in a changing Arctic links to the phenomenon inherent in global governance: If a problem cannot be managed by one or several states alone, it has to be addressed at the level beyond the state that comprises a variety of state and non-state actors (Koch 2011, p. 198).

Does the inclusion of more actors make the AC more effective or transparent? The inclusion of more actors provides better acceptance of the AC as an institution and of its adopted agreements (Heininen 2004, p. 35),

increases its relevance in Arctic affairs and beyond (Kankaanpää and Young 2012) and generally contributes to ‘responsible decision-making’ (Kankaanpää and Śmieszek 2014, p. 43). Nevertheless, the AC needs to provide more transparency in order to avoid that new actors with a lot of capabilities (for instance, corporate actors or other states) dominate discussions due to their resources, thereby reinforcing already existing asymmetries between actors and further undermining the unique position of PPs (Charron 2014).

Further research on the importance of non-state actors in Arctic governance is very much needed to answer questions such as whether some actors have a comparative advantage at different stages of the policy formulation processes. There is still a lack of analyses that address the unequal material and leverage powers of non-state actors, which are necessary, after all, to give a concrete assessment on non-state actors’ influence in the Arctic.²

NOTES

1. All Member States sent delegations to EPPR and TFOPP meetings, with the following exceptions: Denmark did not attend the 2002-, 2003-, 2004-, 2006-, 2007- and 2010/1-EPPR meetings. The Russian delegation was absent at the 2014/2 EPPR meeting and Iceland participated only at the 2000, 2009/2, 2011/2, 2012/1, 2013/2 and 2015/1 EPPR meetings. Participation records are obtained from the Working Group Meeting Reports provided by EPPR (<http://www.arctic-council.org/eppr/reports/>) and by TFOPP (<http://www.arctic-council.org/index.php/en/document-archive/category/520-public-documents>) (last accessed 20 August 2015).
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Non-Arctic States and Their Stake in Arctic Sustainability

Ken Coates and Carin Holroyd

The Arctic sits at the intersection of some of the most significant forces in global affairs: indigenous rights, global climate change and attendant environmental activism, energy development, international cooperation, and transnational commerce. Add to this such influences as the re-emergence of Russian assertiveness, the desire of emerging nations to assume a greater role in international affairs, the sensitivities of Canada–US relations over ocean boundaries and Arctic archipelago navigation, the authority of sub-national governments across the circumpolar world, and the complexity of the contemporary Arctic comes into stark relief. Among these many

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forces, the desire of non-Arctic states to potentially play a significant role in circumpolar affairs is, at once, among the most surprising and potentially most important.

The history of the Arctic offers some salutary warnings about contemporary interest in the Far North. As of 2016, it appears as though the Arctic has found a permanent place in global affairs. But the Arctic has had difficulty holding international attention in the past. From the early days of European exploration, Europeans believed that the North—now proven not to be home of mythical beasts and monsters or a barren wasteland—actually held considerable wealth and, most importantly, a short and economical passageway to Asia. Reality interfered with forecasts and expectations. Huge expanses of ice, bitterly cold winters, and difficulties navigating the waters of the Far North defeated the promoters and visionaries who forecast a different future for the region.

The pattern continued. The race for the North Pole, largely a non-economic contest of European and American adventurers (Cooke and Holland 1978),¹ attracted global attention to the heroic task of conquering the vast northern expanses. Arctic scientists and explorers—Knud Rasmussen, Roald Amundsen, Vilhjálmur Stefánsson, Fridtjof Nansen—became international media personalities, their books selling thousands of copies, and global fascination about the Far North fuelled expeditions by numerous adventurers. After World War II, Cold War militarism generated wide-scale investment in the Arctic, particularly in the form of military installations, radar facilities and, across the Union of Soviet Socialist Republics, large-scale resource and industrial settlements in northern regions.

The current round of fascination with the Arctic has an analogue in the 1960s and 1970s. Global concern about energy supplies sent oil and gas companies into the Arctic. In some areas, most notably off the northern coast of Norway and Russia and along Alaska's North Slope, exploration identified promising energy fields. The construction of the Aleyeska Pipeline through Alaska seemed to confirm the long-standing belief that the Arctic houses vast stores of marketable resources. Efforts were made to prove the commercial viability of the Northwest and Northeast Passages, although these failed due to the limitations of pre-accelerated climate change navigation in Arctic waters and other factors of global and regional order (see Chap. 13 by Moe, this volume). Put simply, the Arctic has often failed its promoters, in large part because southerners and resource promoters have tended to underestimate the strength and intensity of Arctic winters and the economic challenges in the region.

The non-Arctic world has discovered the Far North in some interesting and occasionally troubling ways. Over the past few hundred years, non-Arctic interest in the Arctic has waxed and waned, generally related to a unique combination of southern fascination with the vast north lands and the possibility of discovering wealth or opportunity in the region. Northerners, pleased with the end of generations of neglect and ignorance, are somewhat concerned about the motivations and long-term ambitions of non-Arctic states, particularly as this relates to Arctic navigation and the exploitation of Arctic resources. In less than a generation, the geopolitics of the Far North has been transformed by the growing interest of non-Arctic states in the present and future governance of the region.

Consider one interesting example. In May 2014, Huang Nubo, a Chinese billionaire, purchased property for a luxury resort near Tromsø, Norway, a follow-on from an earlier attempt to buy land in Iceland. The Chinese investor, claimed by some observers to be a front for the Government of China, has now turned his attentions further northward, to a barren piece of land on Svalbard, a Norwegian-controlled archipelago well north of the Norwegian mainland.

The alleged Huang plan stoked fears in Norway about China's long-term ambitions in the Far North. China has developed an Arctic-grade icebreaker, expanded its research activities on Svalbard, and made an unsuccessful attempt to construct a radar station on the archipelago, all under the umbrella of an expanded scientific presence in the region. That the unique legal status of Svalbard—Norway is barred from imposing restrictions on property ownership and engagement by foreign nationals from countries that have signed the Svalbard treaty, as China had done in 1925—did not stop the issue from becoming a focus for political debate in Norway. Longyearbyen mayor, Christin Kristoffersen, urged the Government of Norway to buy the only piece of Svalbard property in private hands, declaring that '[t]his is not an area for a new Klondike. We have to tread carefully. [...] We should own this island. This is not anti-Chinese, but pro-Norwegian' (Higgins 2014).

Although the interest non-Arctic states have had in the Far North began with the age of exploration in the sixteenth and seventeenth centuries and continued into the twenty-first century with a public fascination for northern landscape and indigenous peoples, until only 20 years ago non-Arctic states had a minimal presence in Arctic affairs. Most of the interest there was focused on scientific research. This pattern of non-Arctic state isolation shifted dramatically in the early twenty-first

century. Within a generation, the Arctic had been transformed from a marginal political zone, focused largely on intra-regional and indigenous affairs, into an area of intense global interest, focused on a complex web of oil and gas development rights, the rapid receding of the Arctic ice cap and the attendant prospect of trans-Arctic commercial navigation, growing concern about the effects of climate change on the Far North, Arctic boundary disputes being adjudicated under the United Nations Convention on the Law of the Sea, and the most recent major global struggle over the use of the ‘commons’.² Non-Arctic countries, previously largely sidelined in Arctic debates, indicated their desire to be involved in deliberations about the region’s future. Of course, not all nations approach the Arctic in comparable ways. This examination of the Arctic strategies and policies of non-Arctic countries demonstrates the complex interactions that are redefining the international role of the Arctic. The non-Arctic nations, with widely varying cultural connections to the region and evolving levels of scientific, commercial and political participation, are diverse in their approaches, Arctic capacities, and levels of engagement.

THE ARCTIC COUNCIL

The most public sign of the changing political realities in the Far North came through the debates about external demands to expand the membership of the Arctic Council. The Council was established in 1996, rising out several decades of political organising by Arctic indigenous groups and regional governments (national and sub-national), and aided by the establishment of the Arctic Environmental Protection Strategy in 1991. The identification of common cause over such issues as aboriginal cultural and legal rights, emergency prevention, preparedness and response, environmental protection, and sustainable development resulted in the creation of the Arctic Council. The coordination of Arctic affairs through the Council provided a unique forum for regional cooperation; one given special authority by the active engagement of indigenous peoples as Permanent Participants (see Chap. 3 by Shadian, this volume). The Council serves as an intergovernmental forum for the review of Arctic issues rather than as a legislative body, although an Arctic Search and Rescue Agreement in 2011 and an Agreement on Cooperation on Marine Oil Pollution, Preparedness and Response in 2013 were negotiated under its auspices and ratified by national governments. Perhaps most significantly, the Arctic Council has

emerged as the primary illustration of the growing interest of non-Arctic states in Arctic affairs (English 2013).

Membership in the Arctic Council has several categories: member states (those with Arctic possessions); indigenous peoples of the Arctic; accredited observer status for states, intergovernmental, inter-parliamentary and non-governmental organisations; and experts invited to specific meetings. From the outset, the Arctic Council was intended to be a deliberative forum for Arctic peoples, focused on solving the problems and capitalising on the opportunities of the Far North (English 2013). Germany, the Netherlands, the UK, and Poland became observers in 1998 (along with a series of international organisations, including UNEP, UNECE, NCM, SCPAR, NF, IASC, WWF, IUCH). France gained observer status in 2000 and Spain followed in 2006. When China, South Korea, Italy, and the European Union (EU) applied for accredited observer status in 2009, the Council did not have a formal mechanism to add new members to the group. The Nuuk Declaration of 2011 (Arctic Council 2011)³ set out observer criteria and in 2013, China, South Korea, Japan, India, Italy, and Singapore all were accepted as observers. The EU's request was deferred until 'concerns of Arctic Council members are addressed' (Bell 2013; also Koivurova et al. 2012), which referred to the EU's legislation prohibiting the importation of seal products, an issue not resolved until 2013 (Dalton et al. 2013). Considerable political and diplomatic engagement occurred before the acceptance of non-Arctic states as observers.⁴ Significantly, this status does not permit them to vote on Arctic Council affairs but allows and expects them to be involved with the organisation's activities.

Indeed, the initial requests by non-Arctic states that they be granted observer status in the Arctic Council caught many northern observers by surprise. The Arctic Council, after all, had been established with a goal of promoting intra-regional dialogue and governance and not as a forum for settling global geopolitical debates about the future of the Far North. After an initial period of circumpolar anxiety, the Arctic states agreed to expand the Arctic Council observer group and to seek further engagement with non-Arctic states (as this relates to East Asia, see Coates and Hara 2013). Despite early concerns about expanding the membership of the Arctic Council, there was a general realisation that drawing on non-Arctic states would improve the global capacity to respond to Arctic challenges, particularly the connection between global pollution and climate change in the Far North.

This shift in the mandate of the Arctic Council from the formation of a circumpolar planning and dialogue group to an increasingly global effort to understand, protect, support, and preserve the Arctic is one of the more intriguing developments in international politics. While there are clear national interests at stake among the non-Arctic countries, including access to northern resources and potential shipping routes, a growing concern about the global effects of climate change, and access to Arctic waters potentially opened by global warming, the reality is that the underlying motivations are more scientific and investigative than economic and interventionist.

There is a shared understanding that knowledge of the North is insufficient, requiring a concerted and shared international effort to document and monitor change in the region (see also Chap. 9 by Knecht, this volume). There is also a growing recognition that the ecological disruptions in the High Arctic are created mostly by non-Arctic economic, industrial, and environmental actions, making it the responsibility of non-Arctic states to assist in remediation, monitoring, and long-term sustainability. The more recent initiatives by key non-Arctic states focus on scientific investigations, the search for regionally appropriate contributions to the North, and an awareness of the global significance of environmental change in the Arctic.

The interests specifically of non-Arctic states include a variety of elements. Before the expansion of energy resources in the 2010s through the exploitation of shale gas and other fossil fuel developments, non-Arctic states worried about long-term access to Arctic oil and gas resources through engagement possibilities for non-Arctic energy companies. This is an issue of declining importance given current oil prices, the emergence of abundant shale gas supplies, and the improving cost-effectiveness of renewable energy supplies. These countries also wished to preserve the option to use Arctic shipping lanes, including the Northwest Passage (through the contested waterways of the Canadian Arctic archipelago), the Northeast Passage (along the northern coast of Russia and within that country's national waters), and the trans-polar route (across the North Pole, and the only internationally open Arctic shipping route, albeit dependent on the continued loss of Arctic ice cover). The non-Arctic states were also interested in participating in Arctic scientific and technological research, focusing particularly on studies of Arctic environments and the mitigation of global climate change, an initiative that combines pure scientific interest and a growing realisation of the interconnectedness of non-Arctic

industrial development and energy use and the vulnerability of the Arctic. Finally, the non-Arctic states had an interest in and concern for Arctic indigenous peoples, who continue to attract substantial interest from non-Arctic people who have been fascinated with the traditions and ecological lifestyles of the inhabitants of the Far North.

NON-ARCTIC STATE ENGAGEMENT WITH THE ARCTIC

Non-Arctic state engagement in the Far North has taken a variety of forms, from direct engagement to growing concern about the impact on the Arctic of the industrial and other human activities in southern countries. There is no fixed pattern of non-Arctic state engagement with the Arctic. Some observers, but also the EU, have been actively involved with the Working Groups established under the Arctic Council and have contributed substantially on the technical and scientific front. In several of the Arctic states, particularly Canada and particularly with the indigenous peoples in the region, there was bitterness about the EU's import ban on commercial seal products, now resolved through an EU–Canada agreement.⁵ That the EU wants to closely follow developments in the Arctic—viewed by many northerners as a precursor of more active political participation—has concerned some Arctic Council representatives but has been supported by others, particularly Sweden, Finland, and Norway. The interest of India and Singapore, two countries with limited Arctic presence (India has a research facility on Svalbard and Singapore has been involved in collaborative research and study programmes), shows the growing global reach of Arctic developments. China, on the other hand, makes unconvincing claims to being a ‘near Arctic state’ by dint of the country's northern borders and cold northern winters (Sun 2014, p. 39). At the same time, China's rising geopolitical influence, expanding economy, and growing international presence, while worrying to some, convinced other Council members that it was vital to have China at the meetings and contributing to the resolution of Arctic challenges. And with Japan and South Korea, two technologically impressive nations with few contemporary expansionary aspirations, are viewed favourably, even though their interest in Arctic navigation and long-term access to Arctic resources is not hidden.

Because the Arctic has become a truly international zone, many observers conclude that the region is too important to be left to the Arctic states alone. Many of the issues such as access to resources, environmental

controls, Arctic navigation, and circumpolar search and rescue are of global importance and cannot, in the estimation of such non-Arctic actors as the EU, France, Germany, China, and South Korea, be left to the eight Arctic states and to be decided without the active participation of other countries. Participation in the Arctic Council, bilateral involvement with Arctic nations, and routine engagement on northern issues is designed to demonstrate the interests of non-Arctic states in the region.

DEVELOPMENT OF NATIONAL ARCTIC CAPABILITIES

Over the last 20 years, various non-Arctic states have ramped up their Arctic capacity dramatically. A number of non-Arctic states have icebreakers. Germany has one icebreaker and research vessel which is sometimes employed in the Arctic (but typically is used in the Antarctic). Japan has three icebreakers of which two, the *Soya* and the *Teshio*, however, are operated by the Japanese Coast Guard as patrol boats in northern Japan and not in the Arctic. The *Shirase II* is run by the Japan Maritime Self-Defense Force and works primarily in Antarctica (Tonami and Watters 2012, p. 95). China acquired the *Xue Long* (Snow Dragon) icebreaker in 1994 and carried out Arctic research expeditions in 1999, 2003, 2008, 2010, and 2012 in the Bering and Chukchi Seas (Lasserre 2010, p. 3). The *Xue Long* is equipped with various laboratories and weather and navigation equipment. China recently commissioned a new icebreaker (smaller and equipped with blades that can cut through ice 1.5 metres thick), which should be operational by 2016 (Xinhuanet 2014). South Korea has also been scaling up its Arctic research capabilities. The country already has an icebreaker, the *Araon* built by Hanjin Heavy Industries, which is used in the Arctic during July and August. In 2012, the South Korean government established the Korea Institute of Ocean Science and Technology and pledged approximately US\$ 3 billion for offshore and Arctic shipping research. Plans include the construction of a cutting-edge offshore research boat and a deep water submarine (Liang, 2012). In 2013, South Korea announced its Pan-Government Arctic Development Plan which includes support for science, the development of an Arctic business model (maritime transportation, port development, shipbuilding, and so on), and greater international cooperation (Park 2014a, p. 55). The Japanese national government appointed Atsushi Sunami, a leading international relations scholar and policy analyst within the Government of Japan, to lead the country's political and administrative participation on Arctic matters (for a review

of a major Japanese-language report on Japan's Arctic Policy by the Japan Institute for International Affairs, see Tonami 2013). In 2013, the government created an ambassadorship for Arctic affairs, or Special Representative for the Arctic Region, expanded the Basic Plan on Ocean Policy to include the Arctic, and began preparations for greater Arctic engagement (Tonami 2013, 2014). In presenting a draft Japanese Arctic Policy in October 2015, the Headquarters for Ocean Policy emphasised the juxtaposition of rapid environmental change in the Far North and the prospects for improved Arctic shipping. As the report noted, 'Japan is called upon to recognise both the Arctic's latent possibilities and its vulnerability to environmental changes, and to play a leading role for sustainable development in the Arctic in the international community, with foresight and policy based on science and technology that Japan has advantage in order to achieve sustainable development' (Government of Japan 2015, p. 2). For both South Korea and Japan, it is clear that the countries are at the early stages of formulating their Arctic strategies (Lunde et al. 2015). It is also obvious that they are serious—without a sense of urgency—about proceeding.

Arctic and non-Arctic actors have different, if overlapping, priorities in the region. For the Arctic states, all of the global questions about climate change, Arctic navigation, and the exploitation of Arctic natural resources are complicated by the need to address internal political challenges, circumpolar political integration, indigenous rights and claims, indigenous cultural resilience, the immediate and anticipated local effects of climate change, and significant infrastructure challenges. Non-Arctic states, in contrast, have the ability to disengage or stay apart from local and regional concerns and focus on matters of global and international priority. The points of overlap provide opportunities for engagement; the additional complexity of the challenges facing Arctic nations makes it clear that the Arctic states have separate responsibilities and opportunities that need constant attention.

Japan has started an extensive programme of reviewing its Arctic commitments, opportunities, and responsibilities (Tonami 2013). As a maritime state, the country feels that it has special expertise to contribute to the Arctic conversation, with a particular interest in issues of navigation and economic development. The Ministry of Education, Culture, Sports, Science and Technology launched its 'Rapid Change of the Arctic Climate System and its Global Influences' initiative covering the period 2011–2016 and focusing on the direct impact of climate change, anticipating future impacts, assessing the effect of these changes on Japan's marine environment, and examining the

evolution of Arctic navigation.⁶ Together with the Arctic Challenge for Sustainability project,⁷ this initiative anticipates extensive international cooperation and engagement by Japanese scientists and organisations, and a sustained Japanese commitment to global information sharing and policy-making. There are other significant Japanese contributions under development, including the expanded roles for the National Institute of Polar Research established in 1973, the Arctic Environment Research Centre in 1990, and sustained contributions from such national agencies as the Japan Agency for Marine–Earth Science and Technology and the Japan Aerospace Exploration Agency. As Professor Akiko Okamatsu (2015) explained,

Japan has highly advanced technology for research and promotes various projects under the leadership of the Japanese government. The data and scientific knowledge resulting from Japanese research will be shared in international forums and contribution to the protection of the Arctic environment and effective use of the Arctic.

