

Arctic Governance - Pathways to the Future

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Abstract:¹ The Arctic has become a highly dynamic socio-ecological system due largely to the interacting forces of climate change and a suite of factors that we commonly group together under the rubric of globalization. The result is a cascade of developments that are accentuating the links between Arctic processes and global systems and generating new needs for governance to maintain sustainable human-environment relationships in the circumpolar north. This article addresses the resultant challenge of Arctic governance with particular reference to five themes: (i) the underlying drivers of change in the Arctic, (ii) the identity of legitimate stakeholders in responding to emerging issues of governance, (iii) the framing of Arctic issues for purposes of policymaking, (iv) calls for an international agreement for the Arctic Ocean, and (v) proposals for a comprehensive and legally binding treaty for the Arctic as a whole. The analysis yields negative conclusions regarding some popular proposals (e.g. calls for an Arctic Treaty). But this does not mean there is no need or no scope for innovative initiatives relating to Arctic governance. The conclusion sets forth a series of more modest but also more realistic recommendations aimed at enhancing good governance in this dynamic setting.

Key words: Arctic, Arctic Council, Arctic Treaty, governance, policy discourses, stakeholders

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1. Introduction

Change is occurring in the Arctic at an unprecedented pace. This dynamism is, first and foremost, a consequence of biophysical processes, and especially the cluster of developments we ordinarily lump together under the rubric of climate change.² These developments are real; they are occurring now and are not just matters of speculation about the future. Not only have average temperatures increased by as much as 2+°C in various parts of the Arctic, but also sea ice is receding and thinning, the depth of the active layer of the permafrost is increasing, and Arctic glaciers are melting. These changes have direct impacts on the Arctic in such diverse forms as coastal erosion expected to necessitate the relocation of whole communities, the disruption of infrastructure including roads, airports and pipelines, and a shortening of the season for activities like the use of ice roads. They also may have far-reaching impacts on the overall climate system of the Earth.

Coupled with globalization, these biophysical changes are generating a dramatic rise of interest in economic opportunities that many believe will open up in the Arctic during the next few decades.³ These opportunities include the prospect of increased commercial shipping in the Arctic Basin, the expansion of offshore oil and gas production, the inception of new commercial fisheries, and the growth of ship-based tourism throughout the Arctic. Projections of future trends involving activities like oil and gas development and commercial fishing are notoriously tricky. Recoverable reserves of oil and gas located in the Arctic may prove to be limited, difficult to access, or otherwise costly to extract. Fishing on a commercial scale may turn out to be a non-starter in this setting. Such projections are also sensitive to conditions occurring in other parts of the world (e.g. political conditions in the Middle East) as well as to the effects of new technologies that may increase or decrease the importance of natural resources like fossil fuels. Still, it would be foolish to ignore the probable effects of rapid changes in the Arctic and, consequently, to fail to think in a sustained manner about the needs for governance these changes will generate.⁴

What are the implications of these changes for governance construed as a matter of steering human-environment interactions toward socially desirable outcomes

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2. Elverland, Ellen, *The Arctic System*. Tromsø 2009; Sommerkorn, Martin and Susan Joy Hassol eds., *Arctic Climate Risks: Global Implications*. Oslo 2009.
 3. Arctic TRANSFORM, a project of Ecologic, *Background Papers*. Berlin 2008; Anderson, Alun, *After the Ice: Life, Death, and Geopolitics in the New Arctic*. New York 2009.
 4. Ebinger, Charles K. and Evie Zambetakos, "The geopolitics of Arctic melt," *International Affairs*, 2009 (85), pp. 1215–1232; Arctic Governance Project, "Arctic Governance in an Era of Transformative Change: Critical Questions, Governance Principles, Ways Forward," 2010, URL: www.articgovernance.org.

and away from undesirable outcomes? What started as a focus of attention on the part of pundits envisioning a rush to extract the Arctic's resources leading to serious clashes among major players and even the emergence of a new 'great game' featuring competition for control of the Arctic⁵ has now captured the attention of members of the policy community. The five Arctic coastal states (the Arctic 5), meeting in Greenland during May 2008, issued the Ilulissat Declaration asserting their dominance in the region "[b]y virtue of their sovereignty, sovereign rights and jurisdiction in large areas of the Arctic Ocean" and suggesting rather pointedly that others leave Arctic affairs in the hands of the coastal states.⁶ Since then, both the United States and the Russian Federation have issued new Arctic policy statements emphasizing the importance they attach to issues arising in the Arctic region.⁷ The government of Canada has adopted a more assertive strategy regarding Canadian interests in the Arctic.⁸ The Arctic 5 met again in March 2010 at the invitation of Canada to continue the dialogue initiated in Greenland in 2008.