South Korea's approach to the Arctic is similar to Japan's. In its 2013 Arctic Master Plan, Korea outlined four priorities: expanding its presence in scientific research, searching for additional opportunities (primarily in navigation and resource development) in the Arctic, supporting Arctic political processes, and engaging in and assisting international cooperation. The country has adhered to this general plan, placing particular emphasis on climate change research and remediation, with substantial government–corporate collaboration on Arctic navigation. The 2013 Master Plan for Arctic Policy emerged from a comprehensive internal government consultation process. Korea is determined to be seen as a constructive and responsive participant in Arctic policy-making, outlining a bold vision with high-level policy and strategic goals and numerous specific Arctic projects. The policy commits Korea to working extensively with Arctic partners, to seeking long-term economic opportunities, and to mobilising national resources through extensive collaboration between agencies and with the private sector (Kim 2015). South Korea's engagement, however, appears to be connected to both the urgency surrounding climate change and the prospects for short-term economic return. As Young Kil Park (2014b, p. 59) observed,

Since the early 2000s, South Korea's interest in the Arctic has gradually grown in parallel with the acceleration of the melting of the Arctic sea ice. This interest peaked on May 15, 2013, when South Korea obtained

observer status in the Arctic Council. Afterward, the headlines of newspapers were full of rosy depictions of the enormous benefits that such status would bring to South Korea. One year later, however, interest in the Arctic seems to have cooled.

South Korea's Arctic participation, which is extensive at the scientific and political levels,⁸ is less committed and more variable on the economic front, demonstrating what is likely to be a global pattern as the global significance of Arctic oil and gas resources recedes, at least in the short term.

Arctic Scientific Research

Many non-Arctic states like France and Germany have long maintained an academic and scientific interest in the Arctic. Gradually more countries, including the leading nations in East Asia, have expressed an interest in line with the growing importance of the region in international affairs. The level of global engagement—Greece, Turkey, and Switzerland, among others, have sought observer status—is unprecedented in the history of the Arctic. The establishment and re-enforcement of Arctic research centres, policy units, or other national entities are designed to ensure that each participating country has the national expertise necessary to understand and respond to urgent and emergent Arctic issues. Eleven countries—Norway, Sweden, Germany, France, Italy, Japan, China, the United Kingdom, the Netherlands, South Korea, and India—now have permanent Arctic research bases in Ny Ålesund on Svalbard, the site of most Arctic research. Also the Czech Republic has developed a research interest in the High North.⁹ Some of these countries have had long-standing Arctic research engagements. Japan, for instance, opened its Svalbard base in 1991, the same year as Germany. Others are more recent. France's base opened in 2001, and since 2003 it has shared a common base with Germany. South Korea's base opened in 2002 and China's in 2003.

Arctic scientific research has long focused on ecological questions. This emphasis has expanded in recent years to focus more on climate change and ecological transitions. With the Arctic serving as an early warning system for global climate change, the increased attention is a leading indication of growing concern about the long-term ecological impact of industrialisation and the expanding use of carbon-based fuels. Participation in collaborative Arctic research has, indeed, emerged as one of the most sustained, extensive, and promising aspects of global Far Northern engagement for non-Arctic states.

Resource Investment and Development

The interest of non-Arctic states in Arctic affairs was driven, in part, by concerns about long-term supplies of energy and other natural resources. For several decades, the belief in peak oil (the idea that world production of oil and natural gas was closing in on its maximum potential) led to the anticipation of the exhaustion of southern and accessible supplies. The attention of nations searching for secure supplies and development firms shifted to the Far North, which was believed to hold around a quarter of the world's untapped oil and gas reserves, substantial ocean-bottom resources and as yet undeveloped mineral deposits. The prospects for Arctic resource wealth were far from assured, given the costs and difficulties associated with the exploitation of northern deposits, but for a world worried about long-term energy supply, the Arctic held considerable potential (see also Chap. 14 by Keil, this volume).

Led by China, with Japan, South Korea and India also involved, non-Arctic states clearly hoped that their energy companies, including several key state-owned energy firms, would be part of the Arctic development process. Due to the rapid improvement in global supplies, tied to improvements in shale gas development, renewable resources, and conventional energy sources, the pressure came off the Arctic development agenda. Only the large-scale resources available off Russia's Arctic coast, combined with Norway's smaller but substantial reserves, remained in active play, demonstrating Arctic potential. Importantly, the non-Arctic states did not withdraw or reduce their level of interest in league with the declining urgency placed on Arctic energy development, although the resource companies have cut back on immediate exploration activity.

While much has been made about the scale and intensity of non-Arctic state engagement in the Arctic, it is important not to overstate the nature of that interest. Countries like China have even more active economic and resource interests in non-Arctic regions, including Africa, Brazil, sub-Arctic regions in North America and Russia. It is best to understand southern interest in Arctic resources as a means of hedging bets against long-term supply shortage in critical energy and mineral supplies.

As oil and mineral prices have fallen so has interest in Arctic projects. As *The Economist* (2015) reported in January 2015,

since mid-2014, falling oil prices and conflicts between Russia and NATO have lessened the Arctic's allure. Its energy is pricey. Even at \$100 a barrel,

many fields were marginal because the environment is so extreme. Gazprom and Statoil, the Russian and Norwegian firms developing one of the largest gasfields ever discovered (the Shtokman field in the Barents Sea), mothballed the project in 2012. The boss of Total, a French energy firm, called the Arctic drilling too risky even before prices started to fall. With oil at \$50 a barrel, few Arctic fields would be economic. One of Norway's largest private investors, Jens Ulteit-Moe, recently called energy exploration in the Arctic "a license to lose money".

The Korea Gas Corporation in 2011 acquired a 20 per cent share of the Umiak gas reserve project in Canada's Northwest Territories. This was Korea's first Arctic resource development project. However, the shale gas boom and resulting price decline have resulted in a suspension of the project (Park 2014a, p. 51). The mineral front is likewise uncertain. The ownership of London Mining Greenland A/S, developers of a major open pit iron ore mine at Isukasia in Western Greenland, recently went bankrupt and the company is now owned by Chinese company General Nice Development Ltd. (Government of Greenland 2015). Another Chinese company, MMG Ltd., a subsidiary of Chinese state-owned China Minmetals Corporation, is the major shareholder in the Izok Corridor mine project in western Nunavut. The project has been under governmental review since 2013. If approved, it would be a US\$ 6.5 billion project over 15 years and consisting of eight mines producing lead, zinc, and copper. Along with the economic benefits it would bring to the nearby Nunavut communities, however, there are significant environmental concerns (Munson 2012).

Support for Indigenous Cultures and Communities

Northern indigenous peoples have long held the interest of people from around the world, a fascination shown by generations of books on Arctic exploration and a sustained interest in Inuit art. This is particularly the case for the Inuit, whose unique environmental adaptations have attracted attention and curiosity for generations. Appeals from northern indigenous groups have often found receptive audiences in non-Arctic states, although not, clearly, in the case of the EU's campaign against the seal trade. Inuit appeals for support for indigenous rights and, more recently, greater attention to the environmental threats facing the Arctic have been heard more clearly than in the past, as shown by sustained

media interest in northern indigenous issues and the provision of political platforms, formal and informal, for Arctic indigenous leaders (see also Chap. 3 by Shadian, this volume). In informal (such as interest in Inuit and indigenous art) and formal (support for the Arctic Council) ways, the citizens and governments of non-Arctic states have shown their growing sympathy for and understanding of northern realities. Several countries, including Japan and South Korea, have organised special exhibitions of Inuit art and celebrations of Inuit culture, part of a general effort to raise the profile of Arctic residents. The Inuit have emerged as among the most widely known indigenous peoples in the world, a status sustained and enhanced by the efforts made by non-Arctic states to support northern indigenous cultures.

Technological Innovation for Circumpolar Living

The rapid expansion of scientific and technological knowledge in the late twentieth and twenty-first centuries has transformed many aspects of global life, including in the Far North. In recent years, entrepreneurs, philanthropists, and global governance institutions have focused most of their efforts on the developing world, particularly sub-Saharan Africa and South Asia. In these regions, new technologies such as enhanced water filtration systems, improved vaccines, mobile medical facilities, and the mobile Internet have increased life opportunities considerably. To date, little comparable effort has been devoted to the Arctic regions, where the combination of high costs, vast distances, small populations, and harsh climates has mitigated against the ready application of many new technologies. Non-Arctic states, particularly in Europe and East Asia, have the potential to develop innovations that could greatly improve the quality of life in the Arctic, for instance in the areas of medical services for remote regions, new energy systems, food factories, and improved communications systems. This field remains substantially underdeveloped at present as southern interest in Arctic science and environments has not yet translated into a comparable commitment to socially focused innovations, which might include an Arctic commercialisation eco-system to convert scientific discoveries into practical applications that would improve such basic elements as housing, clothing, transportation, Arctic-based employment, and digital governance.

THE SUSTAINABILITY CONNECTION

Scientists and ecologists argue that climate change in the Arctic could have a pronounced impact on the global environment. They also recognise that Arctic climate change is a direct consequence of industrial activities and consumptive lifestyles in the rest of the world. This provides some of the most important metrics of the current and impending changes. The melting of the Arctic ice cap has become one of the most common illustrations of the changing global eco-system, where human-induced environmental transformations introduce dramatic ecological changes and force rapid human adaptation. The satellite images of the Arctic are clear and easily comparable to results from the previous decades. This has made these maps iconic in the global environmental movement, cited by ecological groups from East Asia and South America to the USA and Europe as proof of the impact of industrial lifestyles to harm remote eco-systems. Notwithstanding the serious environmental degradation in parts of Arctic Russia, it is also obvious that the Arctic produces very few pollutants itself, and is therefore neither entirely responsible for the environmental changes nor has the capacity to act alone to reverse what are clearly dangerous ecological trends, including rising sea levels, the melting of the polar ice cap, potential disruption of ocean currents, and major shifts in animal, fish, and plant life.

The Arctic's environmental challenges, to put it simply, originate to a large degree outside the region and, furthermore, can only be addressed by swift global action to halt the use of hydrocarbons and to reverse the atmospheric pollutants that are transforming Arctic eco-systems (on the latter issue, see Chap. 12 by Cavazos-Guerra et al., this volume). This simple reality has forged an unbreakable link between the Arctic and the rest of the world, particularly the industrialised and industrialising nations.

There will be no solution to Arctic environmental challenges without southern governments, economies, and citizens limiting their use of hydrocarbons and the release of airborne pollutants. What is clearly at issue is whether or not the steps currently underway through the Arctic Council and through national initiatives connected to the Arctic, including expanded research and monitoring of Arctic eco-systems and remediation activities, will generate sufficient global action to mitigate current environmental dangers and, eventually, to reverse the ecological damage done to date (Collins et al. 2015).

While there has been considerable symbolic action to date, little sustained change directly related to collective responsibility for Arctic environmental conditions has taken place (see also Chap. 6 by Selin, this volume). Observer status on the Arctic Council provides non-Arctic states with greater understanding of Arctic realities, but the discussions rarely introduce revelatory information. The ecological challenges are well known and the seriousness of the challenges facing Arctic environmental sustainability is widely appreciated. To date, the Arctic Council has produced only small steps forward, not dramatic political and governance transformations. In this, the Arctic Council is following a comparable path to global institutional efforts to produce major changes in energy use and industrial pollution. Some of the new observers, particularly China and India, are among the greatest offenders in terms of environmental damage and have only shown minimal willingness to alter current energy use and industrial patterns. The Arctic Council and the Working Groups are important global actors, but it is not likely that they will generate the kind of sweeping and urgent ecological change that is required, with or without the intervention of non-Arctic actors. The engagement of non-Arctic states in Arctic affairs has the potential of encouraging these countries to raise Arctic concerns in other global, regional, and national forums.

If the Arctic region is to avoid further environmental deterioration and if there is to be a mitigation of existing damage, there needs to be a sustainability connection between Arctic and the non-Arctic states (see also Chap. 2 by Kristoffersen and Langhelle, this volume). While much of this will be worked out in global forums of environmental governance, such as the United Nations Framework Convention on Climate Change and the work of the International Panel on Climate Change (see also Chap. 6 by Selin, this volume), direct engagement between Arctic and non-Arctic actors such as the EU, China, South Korea, Japan, and Germany could play an important role in developing short- and medium-term solutions to Arctic ecological change. Many of the potential initiatives would build on existing activities and Arctic commitments by non-Arctic states. The core elements of an Arctic/non-Arctic sustainability connection could include an enhanced and coordinated Arctic science initiative, connected to the work of the Arctic Council's Scientific Cooperation Task Force and focused on the identification of the regional effects of climate change and the development of Arctic specific strategies for mitigating current environmental problems in the Arctic, as well as a substantial fund, provided by non-Arctic states, to pay for Arctic ecological mitigation efforts

in recognition of the southern origins of Arctic environmental change. There should also be a global initiative, led by non-Arctic states and managed by the Arctic Council Secretariat, to connect Arctic residents with southern populations as a means of explaining the Arctic impacts arising out of energy use and industrial activity in southern nations. The focus should be on public outreach and engagement and the promotion of greater awareness of the direct global connections between South and North. This effort could also include the creation, under the auspices of the Arctic Council and with funding from all interested parties, of a coordinating agency between the Arctic and non-Arctic observer states with specific responsibilities for monitoring mitigation needs in the Arctic and to report publicly on efforts to address the roots of global climate change (see also Chap. 5 by Humrich, this volume).

Working out the role of non-Arctic states in this sustainability approach, and Arctic governance generally, is not easy but it is vitally important. As Oran R. Young (2012, pp. 298–299) puts it,

There is no simple solution to the puzzle of listening to the voices of non-Arctic states in Arctic Ocean governance. But simply ignoring the issue will not do. The transformative changes now taking place in the Arctic are tightening the links between this region and the global system. Whether we like it or not, the fate of the Arctic will be determined by our ability to manage these links in a manner that is responsive to the rights, responsibilities, and resources of all parties concerned. A strategy of attempting to govern the Arctic as a closed system cannot work. Finding ways forward that allow key non-Arctic states to have a voice in Arctic affairs while recognising the legitimate interests of the Arctic states and supporting rather than interfering with the efforts of the Arctic Council must be a priority for the coming decade.

CONCLUSION

Non-Arctic states have developed a strong interest in the Far North. It remains to be seen if the interest will be sustained in the coming years, particularly in the face of the changing energy and commodity markets, a reduction of resource interest in the Far North and the accelerating transformations associated with global climate change. Equally important, it remains to be seen how non-Arctic and Arctic states can coordinate their interests, many of which overlap, in the best interests of the human and ecological evolution of the Arctic. It is also not clear that the non-Arctic states will subordinate their interests in and concerns about the Far

North to those of the Arctic states, Arctic indigenous peoples, and Arctic residents generally. In the broader sweep of international relations, there is little reason to be optimistic that the external powers will readily subliminate national priorities, which focus largely on economic matters, and particularly their commercial interests to those of the small and scattered indigenous populations of the Far North. Two of the world's superpowers, the USA and Russia, have strong Arctic interests and growing engagement with the Far North, providing an offset to the interests of non-Arctic states. The Global Leadership in the Arctic: Cooperation, Innovation, Engagement and Resilience conference on climate change and Arctic issues, held in Anchorage, Alaska, in August 2015 attracted considerable global attention. The meeting, hosted by US President Barack Obama and involving high-level dignitaries from around the world, indicated the general acceptance of international responsibility for the effects of climatic change in the Arctic.¹⁰

Thirty years ago, the Arctic had a small and inconsistent place in global politics. Much has changed, starting with the empowerment of indigenous peoples and Arctic populations and accelerating through the creation of the Arctic Council and the expanded engagement of non-Arctic states in northern affairs. In only a generation, the Arctic has become a major focal point for global politics, a symbol of the real consequences of climate change, a classic example of the effectiveness of regional cooperation, and one of the world's best illustrations of the participation of indigenous peoples in collective governance. The participation of non-Arctic states was a logical, but in no way assured, extension of the work of the Arctic Council and of the effort to connect industrial nations (polluters) with remote regions rendered vulnerable by human-induced climate change.

The primary lesson arising from the participation of non-Arctic countries in the world of the Arctic Council is that international organisations are capable of reaching beyond superficial differences and what appear to be conflicting positions. Non-Arctic states have approached the Arctic Council from a position of collective interests and not simply national requirements. The Arctic states, for their part, realise that the resolution of Arctic challenges, particularly on climate change but extending more broadly, requires the substantial participation of non-Arctic countries. The work of the Arctic Council, while far from revolutionary in terms of practical outcomes, has demonstrated that nations, indigenous organisations, and other participants can put global and regional interests ahead of narrow national priorities. If critics have wondered why actual progress

on Arctic issues has been limited, supporters are right to emphasise the inclusiveness, collaboration, and practical focus of one of the world's most interesting intergovernmental organisations.

The progress of the Arctic Council to date is a promising sign of the ability of the global political community to work together on major environmental and socio-cultural issues and to do so with the full engagement of Arctic and numerous non-Arctic countries. The work of the Arctic Council demonstrates that non-Arctic states can be drawn into the global effort to address the pressing concerns of the Far North. It shows, equally, that the Arctic states welcome global engagement and appreciate the interconnectedness of Arctic and non-Arctic countries. In other words, Arctic and non-Arctic actors have used the Arctic Council to put urgent global priorities ahead of narrow considerations and to focus on the environmental, social, economic, and political challenges of the Far North and, by extension, of the world as a whole.

In the end, and after years of episodic and inconsistent global political efforts to address climate change and to develop strategies for environmental sustainability, the extension of the Arctic Council to incorporate non-Arctic states is one of the more promising efforts to develop practical solutions. Environmental sustainability is paramount for the members of the Arctic Council, a position well understood by the non-Arctic observers. The Arctic Council, even in its inclusiveness is no panacea for global climate change or environmental sustainability. The mechanisms are working effectively for the Arctic, providing a model for international political, scientific, and governance engagement and offering the nations of the world a useful model for regional and global problem-solving and long-range strategising. At present, the fact that states as diverse as India and Japan, Turkey and Germany, and the EU wish to participate in and support the work of the Arctic Council is an important early indication that the nations of the world are starting to look for practical solutions to the sustainability challenges of the twenty-first century.

NOTES

1. There is a massive literature on Arctic exploration (see Tamnes and Holtsmark 2014).
2. 'The commons' refers to the expectation of access to natural resources that are not under the control of a nation state or subject to private ownership, and are deemed to be available to all.

3. The specific terms within the Declaration are as follows: 'Adopt the recommendations of the Senior Arctic Officials (SAOs) on the role and criteria for observers to the Arctic Council as set out in Annexes to the SAO Report, and decide to apply these criteria to evaluate pending applicants for observer status'.
4. Information provided by Bridget Laroque, Arctic Council representative for Gwich'in Council International, personal interview with Dr. Ken Coates, Saskatoon, Saskatchewan, May 2015, June 2015.
5. The Inuit have continued to press to have the EU decision overturned (see Skura 2015; Montgomery 2015).
6. See <http://www.nipr.ac.jp/grene/e/> (last accessed 17 December 2015).
7. See <http://www.arc.hokudai.ac.jp/en/arcs-%EF%BC%88arctic-challenge-for-sustainability%EF%BC%89project/> (last accessed 17 December 2015).
8. This commitment was reaffirmed by Korea's Arctic Ambassador, Chan-Woo Kim, in his presentation to the 2015 North Pacific Arctic Conference (NPAC): 'The Arctic in the Wider World', Honolulu, Hawaii, 6–7 August 2015.
9. See <http://polar.prf.jcu.cz> (last accessed 17 December 2015).
10. See <http://www.state.gov/r/pa/prs/ps/2015/07/245241.htm> (last accessed 17 December 2015).

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PART 4

Issues: What Is the Global
Arctic All About?

Clean Air and White Ice: Governing Black Carbon Emissions Affecting the Arctic

*Carolina Cavazos-Guerra, Axel Lauer,
and Erika Rosenthal*

INTRODUCTION

The continued decline of Arctic sea ice is expected to have complex implications both within the Arctic climate system and beyond. The Arctic is warming at more than twice the global average, threatening the cultures, wildlife and landscapes of the region, and low-lying coastal areas around the world. While CO₂ emissions are the primary cause of Arctic warming—and ambitious emissions reductions our primary challenge—the long atmospheric residence time of CO₂ means that reducing emissions today will not slow Arctic warming in the coming decades (Rogelj et al. 2014; UNEP and WMO 2011; Hansen et al. 2007). A near-immediate climate benefit and a slowing of Arctic ice melt can be attained through reducing

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short-lived climate forcing pollutants (SLCPs) such as black carbon (BC), which has a short atmospheric residence time (days to weeks) compared to CO₂ (~100 years). BC, a constituent of PM_{2.5} (Particulate Matter up to 2.5 micrometre in size), is a major component of soot formed by incomplete combustion of fossil fuels, biomass, and biofuels. BC disturbs the Arctic climate both by absorbing sunlight and warming the air while transported in the atmosphere and by enhancing ice melting through darkening when deposited on bright surfaces (albedo effect). Thus, BC is thought to have played a significant role in Arctic warming characterised by the accelerating Arctic sea ice melting in the last 30 years (Myhre et al. 2013).

The first part of this chapter describes the sources, pathways, and climate impacts of BC in the Arctic and frames the discussion of challenges, uncertainties, and future prospects for the Arctic and global climate driven by global warming, BC emissions, and anticipated economic developments in the region. The second part reviews the status and prospects of multilateral BC emission reduction efforts that are taking place in three international venues: the Convention on Long-Range Transboundary Air Pollution (CLRTAP), the Arctic Council, and the International Maritime Organization (IMO). A final conclusion outlines necessary steps ahead to cope with the complex challenge of BC emissions, both for the Arctic region and beyond.

BLACK CARBON IN THE ARCTIC: SOURCES, PATHWAYS, AND IMPACTS

BC particles have been observed in the Arctic for more than a century in both the atmosphere and deposited on ice and snow. The former has been witnessed since the second Dickson Expedition to Greenland led by Adolf Erik Nordenskiöld in 1883: ‘Everywhere where the snow from last winter has melted away, a fine dust, gray in colour, and, when wet, black or dark brown, is distributed over the inland ice in a layer which I should estimate at from 0.1 to 1 millimetre in thickness’ (Nordenskiöld 1883, p. 736). This ‘dirty snow’ over the Arctic (also found in the Himalayas) is associated with BC emissions and mineral dust from North America, Europe, and South-East Asia transported over thousands of miles to be deposited in the Arctic (Dumont et al. 2014).

The subject of Arctic atmospheric pollution gained attention by the scientific community when in the 1940s and 1950s several weather

exploration missions deployed by the US Air Force flying over the Arctic Ocean recorded for the first time the layer of high concentrations of aerosol in the atmosphere, also known as ‘Arctic haze’ (Garrett and Verzella 2008). This phenomenon was documented in 1957 by air force meteorologist Murray Mitchell and confirmed in subsequent studies on Arctic anthropogenic aerosols (for instance Rahn et al. 1977; Shaw 1995). Arctic haze layers originate from anthropogenic emissions, including sulphates, particulate organic matter (POM), BC, and other pollutants including ozone (O_3) precursors such as nitrogen oxides (NO_x) and volatile organic compounds (VOCs) (Stohl 2006). These layers originate mainly from residential combustion in northern mid-latitudes and Eurasia and are transported to the Arctic typically in winter and early spring with highly variable thickness (tens of metres to 1 kilometre) and horizontal extent (20–200 kilometres) (Schnell 1984).

BC affects the global climate in several ways: first, directly by absorbing both solar and infrared radiation contributing to the warming of the atmosphere; second, through surface warming when deposited on snow and ice; and third, indirectly by altering the properties of clouds affecting cloud reflectivity, lifetime, and precipitation rates (Boucher et al. 2013). BC particles deposited over snow and sea ice affect the physical snow characteristics, including darkening of the surface and reducing the albedo (fraction of sunlight reflected back to space). Figure 12.1 shows how this effect amplifies warming at the surface, consequently accelerating the snow and ice melting rate and hence reducing the albedo even further. This, in turn, contributes to greater climate change particularly in the Arctic compared to the global average; a phenomenon called Arctic amplification (Mark and King 2013).

The decline of summer sea ice extent affects the atmospheric temperature gradient and, as a consequence, changes the atmospheric circulation and modifies weather patterns in the Arctic (Cohen et al. 2014). This also disturbs temperature and precipitation patterns in mid-latitudes such as Europe and North America, affecting, in turn, agriculture, forestry, and water supplies. Some studies suggest that the increase in extreme winters in northern hemispheric mid-latitudes in recent years is connected to the decline of Arctic sea ice and changes in continental snow-cover in autumn (Handorf et al. 2015). The additional warming of the air resulting from the loss of summer sea ice is expected to spread over high-latitude land areas, accelerating the thawing of permafrost. This could then lead to the

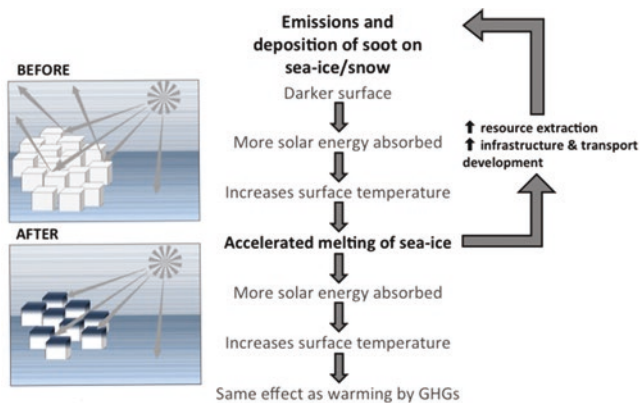


Fig. 12.1 Climate feedbacks of the deposition of BC (soot) on sea ice and snow (Source: © Carolina Cavazos-Guerra)

release of carbon presently locked in frozen soils, and thus further amplify global warming (Lawrence et al. 2008).

However, the exact impact on the Earth's radiation budget (also called climate forcing) of BC is still poorly understood. The climate response to BC differs to that of well-mixed greenhouse gases such as CO_2 or methane (CH_4) because of its short atmospheric residence time of typically only a few days leading to a geographically and seasonally highly inhomogeneous effect on the climate. Due to this, and particularly for the Arctic, it is difficult to accurately assess the long-range transport and processes affecting the atmospheric residence time of BC leading to a large range of estimates for the climate forcing of BC (e.g., Samset et al. 2014).

Arctic Atmospheric Circulation as a Driving Force for BC Transport

The Arctic atmosphere is unique. During winter and early spring when there is little or no sunlight and the surface is frequently covered by snow or ice, cold air forms a protective lid or 'dome' in the Arctic lower troposphere¹ isolating it from the rest of the atmosphere and acting as a transport barrier (the so-called Arctic front) (Bradley et al. 1992). The Arctic front separates the cold and dry Arctic air from warmer air from mid-latitudes and reaches as far south as central Europe (around 40°N) during

the coldest periods in winter. The pronounced seasonal cycle of the Arctic front plays a key role in the transport of BC and other pollutants into the Arctic, with a maximum in winter and early spring (i.e., during the haze season) and a minimum in summer when the Arctic aerosol seasonal cycle is dominated by clouds and precipitation. In winter, northern Eurasia is the major source region for Arctic pollution. Polluted air masses from densely populated areas over East Asia and North America are too warm and moist to directly penetrate the polar dome, but they can descend into the Arctic middle or upper troposphere creating the Arctic haze (Stohl 2006).

Atmospheric circulation patterns in the Arctic also play an important role in the removal of BC particles. In winter, characterised by dry atmospheric conditions, BC settles out of the air onto ice and snow within several days to weeks after the particles reached the Arctic (Shaw 1995). In summer, clouds and precipitation are efficient mechanisms for deposition of Arctic aerosol pollutants (Garrett et al. 2010). Since removal by frozen or liquid precipitation (also called ‘wet scavenging’) of aerosols from the atmosphere is particularly efficient at high humidity and warm temperatures, it has been suggested that a future warmer and wetter Arctic may therefore also be cleaner (Garrett et al. 2011). For aerosol pollutants that have a warming effect² in the Arctic, an increase in wet removal could represent a negative climate feedback, reducing the additional warming by this kind of aerosol.

Current and Projected Emissions in and Outside the Arctic

Numerical and statistical analyses and observational data indicate that the largest fraction of BC reaching the Arctic results from long-range transport of pollutants originating in northern Eurasia, North America, and Asia (for instance Gong et al. 2010). South of 66°N, the largest emissions originate from the transport sector, followed by biomass burning (BB), residential burning, and industrial sources mainly from the Nordic countries and North America (Bond et al. 2013) (Fig. 12.2).

Flaring and residential combustion in the Arctic are responsible for about 40 per cent of Arctic BC, although their contributions have been largely neglected or treated inconsistently in most emission inventories and hence were underestimated in previous global estimates of the climate effect of BC in present and upcoming years. Studies suggest that local BC emissions (north of 66°N) have a much larger impact on Arctic warming

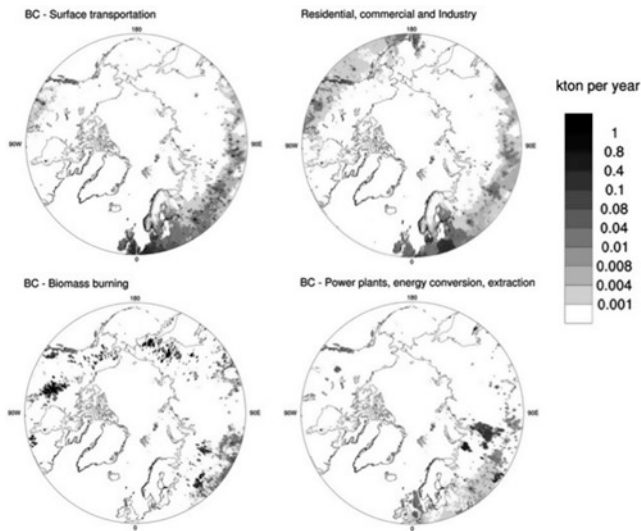


Fig. 12.2 Annual BC emissions in kilotons for the year 2010 from different emission sectors (*Source*: ECLIPSE database and GFED for biomass burning emissions)

than emissions that originate elsewhere (for instance Sand et al. 2013). Therefore, of particular interest are local emissions, especially with the increase in resource extraction activities and other changes expected in the Arctic, including:

Gas Flaring

Emissions related to resource extraction are estimated to be the most important source of BC within the Arctic ($>66^{\circ}\text{N}$), mostly in the North Sea, the Norwegian Sea, the north-eastern part of European Russia and western Siberia (Stohl et al. 2013). Oil and gas extraction sites contribute to a broad mix of gases and particles including BC, NO_x , sulphur oxides (SO_x), and other species due to gas flaring, operation of equipment for power generation, gas venting and leakage as well as the associated infrastructure including storage, handling, and transport. The exact role of Arctic flaring and residential combustion in the Arctic climate system remains highly uncertain (Stohl et al. 2013). This is because most of the global inventories of BC currently do not account for gas flaring emissions due to the scarcity of

data, especially from Russian extraction sites. Since about 30 per cent of the world's undiscovered gas and 13 per cent of the world's undiscovered oil are presumed to be in the Arctic (Gautier et al. 2009), it is expected that their exploration and extraction will add to the burden of BC emissions inside the Arctic (see also Chap. 14 by Keil, this volume).

A recent attempt to provide improved data on the location and strength of oil and gas flaring emissions is the development of ECLIPSE (Evaluating the CLimate and Air Quality ImPacts of Short-livEd Pollutants Project) emission inventory (Klimont et al. 2013). ECLIPSE is specifically designed to analyse emissions of long-lived greenhouse gases (GHGs) and shorter-lived species in a consistent framework, including better estimates for gas flaring in the Arctic (Fig. 12.2).

Biomass Burning

BB from intentional or unintentional burning of vegetation (for instance forest fires) releases BC and other trace gases into the atmosphere affecting not only air quality but also the climate and carbon cycle (Stohl 2006). Emissions from BB mostly originate from wildfires in Canada, the USA, and Russia (especially in Siberia), and can reach the inner Arctic within several days (Quinn et al. 2008). They constitute the most important source of Arctic BC in times of high wildfire activity when they contribute about 80 per cent to the atmospheric BC burden in the Arctic during spring (Warneke et al. 2010). The emissions strongly depend on the type of vegetation burned, the combustion phase (smouldering and flaming), and atmospheric conditions at the time of the fire events (Hornbrook et al. 2011). Model projections of BC from BB reaching the Arctic as a result of long-range transport are around 90,000 tonnes per year, which represent around 4 per cent of the total global emissions of BC from BB (Stohl et al. 2013). It is worth mentioning that these BB layers hardly reach the surface (Brock et al. 2011) due to the frequently strong near-surface temperature inversions, during which temperatures increase with altitude. Such conditions result in a very stably stratified atmosphere inhibiting vertical air motion, and limit vertical transport and deposition over the Arctic. However, they contribute to the formation of Arctic haze, which in turn has implications for the Arctic atmosphere.

Shipping

Estimates from several studies suggest that ships contribute significantly to global anthropogenic climate change and health impacts through

emissions of GHGs and other air pollutants (for instance Granier et al. 2006; Lauer et al. 2009; European Environment Agency 2013). For the Arctic region at present, the impact of BC emissions from shipping is still negligible: shipping contributes only about 1000 tonnes per year to the total BC emissions in the Arctic ($>60^{\circ}\text{N}$), which represent just around 2.5 per cent of Arctic BC emissions (and around 1–3 per cent of global ship emissions) as access is currently restricted by sea ice and limited infrastructure. Nevertheless, a reduction in summer sea ice cover is expected to increase future ship traffic in the Arctic due to reduced journey times and because of an increase in oil and gas extraction in the Arctic (see also Chap. 13 by Moe, this volume). High-growth projections for the Arctic estimate BC emissions from shipping to double by 2030 and to quadruple by 2050 if no mitigation measures are introduced (Corbett et al. 2010). Based on low- and mid-range scenarios of shipping expansion, Azzara and Rutherford (2015) estimated for the US High Arctic that $\text{PM}_{2.5}/\text{BC}$ emissions may increase between 150 and 600 per cent by 2025 if no further emission controls are implemented. Furthermore, emissions of carbon monoxide (CO), NO_x , and other chemical substances such as non-methane hydrocarbons by ships lead to an increase in surface ozone in the Arctic, which is a greenhouse gas contributing to additional surface warming (Granier et al. 2006).

At this time, large uncertainties exist as to how local emissions and long-range transport will change with the industrialisation and urbanisation of Arctic regions. Such developments are expected to produce additional emissions particularly from shipping, mining, drilling, hydrocarbon (oil and gas) extraction and flaring, and could become important sources of Arctic air pollution. Control measures to reduce emissions and their impacts are needed in any case as precautionary measures (see below).

The Role of Co-emitted Species

Typically, sources emitting BC also emit other short-lived species relevant to air quality and climate such as organic carbon (OC), sulphur dioxide (SO_2), and POM. Some of these co-emitted species, such as OC, have a cooling effect (see note 2). Consequently, the balance of emissions when removing all species entirely from a source will have a great effect in the climate response. BC can therefore not be seen independently from these co-emitted species but needs to be addressed in an integrated manner in particular when assessing mitigation measures or future scenarios.

Additional species that are highly relevant to climate change in the Arctic include in particular methane (CH_4), sulphate (SO_4), and trace gases such as halogens, ozone (O_3), and ozone precursors (NO_x) as well as VOCs and POM. In addition to changes in the concentration of these species through anthropogenic activities, changes in the concentrations of some natural aerosols such as sea salt particles will be affected by changes in Arctic circulation and climate, resulting in a number of possible feedback mechanisms accelerating or inhibiting climate change in the Arctic (Pierrehumbert 2014).

OBSERVATIONS AND MODELLING OF BC IN THE ARCTIC: UNCERTAINTIES AND CHALLENGES

Our ability to predict the future Arctic climate relies heavily on our ability to model Arctic atmospheric composition and long-range transport from non-Arctic source regions (Monks et al. 2014). Thus, better numerical models are necessary to fill the gaps in observations in order to get a better image of the distribution of Arctic pollutants. During the last years, several multi-model studies have been performed to simulate Arctic aerosol sources, distribution and composition with most of the model studies complementing observational campaigns in the Arctic (for instance Bian et al. 2013; Eckhardt et al. 2015). Due to the complexity of the Arctic atmosphere and cryosphere system and deficiencies in the treatment of aerosols and clouds, climate model projections for the Arctic have a lower confidence level than for many other regions (Overland and Wang 2013). The particular challenge is to accurately represent dynamical processes and anthropogenic emissions, which are necessary for conclusions about the projected changes in the Arctic (Cavazos-Guerra and Lauer 2014). The widespread model results for the distribution of aerosols over the Arctic can be attributed to, for instance, differences in emissions, chemistry, and transport schemes (Shindell et al. 2008). Even though simulations of BC concentrations in the Arctic have improved in recent studies, the magnitude of the seasonal cycle is still underestimated by most models. There is evidence of high concentrations in Russia that are currently not captured (Eckhardt et al. 2015) suggesting an underestimation of BC sources in Russia in current emission inventories. Moreover, since the radiative forcing due to aerosols has a strong dependency on surface albedo (Haywood and Shine 1997), model uncertainties in the representation of the surface

albedo translate directly into uncertainties in estimates of the absorption of solar radiation by BC over bright surfaces (Myhre et al. 2009).

In sum, large uncertainties in the climate impact attributed to BC emissions remain despite major efforts of observational campaigns and model analyses to identify and assess emissions and transport pathways of BC to the Arctic. This includes the still limited knowledge of emission factors, physical and chemical properties of BC aerosols, and incomplete present-day emission inventories (Bond et al. 2007), particularly for Eurasia. It will be critical to improve emission inventories including global ship and flaring emissions for present-day conditions and future scenarios including business as usual and possible alternative future scenarios. Assessments of the magnitude of the impact of BC on the Arctic climate further rely heavily on numerical models and are still subject to large uncertainties. We thus also need improvements of numerical models in combination with better emission data and additional long-term measurements in the Arctic. This will also improve our understanding of possible impacts on mid-latitude conditions, since changes in the Arctic are not isolated phenomena but are part of a complex chain of interactions and feedbacks between Arctic and non-Arctic regions.

MULTILATERAL APPROACHES TO REDUCE BLACK CARBON EMISSIONS AFFECTING THE ARCTIC: STRONG ENOUGH TO SLOW THE MELT?

As described above, reducing emissions of SLCPs like BC can slow warming and melting in the Arctic in the near term, giving wildlife and communities around the world more time to adapt. This much-needed path to tackling climate change in the Arctic in the coming decades has spurred the multilateral initiatives discussed in this chapter. Critically, both near and long-term strategies are essential to protect the global and Arctic climate. Reducing emissions of SLCPs such as BC are only a complementary strategy to the dramatic reductions in CO₂, through the transition to clean energy and forest protection, that are required to limit long-term climate change. Although air pollution regulation has traditionally been the responsibility of states, the growing understanding of the extent of BC's climate forcing, combined with a fuller understanding of the health effects, has given momentum to efforts in multiple international forums that seek to maximise win-win emission air pollution reduction strategies that benefit both climate and public health.

Ambitious reductions of BC and methane emissions in the next decades have been identified as among the best strategies to reduce Arctic warming and melting in the near term and could ‘slow the projected warming in the Arctic by about 0.7°C in 2040 [...]. This is very significant in light of the rapid rate at which Arctic land- and sea-ice is now melting’ (UNEP 2011, p. xvi).³ Although there are still uncertainties surrounding the modelling and measurement of BC’s impacts on the climate as outlined above, there is broad consensus that we know enough to inform policy action, and that the remaining uncertainties cannot credibly be used as an excuse for inaction.