In September 2008, the Nordic Council of Ministers organized a conference, also in Greenland, entitled "Common Concern for the Arctic" that provided a forum for various non-Arctic states and non-state actors to articulate their concerns regarding developments in the Arctic.⁹ The Council organized a second meeting with a similar focus in Copenhagen in May 2010. The European Parliament adopted a resolution on 9 October 2008 expressing concern about the impacts of climate change on the lives of indigenous peoples and the condition of Arctic ecosystems and looking forward to negotiations designed "to lead to the adoption of an international treaty for the protection of the Arctic".¹⁰ On 20 November 2008, the

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5. Borgerson, Scott, "Arctic Meltdown: The Economic and Security Implications of Global Warming," *Foreign Affairs*, 2008 (87) pp. 63–77.
 6. Ilulissat Declaration, 28 May 2008, URL:<http://www.um?NR/rdonlyres/BB00B50-D278=4459-A6BE=6AE230415546/0/ArcticOceanConference.pdf>.
 7. U.S. Government, "Arctic Region Policy," *National Security Presidential Directive 66*, 9 January 2009, URL: www.whitehouse.gov; Russian Federation Government, "Basics of the State Policy of the Russian Federation in the Arctic for the Period Till 2020 and for a Further Perspective," publication of the official governmental newspaper *Rossiyskaya Gazeta*, 30 March 2009.
 8. Public Works and Government Services Canada, "Canada's Northern Strategy: Our North, Our Heritage, Our Future," Ottawa 2009; Byers, Michael, *Who Owns the Arctic? Understanding Sovereignty Disputes in the Arctic*. Vancouver 2009.
 9. Nordic Council of Ministers, "Common Concern for the Arctic, An Arctic Conference Organized by the Nordic Council of Ministers," 9–10 September 2008, URL: www.norden.org/conference.arctic.
 10. European Parliament, "Resolution of 9 October 2008 on Arctic Governance," URL: <http://www.europa.eu/sides/getDoc.do?pubRef=//EP/TEXT+TA-2008-0474+0+DOC+XML+VO//EN>.

European Commission weighed in with a paper spelling out Europe's interests in the Arctic and laying the foundation for a European Arctic policy statement expected to come in the near future;¹¹ the Council of the European Union pushed ahead on 8 December 2009 with a statement entitled "Council Conclusions on Arctic Issues".¹² Although they have adopted a more low-key approach, the Chinese also have made known their growing interest in the Arctic.¹³ China has stepped up its research efforts in the Arctic and joined the European Commission in seeking "permanent observer" status in the Arctic Council.¹⁴ Chinese representatives now draw a distinction between purely Arctic issues and Arctic issues of interest to the broader international community and express a strong interest in playing a role in addressing the broader issues.

What should we make of all these developments? How should we approach them in the interests of managing human-environment interactions in the Arctic in a responsible and sustainable manner? In this article, I endeavor to articulate a set of policy-relevant insights regarding these matters through an examination of five specific questions: What are the underlying drivers of the recent surge of interest in the Arctic? Who are the legitimate stakeholders in efforts to address the resultant issues? How should we frame Arctic issues for purposes of policymaking? Do we need a specific international agreement covering the Arctic Ocean? Would it be helpful to develop a comprehensive and legally binding treaty (or Charter) for the Arctic as a whole?

2. Underlying drivers

The popular press focuses on the melting of sea ice and the prospect that this might unleash a rush to extract reserves of oil and gas, launch new industrial fisheries, use the Arctic as a preferred route for commercial shipping, and treat the region as an increasingly popular destination for tourists. Developments of this sort are certainly possible. But they are, in large measure, surface manifestations or symp-

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11. European Commission 2008, "The European Union and the Arctic regions," 20 November 2008, URL: <http://eur-lex.europa.eu/LexUriSer//LexUriSer.do?uri=CELEC:DKEY=483680:EN:NOT>; Phillips, L., "Commission backs Norway's Arctic vision: no new treaty," *Euroobserver*, 11 November 2008, URL: <http://euroobserver.com/9/27104?print=1>.
 12. Council of the European Union, "Council Conclusions on Arctic Issues," 8 December 2009, available in the Arctic Governance Compendium at: www.arcticgovernance.org.
 13. Jakobson, Linda, "China Prepares for an Ice-Free Arctic," *SIPRI Insights on Peace and Security*, 2, 2010.
 14. At its most recent ministerial meeting in April 2009, the Arctic Council deferred requests from China, Italy, and Korea as well as the European Commission for "permanent observer" status. All these parties intend to renew their applications.

toms of change rather than underlying drivers of change. If we approach the Arctic as a complex and dynamic socio-ecological system, the idea of transformative changes or what scientists call state changes arising from underlying forces that need to be understood comes into focus.¹⁵ Here, I make the case that the Arctic experienced a socio-ecological state change in the late 1980s and early 1990s and that there are good reasons to believe that recent developments have pushed the region across a threshold triggering a second state change that must be taken into account in efforts to address Arctic issues effectively today and in the near future.