Time is of the essence. Modelling conducted for UNEP’s and the WMO’s ‘Integrated Assessment of Black Carbon and Tropospheric Ozone’ (2011) indicates that the climate benefits of SLCP reductions are greatest if action is taken before 2030, suggesting the need for accelerated timeframes for action to reduce BC emissions. Rapid implementation of ambitious measures to reduce BC and CH₄ emissions coupled with reductions in CO₂ emissions contribute most to bending the global temperature curve down, and giving the world a better chance of staying below a 2 °C rise in temperature in the second half of the century (Rogelj et al. 2014; UNEP and WMO 2011).

The challenge now is whether current Arctic and multilateral governance mechanisms to reduce BC emissions can be implemented quickly and ambitiously enough to deliver on the promise of slowing warming and melting in the coming decades. The following reviews the status and prospects of BC emissions reduction efforts taking place in three international venues that focus on effects in the Arctic. The section leads with a review of the newly adopted *Framework for Action on Enhanced Reductions of Black Carbon and Methane Emissions* at the Arctic Council, a regional intergovernmental body, followed by summaries of initiatives at the CLRTAP and the IMO. We then explore whether and to what extent these initiatives, when viewed together, could point towards a nascent Arctic governance regime on BC that can deliver results.

The Arctic Council Framework for Action on Enhanced Black Carbon and Methane Emissions Reductions

The Arctic Council’s *Framework for Action on Enhanced Black Carbon and Methane Emissions Reductions*, adopted in April 2015 by the eight member states, marks the first time this regional intergovernmental

organisation addressed climate mitigation head on. While the Framework for Action is not legally binding, it is a high-level actionable political commitment by Arctic states recognising responsibility to reduce emissions from within their countries that, because of proximity to the Arctic, have a greater warming and melting impact on Arctic snow and ice than emissions from further away (see above and Arctic Council 2015a; AMAP 2011). Crucially, the Framework includes the major operational elements of international agreements: reporting of national emissions inventories and national actions to reduce emissions; setting a regional emissions reduction goal for BC; and establishing an ongoing Expert Group to measure progress on regional emissions reduction, share best practices and support demonstration projects, and make recommendations to ministers on how to strengthen implementation and further enhance reductions in the future (Arctic Council 2015a).

This Framework for Action arises from a pledge the eight Arctic countries made in the founding declaration of the Arctic Council for ‘the protection of the Arctic environment, including the health of Arctic ecosystems, maintenance of biodiversity in the Arctic region and conservation and sustainable use of natural resources’ (Arctic Council 1996). The Council has begun to slowly evolve from an informal science and policy cooperation body towards a more formal regional intergovernmental body with a permanent, funded secretariat that can serve as a platform for the negotiation of regional agreements to help fulfil that commitment. The changes respond to the increased interest in the region as climate change opens new opportunities for resource extraction (see above and Chap. 13 by Moe and 14 by Keil, this volume), and reflect the Arctic states’ assertion of sovereignty and jurisdiction over much of the region at a time when non-Arctic states are becoming much bigger Arctic players. Because the Council has no independent legal personality, the Framework for Action, like the other agreements negotiated under the auspices of the Council, is technically among the eight individual Arctic states rather than an Arctic Council agreement *per se* (Fenge and Funston 2015).

The Framework builds on the conclusions and recommendations of four years of work between 2009 and 2013 by the Task Force on Short-Lived Climate Forcers (SLCF) established by the Council to identify priority emissions source sectors for cost-effective reductions, and recommend proven policies, technologies, and practices to reduce emissions (Arctic Council 2013). Sectors including diesel transportation, gas flaring, agricultural waste burning, industrial production and waste and residential

heating were identified as priorities for action (Arctic Council 2011). The Task Force report concluded: ‘Nations of the Arctic Council are well positioned to reduce black carbon and methane emissions to slow the rate of Arctic climate change over the next few decades. Existing technologies and proven best practices are available to reduce these emissions. [...] The geographic location of black carbon reductions influences the Arctic climate effect, meaning that measures taken in or near the Arctic can have the greatest impact per unit of emission’ (Arctic Council 2013, pp. 1–3). After the Task Force on SLCF concluded its work, the Council in 2013 created the Arctic Council Task Force on Black Carbon and Methane to negotiate the Framework for Action, which was delivered at the 2015 Ministerial meeting in Iqaluit.

The Framework for Action sets in train critical next steps that give the USA, as the first chair of the Expert Group (as part of its functions as chair of the Arctic Council from 2015 to 2017), to set the precedent for how the Council will review and assess implementation and facilitate enhanced action. This includes leading negotiations on outstanding issues such as setting a regional BC emissions reduction target by a certain date, and whether and how to address CH₄ reductions in the region. As Secretary Kerry stated at the Arctic Council Ministerial meeting in April 2015 at which the Framework for Action was adopted: ‘collectively, Arctic Council members and observer states contribute more than 60 per cent of black carbon pollution. So if we want to know where the problem begins, all we have to do is look in the mirror. [...] During our chairmanship, the United States intends to press for the full implementation of the Framework for Action on Enhanced Black Carbon and Methane Emissions. And that includes the compilation of national black carbon and methane emission inventories, national reporting on domestic mitigation efforts, and greater international cooperation on reducing these dangerous pollutants’ (Kerry 2015).

The Convention on Long-Range Transboundary Air Pollution

The 1979 CLRTAP was the first multilateral agreement to address BC in 2012, prompted by the recognition that emissions reduction would protect the Arctic and glaciated regions as well as lead to health benefits (UNECE 2012; see also Chap. 6 by Selin, this volume). CLRTAP convened an expert group on BC, which reported in 2010 that international action to reduce long-lived greenhouse gas emissions cannot prevent

‘dramatic changes to the Arctic in the near term; therefore additional complementary near-term strategies should be devised’ (UNECE 2010, p. 7). Amendments to the Convention’s 1999 Gothenburg Protocol to Abate Acidification, Eutrophication and Ground-level Ozone⁴ adopted in 2012 established emissions standards for PM_{2.5}, which will come into force in 2020, and urge ‘each Party to seek reductions from those source categories known to emit high amounts of black carbon, to the extent it considers appropriate’ (UNECE 2012, Art. 3, Paragraph 1c). The amendments to the Gothenburg Protocol also established a mandatory requirement to report national BC emissions inventories starting in 2015. CLRTAP established a Task Force on Emissions Inventories and Projections that developed the first standardised guidelines and methodology for estimating and reporting BC emissions, a step towards creating regional and international inventories.

While precedent-setting, much work remains to be done to fulfil the promise of the amended Protocol: the Protocol’s PM_{2.5} emission limits do not apply until 2020 and the specific BC reduction goals are voluntary. Two Arctic states, Canada⁵ and Russia, had yet to ratify the amended Gothenburg Protocol as of November 2015 (UNECE 2012) and hence are not required to submit their full BC inventories in 2015 as will the other six Arctic nations that have ratified the Protocol. Countries that are not yet parties to the revised Protocol must provide their emissions data and reduction commitment figures upon ratification of or accession to the amended Protocol unless they request a grace period. Since BC emissions from Eastern Europe as well as Russia reach the Arctic (see above), the provisions for flexibility to encourage these countries to ratify are important. These provisions allow countries to request extensions of any or all of the specified timescales for application of the emission limits.⁶

The International Maritime Organization: Arctic Shipping Emissions

Progress to address shipping emissions at the IMO has been slow. Projections indicate that both intra- and trans-Arctic shipping will grow in volume and diversify in nature over the coming years (see Chap. 13 by Moe, this volume). As described above, future ship emissions are projected to increase if no additional PM_{2.5}/BC emissions controls are implemented (for instance Azzara and Rutherford 2015). There are three IMO processes relevant to reducing BC emissions: ongoing discussions on BC

in the Marine Environmental Protection Committee (MEPC); the establishment of national Emission Control Areas (ECAs), and revisions to the Polar Code.

The discussion in the MEPC was initiated by a joint submission from Norway, Sweden, and the USA on the impacts of BC emissions from shipping on the Arctic climate, highlighting that reductions of emissions now ‘can provide short-term climate responses that are absolutely necessary to forestall a climate “tipping point”’ (IMO 2010, p. 5). The submission also tabled proposals for action to reduce emissions from shipping that impact the Arctic, which the MEPC has yet to take up.

However, the MEPC has agreed on a definition of BC in 2015—after four years of debate—which will hopefully be a prelude to launching discussions on emissions reduction options. The MEPC agreed a work plan to consider the impact of BC emissions on the Arctic from international shipping in 2011, including the development of a definition of BC, identification of the most appropriate measurement method for BC emissions from shipping, and an investigation of appropriate control measures. The agreed definition describes BC as ‘a distinct type of carbonaceous material, formed only in flames during combustion of carbon-based fuel, distinguishable from other forms of carbon and carbon compounds contained in atmospheric aerosol because of its unique physical properties’ (IMO 2015a).

Now that the IMO has formally adopted the definition of BC, the hope is that it will turn its attention to assessing control measures to reduce emissions such as slow-steaming, diesel particulate filters, and a ban of dirty heavy fuel oil (HFO) in the Arctic. HFO is already being phased out in certain regions including the Antarctic Ocean, and the IMO plans a global ban in 2020 except where scrubber technologies are used. Other options to reduce BC along with GHG emissions include operational measures to reduce fuel consumption and the use of specific BC pollution control measures, including in-engine measures, installation of diesel particulate filters, use of water-in-fuel emulsification on demand, and replacement of conventional fuel valves with slide valves (IMO 2010, p. 4).

Second, IMO ship pollution rules authorise the establishment by a nation or group of nations of so-called ECA, which have more stringent emissions requirements for SO_x, PM, and NO_x, subject to a proposal from the country or group of countries (IMO 2008, pp. 39–40). These rules are codified in the ‘International Convention on the Prevention of Pollution from Ships’, known as MARPOL, and its 1997 Protocol, which

includes Annex VI on ‘Regulations for the Prevention of Air Pollution from Ships’. MARPOL Annex VI sets limits on particulate emissions for NO_x and SO_x , but not for $\text{PM}_{2.5}$. For example, sulphur ECAs have been established in the Baltic and North Seas. An ECA was established for much of North America in 2010 (entered into force in 2012) to reduce SO_x , NO_x , and $\text{PM}_{2.5}$ emissions, but it did not include the Alaskan Arctic, principally because of a lack of health data, which is a required element of the application procedure.⁷ The designation of US coastal areas other than the Arctic as an ECA is projected by the US Environmental Protection Agency (EPA) to reduce annual emissions of NO_x in the USA by about 1.2 million tons and PM emissions by about 143,000 tons by 2030 through the ECA’s low fuel sulphur requirements (EPA 2009).

And finally, in 2015, the IMO adopted the environmental requirements of the International Code for ships operating in polar waters (Polar Code), and the associated MARPOL amendments to make the Code legally binding (IMO 2015b). (The IMO had adopted the safety part of the Code already in 2014.) The Polar Code is expected to enter into force on 1 January 2017 and is supposed to cover the full range of issues relevant to navigation in waters surrounding the poles including the protection of the unique environment and ecosystems of the polar regions (IMO 2014). The environmental provisions of the Polar Code include limits on operational discharges, such as zero discharge of oil and oily mixtures and noxious liquid substances, and design and construction requirements to reduce the risk of spills (IMO 2015b). However, the Code is weak on climate mitigation since it fails to mention BC as well as according emission reduction measures. In addition, the Code does not expand the ban on HFO use currently in place in the Antarctic to the Arctic. BC emissions are reduced when cleaner burning fuels are substituted for HFO (Lothe 2011).

FIRST STEPS IN AN EVOLVING ARCTIC GOVERNANCE REGIME ON BLACK CARBON?

Do the fragmented initiatives in multiple forums discussed above have the potential to evolve into something greater? In other words, taken together can they be considered to point to a nascent Arctic governance regime for BC that can deliver tangible results in the foreseeable future? It remains early days to venture a prognosis, but consideration of four important elements—increased global attention to the region, increased efforts at regional

coordination on other issues, the beginnings of coordination and integration between the three initiatives, and the non-binding character of the current initiatives—points to both hopeful developments and remaining challenges.

First, the melting Arctic has raised issues of Arctic development and protection high on the international agenda (see Chap. 6 by Selin, this volume). The eight Arctic states have each developed national strategies that seek to balance the increased opportunities for Arctic development brought about by climate change with the urgent need for responsible environmental stewardship. Non-Arctic actors, including the European Union, have also developed Arctic strategies that recognise the connection between increased Arctic accessibility and development and increasing emissions and climate impact (see Chap. 11 by Coates and Holroyd, this volume). And the Arctic Council's Framework for Action for the first time expressly involves non-Arctic countries that are observers to the Council in implementing the Council's work on climate change.

Of course, this increased interest in the region cuts both ways; both Arctic and non-Arctic nations are investing heavily in the new opportunities for resource extraction and shipping as the ice melts. The Arctic presents a unique opportunity to put regional environmental standards in place early, before newly accessible oil, gas, and mineral resources are developed, and trans-Arctic shipping becomes more common. But the Arctic nations would have to agree to take stronger coordinated action in their territories and their Exclusive Economic Zones, and there seems to be little appetite to discuss control measures under the jurisdiction of sovereign states in international forums.

Second, there have been some increased efforts to enhance regional coordination on other issues, most notably on oil spill response and search and rescue. More recently in 2015, a Task Force on Arctic Marine Cooperation was established by Arctic Council ministers to assess the future needs for a regional seas programme or other mechanisms, as appropriate, for increased cooperation in Arctic marine areas. This could also encourage continued and more cooperation in other areas, such as emission control and reduction.

Third, there are some small beginnings of coordination and integration between the three BC emissions reduction initiatives. For example, the Arctic Council Framework relies on BC inventories prepared for, and according to the methodology developed by, the CLRTAP. A sub-set of Arctic states, namely Norway, Sweden, and the USA, have made joint submissions on BC to the IMO. A proposal for a circumpolar ECA to

reduce PM_{2.5}/BC emissions around the Arctic basin has periodically been floated by academics and non-governmental organisations, but has not gotten any traction among the Arctic states yet (Azzara 2013). The USA has proposed that the Arctic Council considers discussing measures to improve safety and reduce pollution from smaller ships in the Arctic that are not covered by the Polar Code.

Finally, to date the multilateral BC initiatives for the Arctic are all voluntary—a non-binding Arctic Council Framework, an aspirational reduction goal under the otherwise binding CLRTAP, and nothing more than the adoption of a BC definition and a work plan at the IMO—and there is no indication that any Arctic country is interested in discussing a more binding regime any time soon.

Non-binding legal arrangements can be an effective first step, however, prompting the adoption of domestic implementation measures and establishing critical mechanisms to review national implementation action. While legal obligations represent a higher level of commitment by states than non-legal arrangements, with theoretically higher reputational costs for violation, voluntary arrangements encourage greater participation and ambition and, in the end, can lead to better results than binding agreements that would be negotiated down to the lowest common denominator (Bodansky 2015).

There are examples from other international treaties where states first addressed an issue through fragmented, non-binding approaches in different forums, and then integrated the individual approaches into a stronger binding treaty. For example, CLRTAP started as a series of individual protocols addressing discreet pollutants such as nitrogen oxides, VOCs, and sulphur dioxide. Then in 1999, the parties consolidated these separate protocols into the more comprehensive Gothenburg Protocol, which takes a multi-pollutant approach and now includes voluntary measures on BC as described above (Bodansky and Diringer 2010).

The Arctic Council Framework for Action includes important elements, such as regular reporting to encourage transparency, and a review of national and collective action to facilitate enhanced action that could build confidence and trust among member states to allow for discussion of stronger measures in the future. That is, at least, the theory of environmental governance development. It remains to be seen whether the accelerating changes in the Arctic, combined with a track record of incremental steps in multiple forums in the coming years, can bring the Arctic nations back to the table.

CONCLUSION: FIDDLING WHILE THE ARCTIC MELTS IS NOT AN OPTION

BC from both Arctic and non-Arctic sources impact the Arctic climate, which in turn can have profound impacts on non-Arctic regions. While the scientific understanding of the fate and impacts of BC emissions is still incomplete, and more research is critical, we know enough now to say confidently that the precautionary principle requires measures to curb emissions in and beyond the Arctic as soon as possible.

The challenge now is to ensure that the evolving multilateral governance approaches reviewed in this chapter can effectively facilitate meaningful BC emissions reductions. Arctic countries in particular have an extraordinary opportunity to show strong regional leadership on climate change if they can deliver real emissions reductions.

The multilateral mechanisms to reduce BC emissions reviewed in this chapter are all in their infancy and remain untested. The Arctic Council is a maturing intergovernmental body that can facilitate real action on critical issues—but that promise has yet to be effectively demonstrated on the ground. In the Framework for Action, the eight Arctic countries formally recognise that the Arctic is warming faster than other regions of the world, leading to fundamental changes to the environment and human living conditions in the region and around the world. This endows them with heightened responsibility to reduce emissions from within and near the region that science has determined have a great climate impact. The question now is whether the Council, billed as the premier forum for Arctic diplomacy, can facilitate action that is ambitious and rapid enough to make a difference in the race against the melt, given the scale of the challenge. Further, it will be crucial if the Council succeeds in facilitating Arctic Council observer countries to join in these efforts as called for in the 2015 Ministerial Declaration (Arctic Council 2015b, p. 3).

The amendments to the Gothenburg Protocol of CLRTAP represent a promising first step towards a commitment among Arctic states and key neighbours, whose emissions are known to impact the Arctic, to report BC emissions inventories, and take voluntary measures to reduce emissions within the framework of binding PM_{2.5} emissions ceilings. And the IMO seems to be poised to at minimum launch talks on BC reductions.

The USA has pledged under its chairmanship from 2015 to 2017 to ‘promote full implementation in all Arctic States of the recommendations from the Black Carbon and Methane Task Force and the Short-lived

Climate Forcers Task Force [...], to encourage Arctic Council Observer States whose emissions affect the Arctic to join in,' and to 'continue strengthening the Arctic Council as an intergovernmental forum' (United States 2015). Both will be critical to facilitate ambitious, real-world emission reductions.

In addition, voluntary efforts by state, private sector, and non-governmental organisation partners are also key. One such initiative is the Climate and Clean Air Coalition (CCAC), which aims to spur SLCP emission reductions in developing countries through raising awareness among the public, international institutions and decision-makers, developing technical, policy and regulatory capacity, and mobilising support for BC reduction demonstration projects in areas such as diesel engines, brick kilns, cook stoves, and gas flaring. To date, the CCAC has not addressed emissions from the Arctic region. However, the CCAC has an oil and gas sector initiative that focuses on flaring, and has considered lending expertise and support to reduce flaring emissions under the Arctic Council Framework for Action.

The impacts of Arctic warming and melting are already experienced today across the region as glaciers and sea ice melt and permafrost thaws, and around the world in the form of sea-level rise in coastal and low-lying communities and potentially more extreme weather in the mid-latitudes. Strengthening Arctic regional and multilateral governance approaches to pollution reduction will only become more critical as these impacts take an ever greater toll on human health and the environment in the future.

NOTES

1. The troposphere is the lowest layer of the Earth's atmosphere where all the weather occurs. It is deeper at the equator (up to 20 km) and shallower near the Polar Regions (~ 7 km). The lowest part of the troposphere—also called planetary boundary layer—is where the friction with the Earth's surface influences the air flow and typically varies from a few hundred metres to 2–3 km.
2. The climate forcing by aerosols depends on their interaction with sunlight and clouds, subject to the composition and colour of the particles. Bright-coloured or translucent particles such as sulphates, nitrates, and sea salt particles reflect all radiation they encounter, hence cooling the atmosphere (negative climate forcing). In contrast, darker aerosols such as BC absorb radiation, warming the atmosphere (positive climate forcing).

3. The Greenland Ice Sheet is losing mass three times faster than a decade ago. Vermeer and Rahmstorf (2009) estimate sea-level rise by 2100 at between 0.8 and 1.9 metres.
4. The Gothenburg Protocol set emissions ceilings for air pollutants such as sulphur and nitrogen oxides, non-methane volatile organic compounds, and ammonia. The Protocol also sets limits for specific emission sources, such as vehicles.
5. The new Canadian government that was elected in October 2015 shows a more progressive posture on climate change than the previous Harper government. At the time of writing, it remains to be seen, however, if this government change may also lead to ratification of the amended Gothenburg Protocol.
6. Depending on the pollutant and emission source, the grace period may be between 5 and 15 years after the date of entry into force of the Protocol for the Party.
7. The US ECA did not adopt a standard for PM emissions for large marine diesel engines (called category 3 engines under the US law). The significant PM emissions reductions are achieved through the fuel standard (EPA 2009).

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Voyage Through the North: Domestic and International Challenges to Arctic Shipping

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INTRODUCTION

Shipping is a truly international pursuit. Over time new shipping lanes have opened, reflecting changing international commodity markets but also construction of canals as well as advances in shipping technology. Arctic navigation is no exception. Its significance is very much connected to broader international factors, like changing trade patterns, but at the same time inner-Arctic factors determine much of the conditions for shipping (see also Chap. 1 by Keil and Knecht, this volume).

Trans-Arctic shipping is not a new phenomenon. The two existing passages, the Northeast Passage (NEP) and the Northwest Passage (NWP), are both intriguing and tempting for international shipping, since their usage would reduce the sailing distance between ports in Europe and Asia and between the US East Coast and the Pacific considerably. However, neither passage has so far become important in

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international shipping. Nevertheless, the prospects must be re-assessed in light of new circumstances in the Arctic, especially the changing sea ice situation. Whereas use of the NWP through the Canadian archipelago will still be very limited for natural reasons, the NEP north of Russia, between the Atlantic and the Pacific Oceans, has looked increasingly relevant—and is the focus of this chapter. The main argument is that the imaginaries of the NEP, or rather Northern Sea Route (NSR) (see below), dominating in Russia differ somewhat from prevailing views outside the Arctic, but that both imaginaries exaggerate the potential of the sea route.

DEVELOPMENT OF SHIPPING ON THE NORTHERN SEA ROUTE

The NEP is a historic term for the transit route north of Russia linking the Northern Atlantic and Northern Pacific Oceans. It is a somewhat abstract term without strictly defined borders or end points. On the other hand, the NSR—which is the term used by Russia—is a clearly defined entity: According to the official Russian definition, it stretches from the Novaya Zemlya island in the west to the Bering Strait in the east and out to 200 nautical miles from shore. It is also an administrative term since it describes a sea area where Russia is maintaining a special regime for navigation—something which is unusual since the main principle in the United Nations Convention on the Law of the Sea (UNCLOS) is free navigation outside the territorial sea (United Nations 1982, Art. 58, 87).

In terms of navigation, the NSR is not one clearly defined linear route, but several possible routes within this sea area exist. Due to the shifting ice conditions along most of the NSR, the optimal route choice for vessels navigating the NSR varies. Depending on seasonal, regional and annual variations in ice cover, vessels will sometimes choose routes close to the mainland, other times routes through the many archipelagos, and sometimes routes north of them. Navigation may also include stretches outside the 200 nautical mile boundary (see Fig. 13.1).

Maritime traffic in the area commenced centuries before the NSR was established, however. Russian expeditions started mapping the country's Arctic coast in the sixteenth century, and over the next two centuries also some non-Russian expeditions were organised, including Dutch and



Fig. 13.1 Sailing routes within the Northern Sea Route water area (*Source: Fridtjof Nansen Institute*)

British (Barr 1991). Commercial activities, especially fur trade, also took place in sections of the passage. It was, however, only in 1879 that a ship managed to transit the whole NEP from Europe to the Pacific—the steamer *Vega* of the Finnish–Swedish explorer Adolf Erik Nordenskiöld. In the following decades, sporadic shipping in the western part of the passage took place, as well as scientific expeditions in the western and also eastern part, but no transit. After the Russian revolution and especially since the early 1930s, the Soviet authorities started using the waterway, which was now termed the NSR, for industrial developments in Northwest Siberia. Rules for shipping in the sector were introduced and a special administration with wide-ranging authority was established in 1932 (Arikaynen 1991, pp. 140–141). In 1978, the first all-year route was initiated between Dudinka on the Yenisey River and Murmansk, transporting metals and ore from Norilsk. But transit sailings were rare (Ragner 2000, pp. 545–548).

Traffic on the NSR peaked in 1987 with a total freight volume of about seven million tons and fell rapidly afterwards due to the collapse of the Soviet economy. With the transformation of the economic system and continued economic recession, financing of NSR infrastructure became a big challenge and ports and navigational systems deteriorated. Thus, traffic continued to decline.

THE RUSSIAN IMAGINARY AND CHANGING INTERNATIONAL ENVIRONMENT

The Russian imaginary of the NSR is very much connected to its domestic role. It provides the shortest distance between Russia's eastern and western borders in the North, and it gives access to areas and settlements in the North without any land connections. Important here is also that the sea route over the years has been developed by Russia and the Soviet Union with colossal resources. Thus, in official wording, the NSR is a 'historically emerged national transportation route of the Russian Federation' (Russian Federation 2012).

But Soviet and later Russian authorities were not blind to the international potential of the sea route. Following up Gorbachev's Murmansk speech in 1987, where he envisaged the Arctic as a zone of cooperation, new rules for sailing on the NSR were adopted in 1990, expressly opening it up for international use (USSR Council of Ministers 1990). This paralleled a revision of the legal basis for the claim to control shipping in these waters. The Soviet Union had signed UNCLOS from 1982. The convention balances resource rights and freedom of navigation. The USSR, like many other coastal states, benefited immensely from the former, but had to accept that unhindered shipping is the norm outside territorial waters. However, the convention contains an exception clause, Article 234, which gives the coastal state

the right to adopt and enforce non-discriminatory laws and regulations for the prevention, reduction and control of marine pollution from vessels in ice-covered areas within the limits of the exclusive economic zone, where particularly severe climatic conditions and the presence of ice covering such areas for most of the year create obstructions or exceptional hazards to navigation. (United Nations 1982, Art. 234)

Thus, the new Soviet regulations in 1990 contained a clause that navigation should be regulated 'on the basis of non-discrimination for vessels of all States' (USSR Council of Ministers 1990). The reference to the convention is even more direct in the 'Law on the Northern Sea Route' from 2013 (in reality an amendment law prescribing changes in other laws), where it is stated that navigation

shall be performed according to the commonly accepted principles and norms of the international law, international agreements of the Russian

Federation, this Federal Law, other Federal Laws and other regulatory legal documents issued in relation with the above. (Russian Federation 2012)

The development of a binding Polar Code became a test for Russia's interest and willingness to further integrate the NSR with international regulations. The proposed code definitely created controversy in Russia, as there was fear that the code could imply 'rigid, prohibitive measures that will prevent shipping companies from using the Northern route' (Thomson 2014). But since the code will not apply to all the small ships of less than 500 tons sailing in the area, and only be mandatory for international voyages, the counterarguments lost weight. Russia also has an interest in avoiding sub-standard shipping in the Arctic outside its area of control. The larger Russian shipping companies seem to expect that they can comply with the new standards, but there is concern that pollution protection measures can create problems for many Russian vessels, including diesel icebreakers (Zagorski 2015). To what extent Russia will try to seek exceptions remains to be seen.

Whereas Russia clearly signalled openness to international *use* of the sea route, there is no indication that any form of international *governance* has been contemplated. But the value and potential of the Arctic, and thus the sea route, has clearly been reconsidered. It was directly expressed in then President Medvedev's statement in 2008: 'The transcontinental Arctic Sea Route is another of the Arctic region's assets. This route can connect European, Far-Eastern and river transport routes, thereby making it possible to reduce transport costs and substantially increase business ties between Russian businesses and their foreign partners. [...] Our biggest task now is to turn the Arctic into Russia's resource base for the twenty-first century' (Medvedev 2008). He commented on the Russian Security Council's adoption of 'The Basis for State Policy of the Russian Federation in the Arctic in the Period until 2020 and in the Longer Perspective'—often referred to as Russia's Arctic strategy (Russian Federation 2008).

Indeed, resource extraction was the first priority in the document, and similar statements have been made many times since. Even if the same policy document and also other documents and statements refer to the unique environment in the Arctic—and the need to protect it—'the resource frontier' is the dominant Russian imaginary of the Arctic (see also Chap. 2 by Kristoffersen and Langhelle, this volume). Climate change is usually referred to as an opportunity to increase the sailing season and get easier access to resources.

THE REVIVAL OF THE NORTHERN SEA ROUTE

The opening of the sea route to foreign vessels in 1991 did not yield increased traffic. The international shipping community did not show much interest partly because of unattractive commercial and administrative conditions, partly because the ice was seen as too big an obstacle. After almost 20 years changes took place, both in the way the outside (the shipping industry and cargo owners) looked into the Arctic, and how the Arctic (represented by Russian authorities) looked out. International attention was increasingly on climate change and the receding ice cover, as well as resource richness (Claes and Moe 2014), and Russian authorities now wanted to connect what had hitherto been an internal Russian Arctic corridor with the world market.

A quite steep increase, in relative terms, in transit on the NSR has been reported since 2009, with the highest number in 2013—71 voyages, from zero in 2008. However, there is much confusion about the term used. The statistics published by the NSR Information Office based on data from the nuclear icebreaking company Atomflot use the term ‘transits’ for several sub-categories of voyages:

1. voyages between Atlantic and Pacific non-Russian ports;
2. voyages between a Russian Arctic port and a foreign port traversing the main part of the NSR (the stretch between Yenisey river and the port of Pevek). Typically, shipments from Murmansk to Asian ports fit this definition;
3. internal (domestic) Russian voyages between ports in the western and eastern parts of the NSR and vice versa, traversing the main part of the sea route.

Local voyages between Russian ports within the western or within the eastern part of the NSR area are not included. The same goes for voyages that start within the NSR area but go out of the area without traversing the main part, typically voyages between Dudinka and ports in the Barents Sea or in Europe. Most of the sailings on the NSR are actually in these latter categories.

In the shipping literature, voyages in the second category above would usually be referred to as destination shipping and the third category as cabotage, whereas transit would be reserved for the first category. If we apply a fairly ‘generous’ definition of international transit, to mean voyages

Table 13.1 NSR transit voyages 2011–2013, that is between two foreign ports or between a Russian and a foreign port (*Source*: Northern Sea Route Information Office)

	2011	2012	2013
Hydrocarbons	10	13	11
Bulk	3	6	4
General cargo	2	0	4
Ballast/repositioning	1	8	9
Total	16	27	28

that include at least one non-Russian port and which pass through the sea-route area, namely category 1 and 2 above, we see much smaller numbers than the ones usually cited for transit, namely 28 in the peak year 2013. The composition of cargos in this category is shown in Table 13.1 (for a more detailed analysis, see Moe 2014).

However, if we are interested only in the strictest definition of international transit—to mean voyages between two non-Russian ports (category 1 above)—the numbers get very small: 2 in 2011, 8 in 2012 and 13 in the peak year 2013 (16 if voyages in and out of the Russian port Luga on the Baltic Sea are included). In 2014 and 2015, comprehensive statistics were not published, but scattered sources indicate that there were probably only five and six full transits in these years respectively.

As shown in Table 13.1, hydrocarbons have been the most important cargo, and within this category shipments of gas condensate from ports in the Barents Sea to Asia stand out. Some of the sailings that have taken place over the last years clearly have an experimental or promotional character. Shipping companies and cargo owners have wanted to check the feasibility of using the route in practice, and demonstrate that it can be done. Despite the small absolute numbers, the growth in traffic until 2013 aroused significant interest in studies of the sea route as an alternative transportation corridor to established routes through the Suez and Panama Canals.

ASIA AND THE NSR

Particularly the Asian interest in the NSR has been noticeable. Whereas the Korean interest is closely connected with the country's role as a world leading shipbuilder, and Japan's with its shipping activities, China's is

mostly explained by the country's dominant role in world trade (see Chap. 11 by Coates and Holroyd, this volume). Thus, China sees the NSR as a potentially important channel for transporting Chinese goods to Atlantic markets. Studies have been produced in China that indicate a huge potential for East-Asian shipping through the NSR. For instance, in an article from 2013 two Chinese scholars argue that by 2030, 11.8 million twenty foot equivalent units (TEU) containers can be transported westwards from the Far East to Europe via the Arctic (Zhang et al. 2013, p. 163). In comparison, China exported 31.3 million TEU in 2010 (World Shipping Council 2015). Such and similar numbers have been quoted extensively, but the assumptions in what are largely model predictions, are seldom cited (The Economist 2014). Basically, the cargo predictions are made on the precondition that most of the regional and global limitations we see today will be lifted any time soon. Thus, the forecast represents an imaginary of the Arctic as a freely accessible international region. As of 2015, however, no large container ship has passed through the NSR.

THE LURE OF THE NSR

The fundamental attraction for international shipping's use of the NSR is the shorter distance between ports in the Pacific and the Atlantic. A common reference is that sailing via the NSR shaves off some 5000 nautical miles compared to the southern route via the Suez Canal. But the exact distance saved depends on the start and end points. As illustrated in Fig. 13.2, the farther north the departure and arrival, the more miles are saved compared to the southern alternative. Distance savings are not possible from and to every port on the Pacific and Atlantic coasts. For journeys from Vietnam to Rotterdam for example, the NSR represents a longer route than via Suez.

It is not actually the distance in itself that is important for the economic calculation of a journey, but how it affects voyage costs. Shorter distance can mean less time and fuel consumed, and both are key determinants for total journey costs. If ships can traverse the route without meeting sea ice, and the speed can be up to 18 knots, the corresponding saving is illustrated in Fig. 13.3. Given other assumptions of speed on the NSR versus the Suez route, the saving potential can be considerably higher. Thus, Gunnarsson (2013, p. 45) argues that 19 days can be saved between Murmansk and Kobe in Japan.

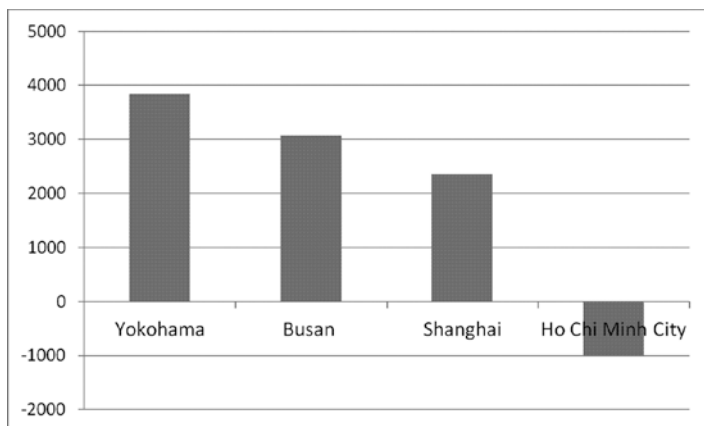


Fig. 13.2 Saved sailing distance to or from Rotterdam using the NSR, compared with Suez route (in nautical miles) (*Source:* Lee and Song 2014, pp. 418–19)

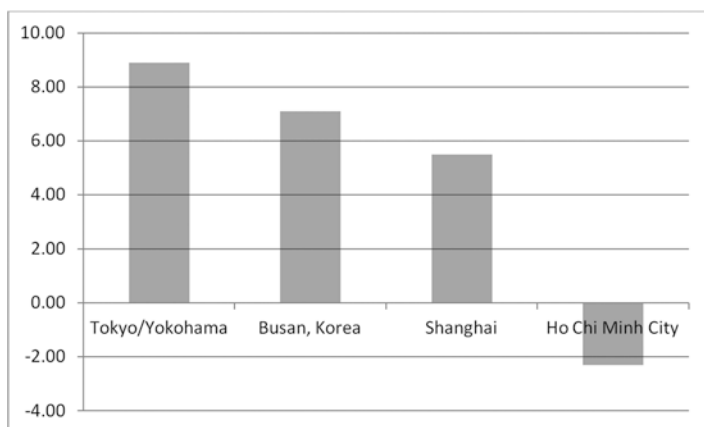


Fig. 13.3 Saved sailing days to Rotterdam using the NSR compared with Suez route assuming ice-free conditions (in nautical miles) (*Source:* Lee and Song 2014, pp. 422–423)

However, if ships encounter sea ice, as they are likely to do except in late August to September, the speed will be lower and correspondingly fewer days saved. A shipping company planning only individual voyages

in the optimal season can adhere to the calculations for ice-free shipping, but if a regular route is considered also less conducive ice conditions must be taken into account—even in the summer season July to November. And of course, the whole route is not yet navigable in the winter season December to June (Stephenson et al. 2014).

Shorter distance also means less fuel used. A 75,000 deadweight tons (dwt) bulk carrier burns approximately 30 tons of heavy fuel oil per day, and fuel savings correspond to days saved. This can amount to a major economic saving. In addition, there are environmental benefits with reduced emissions. However, even more fuel can be saved if speed is reduced. If a ship sails at 40 per cent reduced speed between Murmansk and China, it will consume about 50 per cent less fuel—but use the same time as a ship going via the southern route at full speed (Gunnarsson 2013, p. 45).

There are several factors influencing the trade-off between fuel consumption and speed. The cost of fuel is an important parameter. If bunker prices are low, high fuel consumption does not matter that much in the calculation of total journey costs. The freight market, that is the price for hiring a vessel, is also of crucial importance. If the market is low, that is it is inexpensive to charter a vessel, it does not matter so much if the journey takes longer. The value of the cargo will always play a role. The more valuable the cargo, the more it matters to get it quickly to the market, to minimise capital costs.

Whereas the considerations above are relevant for a company choosing between alternative shipping routes for individual cargos, a shipping company or investor contemplating investments for extensive and regular use of the sea route must also review other factors. Building ice-strengthened vessels is more expensive than ordinary ships. As a rule of thumb, such ships cost about 10–20 per cent more. But there are several ice-classes and the costs will vary. Also, the value of an investment in an ice-strengthened vessel depends on how much it can be utilised for its designated purpose. It is negative if it has to run in non-Arctic waters over large parts of the year, not only because it is unnecessarily expensive for that purpose but also because it is generally more costly to operate. A related issue is return cargo. If shipping routes must be planned taking cargo only one way, the income from each journey must also cover the costs of the empty return. This is clearly a challenge in Arctic shipping and the high share of ballast and repositioning among the voyages in Table 13.1 is an indication of this. All the same, repositioning is also a natural part of international shipping

and using the NSR may be an economical alternative for bringing empty ships from the Pacific to the Atlantic.

Container shipping is the largest segment in international shipping and constitutes the lion's share of ships in the Chinese calculations referred to above. Container shipping involves requirements that are stricter than what is the case for bulk or tanker shipping. International container shipping runs on very strict schedules—the 'just in time' principle. Given current and probable future conditions, it is unlikely that Arctic navigation could provide the level of predictability usually required for this kind of shipping. If a certain time reserve must be added to be sure to reach a destination in time, some of the original time advantage will be eaten up. Also, if a route cannot be maintained year-round, it is a major disadvantage since container shipping involves a complete logistics chain, and it would be costly to have a double chain for winter and summer sailing. The lack of ports—and markets—along the way is also a drawback.

A major concern is draft limitations along the NSR since they affect possible ship size. And in international container shipping, size is the key to profitability. Today, container ships with a capacity of more than 10,000 TEUs are common, and ships carrying 18,000 TEUs are being built. It is the economy of scale that makes the transportation cost per container very small—as long as large container ships can be used. On the NSR, the draft limitation varies with the actual route chosen. The route closest to shore through the Sannikov strait has least ice problems and can be used in a fairly long season, but it is shallow. It is estimated that only container ships with a capacity of 2700 TEU can sail through the strait (Goda 2014).

Given all these factors, it is not surprising that different shipping companies and cargo owners make their calculations and arrive at different conclusions regarding the feasibility of using the NSR. And of course, potential users of the NSR for international traffic will make comparisons with other transport routes, where conditions may also be changing. For instance, insecurity caused by piracy in the Indian Ocean has been presented as a factor favouring the use of the NSR, and shipping companies undoubtedly consider this threat. Some analysts have argued that the physical capacity of the Suez Canal would become a constraint that would benefit other shipping routes. The canal's capacity is not given once and for all, however. Quite rapidly, within one year from 2014 to 2015, Egypt managed to expand the canal to allow two-way traffic, by digging a new 34-kilometre parallel channel, and making the existing channel deeper and wider. Reportedly, this will almost double the

capacity of the canal (Saleh 2015). It can accommodate 18,000 TEU container ships. Also the Panama Canal is undergoing major expansion. When the new canal is finished in 2016, the size of container ships can increase from 5000 TEU to 13,000 TEU, effectively doubling the canal's capacity (Canal de Panamá 2015). Development of other transport corridors, notably the New Silk Road involving railway and road connections between China and Europe via Central Asia, may also be a challenge to the NSR.

THE SIGNIFICANCE OF DESTINATION SHIPPING

The focus of this chapter is on the prospects for using the NSR for international transit, and not destination shipping, but the latter category, which includes voyages with cargo into or out of the sea route area, can also be important for international transit users since it forms a customer base for the NSR. Destination shipping can help maintaining infrastructure and services also needed for international transits.

The volume of destination shipping is closely linked to the activity level of extractive industries in the Russian Arctic. The dominant route is in and out of Dudinka on the Yenisey River, the port of the huge mining complex in Norilsk, with the company Norilsk Nickel as the main cargo owner. This traffic is in Russian statistics not reported as 'transit' since it only involves a relatively small part of the NSR. According to Norilsk Nickel, its shipping branch carried out 52 voyages from Dudinka via the NSR in 2014, 13 directly to Europe, with ore and metals. The total dry cargo freight volume in and out of Dudinka was one million tons. In addition, ten voyages with gas condensate took place, eight of them directly to European ports (Norilsk Nickel 2015, p. 73).

Historically, accompanying vessels from Dudinka was a major argument for development of the nuclear icebreaker fleet. From 1978 onwards, journeys were taking place on an all-year basis. However, in 2008 Norilsk Nickel discontinued its close relationship with the nuclear icebreaking fleet, opting to use its own ice-strengthened cargo ships instead. They required only limited support of icebreakers. This change meant that the nuclear icebreaker fleet lost its main customer and was deprived of a considerable part of its operational income. Also for development of *international* transit Norilsk has played a minor role. For further development of the NSR and for employment of the icebreaker fleet in particular, finding a new 'anchor customer' has been very important.

Such a customer was found with the emergence of the Yamal LNG project on the eastern side of the Yamal peninsula in West Siberia. This project, which as of end 2015 was owned by the Russian gas company Novatek (50.1 per cent), French Total (20 per cent), the Chinese National Petroleum Company (20 per cent) and the Chinese Silk Road Fund (9.9 per cent), is situated onshore and involves establishment of a liquefaction plant and port and construction of 15 purpose-built ice-strengthened LNG carriers, each 300 metres long. The tankers will carry LNG eastwards to Asia in the ‘summer season’—July to November—and westwards to Europe in the ‘winter season’ when ice conditions in the east are too tough. When the project is producing at full capacity by 2020, 16.5 million tons of LNG plus 1.2 million tons of gas condensate will be shipped out per year, corresponding to some 225 voyages, or a carrier leaving the port of Sabetta every 40 hours (Kogtev 2015). And since gas production cannot be turned up and down or the gas stored to any significant extent, the LNG carriers will have to follow a strict schedule. The question is how much icebreaker support will be required. The project owners initially argued that the purpose-built LNG carriers could sail in ice without icebreaker support, whereas the nuclear icebreaker company maintained that Yamal LNG would become an ‘anchor customer’ for the icebreakers, providing them with a steady income. Exactly how much icebreaking capacity will be needed is still a matter of discussion and negotiation. But employment of the nuclear icebreaker fleet is undoubtedly one of the motives for the extensive government support for the project (Moe 2014, p. 792). In any case, the project will entail a substantial increase in cargo shipped via the sea route.

Apart from Yamal LNG, the most significant resource extraction project on Russia’s Arctic coast with direct significance for the NSR is the Novy Port oil project located further south on the Yamal Peninsula. It will also provide significant amount of cargo, up to 5.5 million tons of oil per year when the project is fully operational (Gazprom Neft 2015).

The prospects for large-scale offshore petroleum development, which will require substantial maritime support in the development, as well as in the production phase, have become very uncertain. This is both because of developments in the energy markets, with ample supplies of gas and oil from other sources driving prices down to levels where Arctic offshore projects become unprofitable, and increased international tension with sanctions against Russia effectively freezing the progress on the larger projects in the short term, but also creating uncertainty about

foreign investments in Russia over the longer term (see also Chap. 14 by Keil, this volume).

THE CHANGING FEE SYSTEM

All users are affected by the administrative and economic conditions for sailing on the NSR. As mentioned earlier, the conditions were for a long time held to be unattractive and the transit fees prohibitive. The tariffs were calculated as a fixed sum per ton of cargo in various categories, for example 1048 roubles (corresponding to approximately 30 USD at the exchange rate around 2005) per ton transported in standard containers and 2464 roubles (73 USD) for machinery and equipment plus a sum per ton of full displacement for the ship in question—1000 roubles (29 USD) for the whole sea route (Federal Rates Service 2005).

This started to change in 2009–2010 when discounts to the prices listed were offered for the first time. By 2011, a new tariff system came into law where the price list was kept, but where the old prices became maximum prices and the icebreaker company Atomflot was allowed to accept lower prices, if this was needed to get customers (Federal Rates Service 2011). Clearly, the authorities and Atomflot saw that competitive rates were necessary to attract traffic—and the announced goal was to increase transit traffic on the NSR.

The increase in traffic must partly be attributed to this change, but since the fees are negotiated individually, they are regarded as commercial secrets and only few pieces of information on prices actually paid have become public. The information in the public domain indicates that international users have paid very low fees. According to the director of Atomflot, the first LNG carrier to pass through the NSR in 2012 paid five USD per ton (Ruksha 2013). This was at a time when the official maximum rate for such transport corresponded to approximately 16 USD per ton.

The Russian reasoning seems to have been that the increase in traffic volume would still yield a sizeable income and help finance part of the necessary investments as well as operational costs. Indeed, a vision of the NSR ultimately becoming a source of income for the state budget has prevailed, as expressed for instance by Premier Medvedev in 2015 (Medvedev 2015).

But so far income from international transits has been modest. Commenting on income in 2013—the top year so far for transit—the deputy director of Atomflot declared that the company's major source of

revenue was not the transits but servicing of polar stations and supporting scientific research on the continental shelf (Kashka 2013).

By 2014, new changes were made in the way tariffs were calculated, introducing a system of zones. In the new system, the rates are calculated according to gross tonnage of the ship, the number of zones traversed and the ice class of the ship plus consideration of the season. It was argued by some domestic users, for example the Murmansk Shipping Company, that this effectively meant an increase in the fees (Murmansk Shipping Company 2013), but for international transits it did not make much difference since the escort fees actually paid are negotiated on an individual basis.

OUTLOOK FOR THE NSR: CHANGING IMAGINARIES?

For users contemplating long-term investments in ships or logistics chains, predictable framework conditions are of utmost importance. This includes not only the fees to be paid, but also the technical conditions. Russia has freely admitted that navigation systems and infrastructure in general are in poor condition (Russian Federation 2013). Various plans exist to rectify the situation, and very importantly, Russia has embarked on an ambitious construction programme for three new nuclear icebreakers, which will cost some 1.1 billion USD each, deemed necessary for replacing ageing vessels and serving expected increase in traffic. The government has, in principle, promised to fully finance the new icebreakers, but only after a battle with the Ministry of Finance, which hoped to place much of the burden on users (Moe 2014, p. 796).

The question now is whether the government will keep up the speed of the construction given the present economic and political outlook. There is no doubt that the Russian leadership has had high expectations for development of the NSR: As expressed by Vladimir Putin in 2011: 'I want to underline: We see the future of the Northern Sea Route as an international transport artery, capable of forming competition for the traditional transport lines, both in terms of costs, safety and quality' (Putin 2011). This vision has been followed up with concrete targets for increase in traffic on the NSR. According to the State programme for development of the transport system from 2014, the goal is to increase total cargo volume on the NSR to 63.7 million tons by 2020 (Russian Federation 2014a). And, according to the government, 80 million tons in 2030 is realistic, which would represent a 20-fold increase over total volumes of four million tons

in 2014 (Medvedev 2015). This optimism is mirrored in discussions about the need for a new super icebreaker that would be almost twice as strong as the ones currently under construction, and which would allow year-round escort (Medvedev 2015). But lofty plans and declarations should not be confused with final decisions.

Even though the official position remains that transit shipping on the NSR has a bright future, there are nevertheless signs that attention is shifting away from international transit to destination shipping. As outlined above, the increase in international traffic has been steep, but only in relative terms and only until 2013. According to Russian officials, the total transit freight volume (categories 1, 2 and 3 above) was 1.18 million tons in 2013, but fell to 274,000 tons in 2014 and a miniscule 39,000 tons in 2015 (Regnum 2015).

The slump in the international freight market has not benefited the NSR, and the low oil price has made fuel savings less of an issue. These market conditions may change again, and bring back some of the NSR's advantages. Nevertheless, important limitations remain related to size, seasonality and predictability. It is also possible that Russian authorities will review their plans for NSR development in light of a tenser international situation. It could mean that international transit is seen as less promising, and consequently that the focus will be on destination shipping, supplies to settlements and military needs.

According to the Ministry of Transport, it is transportation of hydrocarbons from fields near Russia's northern coast or on the continental shelf that is most promising (Olerskiy 2015). Thus, half of the announced goal for 2020 mentioned above is expected to come from cargo in and out of Sabetta (the Yamal LNG and Novy Port projects). But the ministry's projections also presume that all oil produced in the Nenets autonomous district with terminals in the Pechora Sea as well as offshore production in the same area from the Prirazlomnoye project is transported eastwards to Asia (Paliakova 2015). This assumption is very uncertain, but the possibility of offshore production in 2020 beyond Prirazlomnoye is nil. Even without the western sanctions against Russia introduced in 2014, production before 2030 would be impossible. Thus, the vision of a flourishing traffic already by 2020 is unrealistic, but seems to be politically expedient. A big problem arises if raw material prices remain low. Many Arctic projects are likely to be postponed, reducing the need for transport services and undercutting revenues for the NSR.

Russia's policies for further development of the NSR will not be based on commercial calculations alone. They must also be considered in the context of broader Russian priorities. National security is a top priority (like in any country), and is often invoked as an argument for increasing usage of the NSR. President Putin put the need for new icebreakers in dramatic terms in 2013, stating that without them 'all our geopolitical advantages in the North will be lost' (Putin 2013).

But the exact link between national security and various aspects of operating the sea route is not so obvious. In the official 'Strategy for Development of the Arctic Zone of the Russian Federation and Securing National Security in the Period until 2020' adopted in 2013, the NSR looms large (Russian Federation 2013). But the list of goals for the NSR as well as other items in the strategy is very long, so it is impossible to judge about priorities until an implementation plan is decided. A 'Complex Plan for Development of the Northern Sea Route' is being developed, ostensibly covering many aspects of the NSR, but remains confidential (Russian Federation 2015). However, the Russian government has started a programme to re-open abandoned Soviet military bases along the coast and on some islands to 'realize state sovereignty in the Arctic zone of the Russian Federation' (Russian Federation 2014b). The NSR has been important in bringing supplies to these bases as they are developed, and will also play a role when they are operative. But presumably air transport will be more important for operative needs.

A further indication of a more introspective imaginary of the NSR is the proposal to require all shipments of oil and gas from the Russian Arctic to be carried by vessels under Russian flag. A draft law to be presented to the Duma was worked out in the summer of 2015 (Popov et al. 2015). If such a law is adopted, some ship-owners will probably re-flag parts of their fleet, but overall reduced international interest for operations in the Russian Arctic must be expected.

We know little about the internal budget debate in Russia, but can be quite certain that the budget situation will only be tighter in the years ahead. In the period since 2000, increasing petroleum revenues helped reduce cost consciousness across the board. Thus, cost-benefit calculations in the discussions about the NSR were never much evident, even if the idea of raising revenues was much talked about. In new economic circumstances, it is reasonable to expect that cost issues will be more pronounced also in Arctic policies. Whereas the overarching goal of preserving and improving the NSR will remain, finding new and more

cost-efficient ways of meeting the goal could mean that new ways of managing the sea route will be launched.

CONFLICTING OR CONSISTENT IMAGINARIES?

The imaginaries and expectations for the NSR presented here—from Russia and from the outside—have something in common. They all envision a NSR with large potential and importance. But whereas the outside, particularly Asian, interest is primarily connected to trans-arctic transits, the Russian imaginary is increasingly related to resource extraction in the Arctic. These imaginaries have different implications for how the sea route will be or should be developed. There are overlaps between the Russian and outside interests, though. A case in point is Yamal LNG with an increasing share of investment coming from China. This project is set to become the major cargo producer for the sea route in a few years' time and a substantial share of icebreaking capacity will be employed there.

A major conclusion of this study is, however, that both imaginaries are exaggerated or rest on very uncertain assumptions—transit is not as attractive for international shipping as often presented, and development of extractive industries in the Arctic is likely to be much slower than foreseen in Russian plans.

The most probable development is that international transit will continue to grow slowly, since the fundamentals of the NSR remain interesting for segments of international shipping. But it will become a secondary activity and not a driver for development of the NSR. For internal Russian political reasons and the transport need of some extractive projects, destination shipping will grow, but not as fast as anticipated until recently. How strong this development will be depends very much on Russian state priorities. How much will the Russian state be willing and able to subsidise the NSR and invest in upgrading of infrastructure? Uncertainties about development on the Russian side are in turn likely to hold back investments from foreign shipping companies and cargo owners that could tie them to the sea route.

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The Arctic in a Global Energy Picture: International Determinants of Arctic Oil and Gas Development

Kathrin Keil

INTRODUCTION

The debate about the Arctic has for a long time centred on the region itself. This is very justifiable given the rapid transformations with profound consequences for the Arctic environment and people due to rapid warming over the last few decades. As the Arctic Climate Impact Assessment (ACIA) pointed out: ‘Arctic average temperature has risen at almost twice the rate as the rest of the world in the past few decades’ (ACIA 2004, p. 8); a phenomenon usually referred to as ‘Arctic amplification’ (see Chap. 12 by Cavazos-Guerra et al., this volume). At the same time, the same report also highlights: ‘The Arctic plays a unique role in the global context and climate change in the Arctic has consequences that extend well beyond the Arctic’ (Weller 2005, p. 990).

Although Arctic–global links have already been emphasised in the ACIA report from 2004, it was only more recently that a popular aphorism has been making the rounds of Arctic debates, pointing out that

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‘what happens in the Arctic does not stay in the Arctic’ (Crump 2013; Depledge 2015; National Research Council 2014, p. 77; O’Rourke 2012, p. 58). While this is surely true and illustrated most vividly by possible effects of a rapidly warming Arctic climate, for example, on global sea level rise and mid-latitude weather patterns, this statement is only one part of the story. It does not reveal that what is happening in the Arctic often did not come from the Arctic but was in fact heavily influenced and often triggered through systems, processes and decisions taken outside the Arctic region, mostly in the densely populated, highly industrialised regions of Europe, North America and increasingly Asia. So there is a two-way street here involving feedback loops and interdependencies connecting Arctic and global systems and processes in multiple ways and directions.

Further, the discussion still centres on Arctic–global connections already in focus in the ACIA, which is the climatic links of a warming Arctic to weather and climate patterns further south. This focus on environmental and climatic aspects is mirrored in the much larger scientific efforts in the natural sciences devoted to Arctic–global studies in comparison to the social sciences. For decades already natural sciences generally and climatology specifically have produced a significant amount of literature as to the ongoing and likely feedback loops between the climatic, environmental and atmospheric systems of the Arctic and the rest of the globe. A prominently studied feedback loop is that higher Arctic air temperatures lead to increasing ice and snow melt, which exposes darker land and water areas instead of the lighter snow and ice surfaces, thus decreasing the surface albedo (reflectivity) of these areas. This means an increased absorption of solar radiation, which leads to even further increasing air temperature (e.g., Curry et al. 1995; Dorn et al. 2009; Perovich et al. 2007; Winton 2006). Also, higher Arctic air and ocean water temperatures lead to thawing of subsea permafrost, which could lead to an increased release of methane and CO₂, which further increases air temperature (e.g., Paytan et al. 2015; Shakhova et al. 2010; Zimov and Schuur 2006). Also a number of interdependencies between Arctic and non-Arctic regions have been studied. For example, in the event of an accelerated melting of the Greenland ice sheet, sea levels will rise affecting low-lying areas also in mid-latitudes (e.g., Overpeck et al. 2006; Simon 2009). Less Arctic sea ice, Arctic amplification and a changed North Atlantic Oscillation possibly lead to changed weather patterns in mid-latitudes as well as to effects on the East Asian monsoon (Cohen et al. 2014; Francis and Vavrus 2012; Gong et al. 2001; Jaiser et al. 2012). Warmer temperatures in the Arctic

lead to less sea ice, which affects Ocean circulation and potentially weakens the Gulf Stream, which may cause colder temperatures in Europe (Helmholtz Association of German Research Centres 2014).

All these studies undoubtedly contribute a lot to increasing our still humble knowledge about the Arctic and how it interacts with global processes. However, the argument here is that there is much more to the Arctic–global connections story, especially in the realm of governance actors, institutions and processes that operate at the interface of regional–global interdependencies. Arctic–global political and economic interdependencies are manifold, especially in today’s world characterised by globalisation and global change. But Arctic studies have so far not tapped deeply into the endeavour to enhance our understanding of such interdependencies, and neither of socio-ecological interactions. A truly interdisciplinary study doing justice to the latter is beyond the scope of this chapter. Rather, in the following, an attempt is made to illustrate some linkages and interdependencies between Arctic and global systems and processes using the case study of Arctic oil and gas development.

In sum, this chapter addresses a specific object of governance—development of Arctic oil and gas resources—and highlights especially those governance actors, institutions and processes that operate at the interface of regional–global interdependencies. The chapter thus draws heavily from the previous chapters dealing with conceptual issues of involvement, institutions and imaginaries of Arctic governance in global perspective by applying these to the governance object Arctic oil and gas development.

The aim of this chapter is to exemplify global–regional links by looking at relevant actors and processes influencing the pace and extent (and in the end also the consequences of) Arctic oil and gas development.¹ The chapter thus takes an ‘outside-in’ perspective (see Chap. 2 by Kristoffersen and Langhelle, this volume) by focusing on outer-Arctic actors and processes and their relevance for Arctic oil and gas development. As outlined above, the point of departure is that the ongoing transformations occurring in the Arctic region are deeply intertwined with regional and global processes, both in the sense of the Arctic affecting and being affected by these processes that reach beyond the Arctic’s southern borders.

To illustrate the governance actors, institutions and processes that operate at the interface of regional–global interdependencies, this chapter analyses thus far neglected international determinants of Arctic oil and gas development. Such determining factors include international market developments, geopolitical tensions from outside the Arctic, competition

with conventional and unconventional resources elsewhere, and thus far neglected forms of governance including the role and bargaining power of international energy companies. With this analysis, this chapter shows the bigger picture of the Arctic's (actual and potential) significance in global energy supply and security, and the role of global political and economic trends for Arctic energy development.

Finally, this chapter provides a concrete example of the relevance of imaginaries for a concrete Arctic governance object, and how we need to be aware of and problematise the dominance of certain imaginaries. The dominant imaginary in relation to Arctic oil and gas development has largely been one of the Arctic as a resource base (or 'frontier') for exports and thus southern markets and generally as a region of opportunity for (often predominantly large-scale) business interests (see Chap. 2 by Kristoffersen and Langhelle, this volume). Taking this imaginary of the Arctic as a resource pool for large markets outside the region as the dominant imaginary, this chapter argues that the debate around Arctic oil and gas development has largely ignored the role of outer-regional actors and processes for the pace and extent of Arctic energy development, which are part and parcel of such an imaginary.

INTRA-ARCTIC POLICIES AND SYSTEMS

Before delving into the international determinants of Arctic oil and gas development, it goes without saying that also intra-Arctic policies and domestic systems play a crucial role for the pace and extent of Arctic economic development. Of relevance are, for example, domestic incentive structures like subsidy programmes for Arctic oil and gas projects (e.g., Gerasimchuk 2012; Lunden and Fjaertoft 2014), whether the political system is federalised or centralised (e.g., Claes and Moe 2014, p. 116 f.; Østhagen 2013), and the current state and future development of the domestic energy mix in order to determine domestic demand for Arctic oil and gas resources. A major factor is also the political interest of Arctic countries in developing their Arctic oil and gas resources, which varies considerable between Arctic countries (Keil 2014). This often coincides with the competitiveness of Arctic oil and gas resources within Arctic countries since most of these countries have only parts of their land and water masses in the North, and thus often also oil and gas resources in their non-Arctic areas. As summarised in Keil (2014, p. 164) for the five Arctic coastal states:

The USA dedicates rather low importance to the Arctic in general and to the region's hydrocarbons in particular, whereas for Russia, in contrast, the Arctic is of tremendous importance because of a combination of security, economic and identity reasons. Canada, Norway and Denmark/Greenland all show high interest but for very different reasons. While for Canada, the Arctic and its hydrocarbon resources are important predominantly for sovereignty reasons, Greenland's main interest in Arctic oil and gas is owing to the inhabitants' ambitions for political autonomy. Norway, in contrast, has very high economic stakes in its northern resources.

But even for a country like Russia where high interest in Arctic oil and gas are obvious, the story is not always straight forward. As Claes and Moe point out, although Russia has a very large Arctic on- and offshore resource base, large exploration efforts and acquisition of licences have not always translated into large-scale industrial development, especially in the Arctic offshore (2014, p. 108 f., 116 f.). This was and is due to domestic state structures but also due to limited incentives to tap into costly and complicated offshore resources, which are co-determined by processes beyond the Arctic's border.

In sum, while conditions in Arctic countries are necessary for the understanding of the pace and extent of Arctic oil and gas development, they are not sufficient. Thus, the following outlines global influencing factors including international market developments, geopolitical tensions from outside the Arctic, competition with conventional and unconventional resources elsewhere, and thus far neglected forms of governance including the role and bargaining power of international energy companies.

INTERNATIONAL MARKET DEVELOPMENTS

The majority of Arctic oil and gas that is produced or planned to be produced is intended for export. This is due to some Arctic countries—notable the ones with the most substantial record in Arctic oil and gas exploration and development, that is, Russia and Norway—being highly dependent on revenues from exporting these commodities. A high oil price and regionally high gas prices over the last years have further increased the incentive to export these commodities. Additionally, Arctic domestic markets are rather small and unattractive given the combination of a small and often widely dispersed population in a very large geographical space. This export orientation of Arctic oil and gas coincides with a dependence

of Arctic producers on sufficient demand in potential consumer markets and thus the energy market developments in these regions. Furthermore, given the high priority energy security is usually attributed to in countries' political strategies, energy relations are seldom immune to geopolitical tensions and conflicts. Finally, producing for export means Arctic oil and gas resources are vying with the same kind of resources elsewhere as well as with possible substitutes, especially from unconventional hydrocarbon resources. To remind us, according to the US Geological Survey (USGS) the Arctic region is expected to contain around 22 per cent of the world's undiscovered conventional oil and gas resources (Bird et al. 2008; Gautier et al. 2009, p. 1175 ff.), but this also means that 78 per cent are somewhere else!

Target markets for especially Norwegian and Russian Arctic oil and gas are the large, regional markets in Europe, the USA and Asia. Europe remains an important market despite limited growth potential due to saturated markets and political priorities to increasingly switch to renewable energy production and usage. For example, Germany receives around three quarters of its gas imports and almost half of its oil imports from Russia and Norway (BMW 2013, p. 15), two Arctic countries that are aiming to increase their Arctic production next to their already existing fields in the North.

Fast growing markets in East Asia, especially in China, are increasingly vied for among Arctic producers. Especially for Russia, this is also part of the country's strategy to diversify its hydrocarbons' export destinations. For now, virtually all Russian oil and gas pipelines are leading solely to the west. Russia is therefore pursuing plans to build pipelines to the Russian Pacific coast and to China specifically in order to access Asian markets. Oil is already flowing from East Siberia to the east through the East-Siberia-Pacific Ocean pipeline. A recent boost has been an agreement between Russia's state-controlled Rosneft and Chinese state company CNPC on a 25-year contract, which could double Russia's oil exports to China to 30 million tons per year (Røseth 2014, p. 848). But in recent years there has been only little progress in increasing gas exports to Asian markets. A major reason has been disagreements about gas prices; China is not willing to pay (high) European prices for Russian gas (Hulbert 2012; Pinchuk 2012; Schröder et al. 2011, pp. 18–20, 24). But in May 2014, an agreement was signed between Gazprom and CNPC under which Gazprom will deliver 38 billion cubic metres of natural gas to China annually for 30 years; a deal valued at \$400 billion (Røseth 2014, p. 848). The price tag on the gas has

not been officially revealed but according to Røseth's research, both sides were able to agree on a price between \$387 and \$380 per thousand cubic metres, which is comparable to the average price for European gas exports in 2013 (Røseth 2014, p. 848). However, transportation costs from Russia to China are expected to be higher, also because significant investments in pipeline or liquefied natural gas technology will be necessary.

GEOPOLITICAL TENSIONS FROM OUTSIDE THE ARCTIC AND COMPETITION WITH RESOURCES ELSEWHERE

That there is movement on the eastern diversification front is understandable against the backdrop of, first, Russian dependence on foreign capital, technology and expertise to develop its complex and expensive Arctic project plans. Second, the strained relationships between Russia and western countries since the onset of the Ukrainian crisis in late 2013 has made it harder for Russia to engage with western companies for technology transfer and development cooperation (e.g., Røseth 2014). After a number of joint ventures were agreed between Rosneft and foreign companies in 2011 and 2012 to explore offshore areas among others in the Arctic Barents and Kara Seas (e.g., ExxonMobil 2011; Kramer 2011; Parfitt 2011; Rosneft 2012a, 2013), hopes were high for these projects to mark the kick-off of large-scale offshore development in the Russian Arctic. However, only one of these projects (the Exxon–Rosneft Kara Sea deal) made it to the exploratory drilling phase in August 2014 (Anishchuk 2014). And due to several sets of US sanctions imposed on Russia in the course of 2014, the campaign had to be stopped already a few weeks later in mid-September 2014, and Exxon announced to end all activities associated with the project (Crooks 2014).

A telling example for the role of international market developments and competition of Arctic oil and gas resources with resources elsewhere is the fate of the so-called Shtokman gas field in the Russian part of the Barents Sea. This field, discovered in 1988 around 500 km offshore from the nearest coast, is one of the biggest offshore gas fields in the world with expected reserves of 3.9 trillion cubic metres of gas and around 56 million tonnes of gas condensate. While Gazprom Neft Shelf, a Gazprom subsidiary, holds the exploration and production licence and all rights for product marketing of Shtokman hydrocarbons (Gazprom 2012), operating the field is not possible without foreign investment and involvement in the development of the field. And importantly, having the technological

equipment and expertise to develop such a large offshore field in the harsh Arctic environment is only one side of the coin. Thus, it was only in the early 2000s when aside from Shtokman looking technologically feasible, the promising outlook of gas exports to the USA where a large industrial and consumer basis was confronted with soaring gas prices brought Shtokman high on the Russian political agenda. Further, the acknowledgement that field development on this scale is not possible without foreign involvement made Gazprom open up the bidding process also to US companies whose large pockets and state-of-the-art expertise appeared to give the final momentum to Shtokman development (for these and other details on the Shtokman project, see Claes and Moe 2014, pp. 109–111).

After longsome negotiations and mixed signals from Gazprom, in 2007 a joint stock company—the Shtokman Development AG—was established and charged with the first phase of field development (Laaksonen 2010, p. 22 f.). The Shareholder Agreement from 2008 allots Gazprom a 51 per cent majority share, French Total 25 per cent and Norwegian Statoil 24 per cent of the company (Gazprom 2012). But until today no final investment decision has been taken to develop the field. In fact, after many announcements and subsequent deferrals, the project was postponed in August 2012 for the foreseeable future, probably not before 2025 or even 2030. Reasons named for shelving Shtokman refer generally to the soaring costs and the uncertain profitability of such a challenging endeavour but the major reason is the loss of the USA as the key market for Shtokman gas (Barentsnova 2013; Macalister 2012). Since the late 2000s, the US gas market has been experiencing a dramatic shift from conventional to unconventional sources what some have termed ‘America’s Natural Gas Revolution’ (Yergin and Ineson 2009) or ‘The Shale Gas Shock’ (Ridley 2011) with the potential to change the global natural gas balance. The combination of the existing technologies horizontal drilling and so-called fracking make the plentiful natural gas supplies locked up in shales accessible (Keil 2014, p. 170 f. referring to Yergin and Ineson 2009). Shale gas is even projected to turn the USA into a gas exporter before 2020 (US Energy Information Administration 2014, p. MT-22).

The disappearance of the US market was indeed the core barrier to any investment decision because even substantial tax concessions granted by Russia were seen as not sufficient to prove the project viable (Claes and Moe 2014, p. 110). Then again, many critical voices emphasise that the shale gas revolution and unconventional oil and gas resources generally may turn out to be a relatively short-term ‘bubble’, especially because

of the limited number of high-productivity plays, high decline rates and accordingly high levels of capital input, low net energy yields in comparison to conventional fossil fuels, and severe collateral environmental damage (Hughes 2013; Stevens 2010; White 2012). So in the mid to long term, the US market might become available again for gas from Shtokman and thus could revive development plans.

ROLE AND BARGAINING POWER OF INTERNATIONAL ENERGY COMPANIES

From a global governance perspective, this chapter aims to go beyond the governance formats and institutions usually in focus of attention when dealing with Arctic oil and gas development. These usually encompass various institutions on international and regional levels dealing with

- issues of delimitation in the Arctic Ocean as outlined in the United Nations Convention on the Law of the Sea,
- regulations for the prevention, preparedness and response to environmental pollution from oil and gas activities, such as the International Convention on Oil Pollution Preparedness, Response and Cooperation, the Convention for the Protection of the Marine Environment of the North-East Atlantic (OSPAR) and the Agreement on Cooperation on Marine Oil Pollution Preparedness and Response in the Arctic as well as the Framework Plan for Cooperation on Prevention of Oil Pollution from Petroleum and Maritime Activities in the Marine Areas of the Arctic, which were negotiated under the auspices of the Arctic Council, and
- provisions for search and rescue, such as the recent International Code of Safety for Ships Operating in Polar Waters (or short Polar Code) and the Agreement on Cooperation on Aeronautical and Maritime Search and Rescue in the Arctic negotiated under the auspices of the Arctic Council (for an overview of relevant institutions for Arctic oil and gas development, see Keil 2015).

While these studies are very valuable for our understanding of governance arrangements for Arctic oil and gas developments, this chapter addresses the role and relevance of the concrete economic business deals between Arctic and international actors on oil and gas projects. These also have a crucial impact in terms of pace and extent of Arctic oil and

gas development in the sense of governing the conduct of Arctic energy exploration, exploitation and usage but have thus far received only very little attention.

Despite the excitingly received report from the USGS that the Arctic could hold 30 per cent of the world's undiscovered natural gas and 13 per cent of the world's undiscovered oil (Gautier et al. 2009, p. 1175), the Arctic remains a very challenging region for oil and gas development due to the prevailing difficult environmental and climatic conditions. While the estimation of *resources* (or how much actually exists) is already afflicted with many uncertainties (Budzik 2009, p. 7 f.; Claes and Moe 2014, p. 100 f.; Gautier et al. 2009, p. 1178), the estimation of proven *reserves* (or how much can actually be commercially developed) is even trickier. Reserves are naturally subject to variation (and thus uncertainty) because they do not only depend on the state of nature (i.e., how much oil and gas actually exists), but also which technological, economic and political factors prevail and how they are interpreted by stakeholders.

Against the background of the many obstacles and uncertainties as to the existence and profitability of Arctic oil and gas resources (e.g., Claes and Moe 2014; Keil 2013a, 2014), it is in fact surprising that over recent years we saw quite a bit of international interest especially in Russian prospective Arctic fields. Additionally, Russia has been able to negotiate business cooperation deals with foreign companies resembling what Claes and Moe (2014, p. 110 f.) call the 'Shtokman model' in contrast to a 'concession model'.² In the Shtokman model, the Russian project partner retains 100 per cent of the exploration and production licence and all rights for product marketing of produced hydrocarbons. Foreign companies are involved in a special-purpose company that is charged with the initial phase of developing the field (see above), which is the capital- and investment-intensive phase of field development including, for example, the design, financing and construction of field infrastructure. Further, the cooperation agreements usually contain clauses on technology transfer and research cooperation committing the foreign partners to provide technical assistance. In the case of Shtokman, the Shtokman Development AG was planned to run the operation of the field for 25 years, after which the whole project would fall to Gazprom without compensation for the foreign partners (Claes and Moe 2014, p. 110; Gazprom 2012; Laaksonen 2010, p. 22 f.). Foreign companies are thus involved only in the rather capital-intensive first phase of the project, and excluded from the other phases where the production peak is expected (Laaksonen 2010, p. 23,

104). In sum, although not having a share in the actual licence or owning a part of the actual reserves, foreign companies share all financial, geological and technical risks related to development activities (Laaksonen 2010, p. 23, 102; Moe 2009, p. 78; Øverland 2008, p. 10), and the terms for their compensation remain elusive.

There have been a number of joint ventures between Russian and foreign companies in the past that resembled the concession model with foreign companies being allotted a share in the licence.³ But recent years have shown a tendency to change the cooperation agreements to ‘Shtokman model’ types, and new agreements—like the offshore development deals between Rosneft and Italian ENI, Norwegian Statoil and US Exxon, respectively, in 2011 and 2012—are all modelled on the Shtokman type (Keil 2013b, pp. 113–118).

To understand why foreign companies are engaging in (specifically Russian but also generally) Arctic endeavours, one needs to take a broader look at the role and standing of energy companies on a global scale and the negotiation environment. One part of the explanation is the so-called obsolescing bargain process according to which initial agreements tend to favour transnational companies involved in host country development. But after resources have been found and significant investments sunk into the development, bargaining power shifts in favour of the host state, which then introduces new and tougher conditions. Initial agreements can then take an entirely new form—for example, being transformed from concession to Shtokman-type deals—and thus the original bargain obsolesces (Graaff 2012, p. 534 referring to Vernon 1971; Vivoda 2009, esp. p. 519). That the Shtokman deal and the newer agreements from 2011 and 2012 were Shtokman-type agreements from the beginning can be explained by the generally bigger bargaining power of Russian companies at the time because of the high oil prices in the early 2010s and the expected undersupply of the gas market when Shtokman was negotiated.

This latter point refers more broadly to the international environment and bargaining situation in which foreign energy companies—most of them large, multinational companies—that are engaged in Arctic projects find themselves in. In order for a foreign company’s engagement and investment in an Arctic oil or gas project to be possible and commercially viable, it has to have some bargaining power vis-à-vis the host state (i.e., where the resources are located) and their national oil companies (Vivoda 2009). A foreign company is generally assumed to have a high degree of bargaining power if the following conditions are met:

1. The company can offer rare, idiosyncratic resources and capabilities, which are only hard to imitate by other companies and not easily substitutable. Further, competition between foreign companies is low so there are only few (or no) other companies that can supply the same service;
2. The company has other investments options available elsewhere and is thus not dependent on the respective host state's resources. Similarly, high competition among resource-bearing countries for foreign investment increases the foreign company's bargaining power (Vivoda 2009, p. 517 f.).

So how does this work out in the Arctic? The following example sticks largely to the example of Arctic oil and gas development in the Russian Arctic because this is where we can observe a relatively large number of past and recent project developments with foreign involvement. Circumstances might of course be different in various Arctic contexts, mostly due to different national systems for foreign investment. But since international energy companies are frequently (planned to be) involved in Arctic development projects, the analysis can claim some validity for the broader Arctic context.

Concerning condition one, one can say that quite a few international companies exist with interest in and capabilities for Arctic development projects. For example, many companies showed interest in getting involved in the development of Shtokman when Moscow signalled to create an international consortium (Claes and Moe 2014, p. 109 f.). Also the licencing rounds issued by the Norwegian Petroleum Directorate attract many foreign energy companies and their Norwegian branches, respectively.⁴ So at first glance, foreign companies' bargaining power seems relatively low due to a relatively large amount of players in the hydrocarbon market (Vivoda 2009, p. 523 f.). However, it can be expected that especially for the newly opened exploration areas in the Arctic offshore—especially in some Russian offshore areas that are often inflicted with difficult ice and weather conditions—there is only a small number of companies possessing the state-of-the-art offshore technology as well as the necessary financial resources to engage in such projects, which increases companies' bargaining power substantially. The fact that Russia only hesitantly opened its closed hydrocarbon sectors to foreign involvement in the mid-2000s (see above), is an indicator of this weak spot in the host state's bargaining position.

However, foreign companies' strong bargaining power is weakened by today's increasingly limited options for foreign large-scale investment in energy resource fields in many regions of the world. This used to be different during the general privatisation and deregulation trend in the oil industry during the late 1980s and 1990s, when low oil prices made host countries desperate for foreign investment in their oil fields, national oil companies were no serious competitor for multinational energy companies, and the latter had various investment alternatives due to the open and widely privatised character of the oil industry in many energy regions of the world (Vivoda 2009, p. 519 f). But, recent years have seen a general renationalisation trend in the hydrocarbon sector all over the world, also in Russia, which Vivoda (2009, p. 521) describes as the 'underlying factor behind the demise of major IOCs [international oil companies] in this decade'. While the Russian state has dominated natural gas production for a long time with the state-controlled company Gazprom, also the oil industry has seen a renationalisation trend after a period of privatisation in the 1990s. This renationalisation started when the privately owned company Jukos was taken over by the state-owned company Rosneft in 2005. A further indicator of this trend was when TNK-BP—formerly 50 per cent owned by the multinational energy major BP and at the time the third largest oil producer in Russia—was acquired by Rosneft in 2013, concentrating 40 per cent of Russian oil production in Rosneft's hands (BP 2012; EurActiv 2012; Rosneft 2012b). Also Gazprom entered the oil business with purchasing Sibneft in 2005, which was renamed in Gazprom Neft, further concentrating Russian energy production in state-controlled companies, creating a general anti-foreign direct investment climate and reducing foreign companies to junior partners of Rosneft and Gazprom (Grätz 2012; Schröder et al. 2011, p. 29 f.; Vivoda 2009, p. 522).

This renationalisation trend through concentration of reserves control in the hands of national energy companies also occurred in other major energy regions of the world, such as in South America and Africa (Vivoda 2009, p. 522 f.). Additionally, the rise of national oil companies not only limits multinational companies' access to their home countries' resources, but national companies increasingly also compete *internationally* with their multinational counterparts, through getting increasingly involved in traditionally western markets in the USA and the EU. Such companies, more and more from China and India, are endowed with large-scale financial backing from their governments, given them the chance to outbid privately run international companies (Vivoda 2009, p. 524).

Consequently, multinational oil companies struggle to get access to new reserves, which in the long term reduces their production rates (Vivoda 2009, p. 518, 521, 525 f.), making them more likely to enter risky and rather unfavourable deals.

In sum, foreign companies getting involved in highly risky and uncertain Arctic oil and gas development projects can be explained by a certain degree of desperation among international energy companies to access new resources. This is on the one hand due to the maturing and increasingly costly fields on the ‘home turf’ of multinational companies on the North Slope of Alaska, the Gulf of Mexico and the North Sea; and on the other hand due to the increasing competition from non-western national energy companies and decreasing bargaining power of international energy companies vis-à-vis resource host states. National oil companies compete with international energy companies both through their increasing role in energy export and general downstream operations in the international companies’ traditional markets, and through limiting international actors’ access to reserves in their home country (Vivoda 2009, p. 521, 523–526, 532). It remains to be seen how the bargaining power of multinational oil companies will change again in the recent period of low oil prices, and how this affects specifically Arctic energy developments.

CONCLUSION: ‘THE ARCTIC IN A GLOBAL ENERGY PICTURE’ OR ‘ARCTIC RESOURCES FOR THE ARCTIC’?

This chapter has taken the dominant imaginary of the Arctic as a resource area for outer-Arctic markets or the Arctic in a global energy picture as the point of departure. The major argument has been that despite this dominant imaginary, the debate around Arctic oil and gas development has largely ignored the role of outer-regional actors and processes for the pace and extent of Arctic energy development. This chapter has highlighted some of these thus far neglected global–regional interdependencies concerning Arctic oil and gas development, namely international market developments, geopolitical tensions from outside the Arctic, competition with resources elsewhere, and the role and bargaining power of international energy companies including the relevance of concrete economic business deals between Arctic and international actors on oil and gas projects as thus far understudied governance arrangements relevant for Arctic energy development.

However, this imaginary of the Arctic as a region of opportunity for business interests is of course contested, especially if the focus is not on opportunities for regional and local development. Further, many would argue that a focus on the Arctic in the global energy picture is inappropriate as long as many Arctic regions and communities suffer from inadequate access to energy and high prices for energy supply. Against this background, an appropriate imaginary for Arctic oil and gas development should be on Arctic resources for the Arctic, and not for outer-Arctic markets (see Chap. 2 by Kristoffersen and Langhelle, this volume).

In the end, why are such different imaginaries of Arctic oil and gas development important? Are they relevant for the future unfolding of Arctic oil and gas exploration, exploitation and usage? They very much are! For example, imaginaries have an influence on who is considered a legitimate actor in Arctic energy development and which institutions and regulations are needed for which purpose. In an imaginary dominated by the Arctic in a global energy picture, credibility is given to large, capital-intensive energy majors from outside the region who have the necessary resources to realise large-scale energy development. In contrast, an imaginary focusing on Arctic resources for the Arctic, we expect priority given to local actors and owners of the resources, that is, owners should also be the producers of the commodities, which should be made available locally (generally on the relevance of imaginaries, see Chap. 2 by Kristoffersen and Langhelle, this volume).

Which imaginaries are dominant is in turn also co-determined by global processes. For example, in times of a low oil price one can expect a shift away from the Arctic as a resource pool for global markets, given the challenging environment and high costs of operating in Arctic regions and of bringing Arctic commodities to markets. The recent exits of Shell and Statoil from their oil drilling and production plans in Arctic Alaska are indicative of this development (DeMarban and Klint 2015; Joling 2015; Krauss and Reed 2015). This resembles a similar trend as for Arctic shipping, where sobering numbers of international transit voyages through Arctic routes over the last years have put expectations about the Arctic becoming a major region for international maritime trade on the backburner. Instead, the relevance of Arctic shipping for regional development of Arctic states, especially Russia, is increasingly in the focus of attention (see Chap. 13 by Moe, this volume). However, without a thorough understanding of the relevant global actors and processes affecting the pace, extent and consequences of Arctic resource and shipping developments,

we cannot come to sound conclusions as to the meaning of these issues for the Arctic and beyond.

NOTES

1. Due to space constraints, the consequences aspect of Arctic oil and gas development cannot be dealt with in detail here. For a concrete example of such consequences, see Chap. 12 by Cavazos-Guerra et al., this volume on the role of black carbon emissions in the Arctic.
2. In a concession model-type agreement, Russia would allow for a stark involvement of foreign companies, even in form of licence sharing, in exchange for technology and capital investment. This would allow for an equitable cost and benefit sharing in the form of strong foreign involvement in the development process in exchange for expertise and capital.
3. Examples include the early phases of the Sakhalin II project or the Kovykta gas field in Eastern Siberia (Keil 2014, p. 116).
4. The recent Awards in Pre-defined Areas 2014 (the so-called APA 2014 round) licencing round awarded ownership to 43 different companies in 54 new production licences (Government of Norway 2015).

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Conclusion: Governing the Arctic as a Globally Embedded Space

Sebastian Knecht and Kathrin Keil

In the mid-1980s, one of the pioneers and leading experts in Arctic governance and politics research, Oran Young, predicted the world to enter the ‘age of the Arctic’ (Young 1985; Young and Osherenko 1989). At a time when the Cold War between the USA and the Soviet Union heated up again, recent advances in technological capabilities had made military operations in a region divided by an ‘Ice Curtain’ increasingly possible, and a significant number of industrial sites were built up on both sides of the Arctic Ocean that could potentially be the target for a nuclear strike in a region where both superpowers came geographically closest. Young asserted that the world would be well advised to pay more attention to the pristine Arctic as a focal point of strategic competition between the USA and the USSR with serious repercussions for the global security architecture. As he wrote at the time,

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[i]t is hardly an exaggeration to say that the world is entering the age of the Arctic, an era in which those concerned with international peace and security will urgently need to know much more about the region and in which policymakers in the Arctic rim states will become increasingly concerned with Arctic affairs. (Young 1985, pp. 160–161)

Young's description of the role of the Arctic region in world politics, as accurate as it was for the mid-1980s, was overcome by history and the political events of the late 1980s, which led to the end of East–West confrontation. The ice remained, but the curtain that had divided Europe for almost half a century fell, and with it the separation between the Cold War blocs in the Arctic Ocean. All of a sudden, the Arctic disappeared as a strategic zone from the world map, and peaceful and collaborative multilateral cooperation between former opponents, ultimately leading to the adoption of the Arctic Environmental Protection Strategy in 1991 and later on the establishment of the Arctic Council in 1996, forged ahead.

Some 30 years after Young's projection, we are about to re-enter the 'age of the Arctic', however, due to much different reasons. The forces of climate change, which are especially pronounced in the North, catapulted the Arctic back into minds and on many political agendas ranging also far beyond the northern region. The manifold and complex interdependencies between Arctic and non-Arctic spaces, systems and processes necessitate the outlook of the Arctic as a 'globally embedded space', which formed the central notion of this book. This volume has sought to show from various angles what possible implications emerge from global perspectives on the North for Arctic research and beyond. In the following, we reflect upon some of these implications for empirical and theoretical considerations in Arctic governance research as well as the future governance of the region in the twenty-first century, and conclude with an outline of some overarching trends for Arctic research in a global context based on the findings from this book.

TWENTY-FIRST-CENTURY ARCTIC GOVERNANCE: COMPETING MODELS

Three broad models of governance can be identified in current discussions about how to effectively address contemporary Arctic change, its multiple causes and worldwide imprints. What unites them is that they all see a necessity for change from the status quo to better respond to current

transformations in the region and be prepared for future ones. They differ, however, with regard to how best to design institutional and governance arrangements in order to provide stewardship and strengthen resilience for the region and its people.

The first of these models focuses on the Arctic Council as the centrepiece of reform and includes more modest proposals for internal modifications of its structures and processes (Young 2016) as well as calls for upgrading its very foundation from a high-level forum to that of a regional intergovernmental organisation able to take binding decisions and to ensure compliance with them (Nord 2016). Others have called for turning the Arctic Council into ‘an “Arctic Security and Cooperation Organization” (ASCO) designed along the lines of the consensus-based Organization for Security and Cooperation in Europe (OSCE)’ to open up its mandate to include an economic and a security dimension next to a human dimension (Conley and Melino 2016, pp. 17–19). However, turning the Arctic Council into a full-fledged international organisation may actually inhibit its mandate over the concert of different state interests and national preferences, make the body more exclusive and inflexible, and would overly politicise circumpolar cooperation to a point where ‘a growing preoccupation with policy making as opposed to policy shaping may actually detract from a focus on what the Council does best’ (Young 2016, p. 14).

Certainly, as the issues and challenges confronting the North grow ever more complex, the Arctic Council members acknowledge a need to make the Council’s working structure more effective and flexible. For example, the Working Groups have been asked to increasingly fletch out cross-section topics to collaborate more strongly across Working Group boundaries and address these in joint Working Group meetings. Further, the Arctic Council Secretariat has been tasked with providing an overview of the multitude of Arctic Council projects (Arctic Council 2016) and to identify synergy potential between projects and participating Working Groups. More and more voices further point to the necessity to establish a mechanism that monitors the Council’s effectiveness in the sense of its reports and recommendations also being translated into political action (Dubois and Tesar 2014). The recently adopted Framework for Action on Enhanced Black Carbon and Methane Emissions Reductions (Arctic Council 2015) already includes such a monitoring provision by asking both Arctic states and observers to regularly report on their national efforts on black carbon and methane reduction. Although the Framework

is not a legally binding document, the monitoring provision is nevertheless a novelty within the Arctic Council and a sign that we will possibly see more such efforts in the future.

Another crucial aspect to be addressed concerns the interface between the Arctic Council and actors beyond the membership category, including observers and other regional and international institutions. As many chapters in this book have shown, there is a rising interest of old and new observer states and organisations to renew commitments towards greater involvement in Arctic governance and a growing tendency towards inter-organisational partnership. The Council has slowly shown some effort in addressing the ‘observer issue’, the most recent being a ‘Special Session on Observer Engagement’ between the Council members and representatives from observers in Anchorage in October 2015 that resulted in an Amendment of the original 2013 Observer Manual.

With that said, a second model for more effectively addressing Arctic change places the Arctic Council in a wider regime complex, encompassing Arctic-specific and Arctic-relevant ‘regimes or elements that pertain to the same issue domain or spatially defined area, that are related to each other in a non-hierarchical manner, and that interact with one another in the sense that the operation of each affects the performance of the others’ (Young 2012; see also Stokke 2011). The very basis of this emerging Arctic regime complex constitutes the United Nations Convention on the Law of the Sea (UNCLOS), well acknowledged and respected by all actors involved. Beyond UNCLOS, the complex further includes non-binding provisions as well as legally binding agreements developed and adopted under the auspices of the Arctic Council, the International Maritime Organization’s mandatory Code for Ships Operating in Polar Waters (Polar Code), the International Convention for the Safety of Life at Sea in search-and-rescue affairs, the International Organization for Standardization’s standards for oil and gas development, and several regional fisheries management organisations, and could potentially include more of those in the near future.

The concept of a regime complex is indeed helpful to understand the multiple sources of norms and regulations affecting the behaviour of Arctic states and provides a more promising solution to keep pace with a dynamic region. Nevertheless, the regime complex approach also has its shortcomings. It analyses local, national, regional and international levels as largely independent layers of governance and primarily focuses on how regulatory practices on one level, for instance the international through

UNCLOS, impose constraints on actors on another level, usually the coastal states' scope of action towards management of the Arctic marine territory on a national or regional scale. No governance system is static and neither is the Arctic governance regime carved in stone, and this process character is little accounted for in the regime complex approach with its specific focus on a pre-defined set of governance levels. The concept requires more emphasis on cross-level interactions and inter-institutional cooperation between actors on those different levels to also account for the potential impact and roles actors other than the eight Arctic states or state-driven international organisations could play, such as transnational advocacy groups, international corporations, non-governmental organisations and Arctic indigenous communities.

Finally, also the ghost of an overarching regional agreement for the Arctic region still spooks in the debate on alternative models for future Arctic governance. Differing in the degree of their bindingness and the obligations to which signatory states commit, proposals for such a regulatory regime range from a more informal Arctic Ocean Coordinating Agreement (Baker and Yeager 2015) and the establishment of a regional seas agreement with the aim 'to de-securitize Arctic environmental issues, and deal with them as part of a normal, political and bureaucratic order' (Exner-Pirot 2012, pp. 240–241; see also Huebert and Yeager 2008) to a comprehensive and protective Antarctic-style treaty for the Arctic (Koivurova and Molenaar 2010). A regional convention may not prove to be a very functional and viable option, though, because it would be indifferent to sub-regional needs and concerns in the European, Russian and North American Arctics as well as their local communities, and blind to the multiple global–regional links between Arctic regions and international systems, processes and actors. Moreover, apart from not having political backing by all Arctic states, the plurality of interests and voices would render any legally binding Arctic treaty shallow. Any regional agreement would further only apply to Arctic states and would hence not effectively prevent human and economic activity from non-Arctic actors in international waters of the central Arctic Ocean to which they have a right under UNCLOS. The call for an Arctic Treaty as some kind of a last resort because neither the Arctic states nor the international community are trusted in having the know-how, capabilities or even willingness to manage a vulnerable Arctic ultimately blocks our view for looking at what has been proven useful and effective. This discourse carries the risk of neglecting the successes and functionality specifically of the Arctic Council as a

steward of regional ocean and coastal governance. And to combine these two criticisms, it is important to not (only) think about reforms of existing and creating new Arctic arrangements, but also to explore in more depth which institutions and governance arrangements exist internationally that might not have an 'Arctic label' but nevertheless are relevant for the Arctic generally or parts of it.

MUCH LEFT TO DO (AND TO IMAGINE)

All three models discussed above certainly have their advantages and drawbacks when it comes to govern the Arctic as a globally embedded space and can be evaluated on those grounds. There is no reason for complacency here, rather still a lot more to do for researchers and practitioners alike, as we briefly outline further below.

Whether or not any of these reform proposals turn out to be efficient and effective in managing Arctic change, they have received only marginal attention as to the different imaginaries that all three models represent and foster of what the Arctic could or should look like. Most proposals for Arctic Council reform indicate to open up the body to consider also economic and security-related questions beyond the original mandate in the areas of environmental protection and sustainable development, and hence to pull these issues into the realm of the possible and governable. But while Arctic Council internal reform and external opening are surely welcome developments, the focus on the Council as the preeminent forum for Arctic governance and the imaginary of an exclusive Arctic community likely exceeds the capacities of the Council to truly perform all tasks associated with a globally embedded Arctic. We fear that the Council—and the many successes it has achieved—could be 'reformed to death' by trying to impose all necessary tasks of global Arctic governance on it and that it just cannot live up to these standards with the form and function it actually has. By trying to significantly extend the capacities of the Council, we may probably lose many of its remarkable virtues. A telling example is the unique and strong role of indigenous peoples in regional affairs that could be lost would the Council focus increasingly on traditional intergovernmental issues like security.

While within the Arctic Council debates and efforts on structural and procedural reforms are ongoing, a major problem is that the Council remains caught in the two-year cycles of its chairmanships. Despite pledges to the opposite, each chairmanship continues to introduce its own agenda

with rather little continuity to former chairmanships or responsiveness to a broader vision. It is further doubtful that we will see a thorough monitoring of national implementation of Arctic Council reports and recommendations. Implementation remains subject to national discretion as the Council itself does not implement any policies but can only encourage its member states to follow up on its recommendations for action.

Despite ongoing efforts to address the ‘observer issue’ more consistently, serious debates about a long-term roadmap as to how the Council will address the issue of new observer applications, not to speak of finding a more sensible *modus operandi* of engaging existing observers, are hardly discernable. The Council’s current observer policy remains what Conley and Melino (2016, p. 14) say is an ‘awkward compromise on the regional versus global dimension of the Arctic’. The issue is surely a tricky one with more radical reform ideas also coming along with serious repercussions. Conley and Melino, for instance, suggest to increase the observers’ share in the financial burden of running the Council and to give them full participation rights in Council activities in return. This, however, puts especially state observers in a more favourable position and would sideline many of the non-state observers, including Permanent Participants, not able or willing to make greater concessions.

The regime complex model could suffer from the opposite problem than the exclusive Arctic one. While representing an open model of Arctic governance, which appears more suitable to govern a global Arctic, the loose and highly fragmented nature of the regime complex does not provide that one central forum for actors to deliberate the core imaginaries that the complex could and should pursue. In other words, there is no room in this model for a more fundamental debate about a shared ‘Arctic vision’ and to deliberate who should govern the Arctic, where and how governance should take place and what should be governed to that end. The separate and hardly connected institutions constitute multiple and flexible arenas to discuss goals and imaginaries of Arctic governance and hence open up possibilities for discourse, even though that may result in contradicting rather than complementing imaginaries and policies proposed in different parts of the regime complex. This is in stark contrast to an Arctic treaty model that would create a closed system, which will be very difficult to adapt once in place due to necessary quorums and majorities if not unanimity among the parties. An Arctic treaty would lock-in an imaginary of the Arctic perceived as dominant and capable of winning a majority among the ratifying parties at a specific point in time with

little chance to adapt later on when it might have become outdated or ineffective.

The chapters in this book considered many new and highly relevant aspects of the Arctic governance architecture and contribute to a better understanding of its ever stronger entanglement with non-Arctic and global governance processes and actors. Among such emerging trends of the global Arctic paradigm are the multi-layered structure of governing Arctic-relevant issues in terms of actors able and willing to influence Arctic governance, the forums that are relevant for addressing such issues, and the narratives that have an impact on governance processes. In line with this, we need a new understanding of who and what is Arctic-*relevant* (actors, institutions, policy issues, etc.) beyond the geographical Arctic determined by land-ownership and border-drawing. As one concrete example, we expect the question of 'who owns the Arctic', which took up much room in recent Arctic research, to decrease in relevance. Rather, we will have to delve into more complex material because the crucial questions are no longer only about territorial rights and sovereignty but also about status and participatory rights of different stakeholders and rights holders in- and outside the Arctic.

Such an approach would indeed also speak to the geographical indeterminacy of the Arctic's southern border and thus to the many existing geographical definitions of where the Arctic begins and ends. In this regard, it might become necessary to further blur the boundary between what is perceived 'Arctic' and 'non-Arctic'. As this book has shown, many Arctic-relevant problems are caused and can be influenced by processes, systems and actors way beyond the Arctic Circle, and can thus also only be addressed through international cooperation. Does it hence make sense to still speak of them as 'non-Arctic', thereby indicating exclusiveness and 'outsiderness'? We feel this is little conducive to the core issues, which are to address the pressing problems facing the region, and which reverberate also to societies and regions in the mid-latitudes.

This is not to say that regionally specific issues are not relevant anymore or secondary to global concerns. What we hope to have highlighted with this book is that the Arctic governance landscape is increasingly diverse and complex and that the difference between 'Arctic' and 'non-Arctic' becomes more and more pointless with regard to transboundary issues such as climate and environmental change or Arctic resource governance. President Obama's speech at the GLACIER conference in summer 2015, which was addressed in the Introduction to this book, is indicative of the coexistence of Arctic regional and Arctic global concerns. Obama placed

as much emphasis on locally specific issues of importance to Alaskans as he placed on the challenges of climate change and the urgent need to respond to it globally, therewith indicating the Arctic debate to become more globalised. A crucial aspect of this more diverse and complex picture is the way it is framed and narrated, and the media coverage of the GLACIER event illustrates this nicely. In Alaskan and some US media, Obama's visit to Alaska was portrayed as Washington finally discovering and acknowledging Alaskan concerns and more generally the relevance of the Arctic to the entire USA. In international media outlets, in contrast, GLACIER was seen as a warm-up for the COP21 negotiations later that year in Paris and a sign of Obama's increasing efforts in the fight against climate change. In fact, many news pieces did not even mention the Arctic.

Not only is the (future) governance system of and for the Arctic very much disputed, but also does every part of the emerging Arctic governance system itself become a platform for the promotion, deliberation and contestation of different Arctic futures. The geopolitical order of the 1980s described in the Introduction, and attempts by the five Arctic Ocean coastal states to revive it in the late 2000s through for instance the 2008 Ilulissat Declaration, supported a clear and distinctive view on who governs, where governance takes place and what is to be governed and how. So does the global Arctic paradigm.

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