The state change of the 1980s/1990s arose, for the most part, from socio-political developments including the end of the cold war, the collapse of the former Soviet Union, and the opening of the Arctic to a variety of initiatives framed in circum-polar rather than global terms.¹⁶ Captured in President Gorbachev's iconic 1987 Arctic "zone of peace" speech, the effect of this state change was to decouple or delink the Arctic from overarching global concerns and to bring down barriers that had precluded efforts to create co-operative arrangements encompassing the Arctic as a distinct region.¹⁷ The result was an opening of the floodgates to a wide range of co-operative initiatives. Some of the emerging arrangements, such as the Arctic Environmental Protection Strategy, the Barents Euro-Arctic Region, and the Arctic Council, have taken the form of intergovernmental arrangements. Others involve collaboration among sub-national units of government (e.g., the Northern Forum), indigenous peoples organizations (e.g., the Indigenous Peoples Secretariat), scientific bodies (e.g., the International Arctic Science Committee), educational organizations (e.g., the University of the Arctic), and environmental NGOs (e.g., WWF's International Arctic Programme). By the beginning of the 21st century, the resultant network of co-operative activities had turned the circumpolar north into an area widely perceived as a distinct region with a policy agenda of its own. The Arctic Council had acquired the status of the prime meeting ground for actors associated with all these enterprises.

Now the Arctic appears to have crossed a new threshold leading to another state change and giving rise to what observers have begun to describe as a "new Arctic".¹⁸ This time, the forces at work involve a combination of biophysical developments (e.g., the melting of sea ice and other impacts of climate change) and

15. Walker, Brian and David Salt, *Resilience Thinking: Sustaining Ecosystems and People in a Changing World*. Washington, DC 2006.

16. Osherenko, Gail and Oran R. Young, *The Age of the Arctic: Hot Conflicts and Cold Realities*. Cambridge, U.K. 1989.

17. Scrivener, David, "Gorbachev's Murmansk Speech: Soviet Initiatives and Western Responses," *Security Policy Library No. 1*. Oslo: 1989

18. Anderson, Alun, *After the Ice: Life, Death, and Geopolitics in the New Arctic*. New York 2009.

socio-economic occurrences (e.g., the spread of the effects of globalization to the Arctic).¹⁹ Taken together, these developments are opening the Arctic to global concerns, like the extraction of raw materials to meet the needs of industrialized societies and the development of commercial shipping on a scale designed to meet global needs. While the melting of sea ice is readily apparent, it remains to be seen whether major increases in the production of raw materials, industrial fishing, commercial shipping, and tourism will follow in short order. Nevertheless, the effect of this second state change, symbolized by the 2004 *Arctic Climate Impact Assessment*, has been to tighten the links between the Arctic and broader planetary systems.²⁰ Whatever the ultimate consequences of this new state change are in biophysical and socio-economic terms, it is already imposing constraints on efforts to deal with the Arctic as a distinct region and to strengthen collaborative arrangements created to operate on a circumpolar basis.

To the extent that this assessment is correct, underlying issues in the Arctic can be expected to take on a more global cast. This may intensify discord regarding matters like efforts to delineate expansive jurisdictional boundaries to ensure control of natural resources. But it may also create a basis for co-operation in such forms as negotiating and implementing a mandatory Polar Code applicable to the operation of vessels in Arctic waters.²¹ In either case, it will be harder to frame a policy agenda in Arctic-specific terms, and we can expect an expansion of the circle of actors who see themselves as Arctic stakeholders and seek seats at the table in addressing Arctic issues. Specific issues concerning oil and gas development, shipping, and so forth will need to be considered in terms of these underlying forces at work in the Arctic. Among other things, the current state change may raise questions about the capacity of the Arctic Council, at least in its current form, to function as an effective mechanism for addressing a range of matters affecting the Arctic.

3. Legitimate stakeholders

Debates about membership in the circle of those possessing a legitimate claim to recognition as stakeholders in Arctic affairs have not been prominent in recent years. In the aftermath of the state change of the 1980s/1990s and as an outgrowth of considerable debate, the eight Arctic states (the five Nordic states plus Canada,

19. Chapin, F.S., M. Hoel, S.R. Carpenter, J. Lubchenco, B. Walker, et al., "Building Resilience and Adaptation to Manage Arctic Change," *Ambio*, 2006 (35) pp. 198–202

20. *Arctic Climate Impact Assessment (ACIA): Impacts of a warming Arctic*. Cambridge, U.K. 2004

21. Jensen, O. "The IMO Guidelines for Ships Operating in Arctic Ice-Covered Waters," *Nansen Institute Report 2/2007*. Lysaker, Norway 2007

Russia, and the United States), operating as the members of the Arctic Council, have dominated the scene. Other states have been relegated to the status of observers at Council meetings. The Council has accepted a number of indigenous peoples organizations as Permanent Participants in its activities, a notable precedent with implications extending far beyond the Arctic. But other non-state actors have had to settle for observer status. Because the Arctic was to a substantial degree decoupled from global politics and economics during this time, a number of non-state actors, ranging from the Northern Forum to the International Arctic Science Committee, experienced considerable freedom to pursue their own agendas in the Arctic, so long as they made a point of framing issues of interest to them in a manner restricted to the circumpolar north.

The current wave of interest in Arctic affairs has jarred this informal consensus and generated significant differences regarding the identity of those in a position to operate as Arctic stakeholders. In the Ilulissat Declaration, the Arctic 5 - Canada, Denmark/Greenland, Norway, Russia, and the US - presented themselves as coastal states occupying a “unique position” to address issues relating to the Arctic Ocean, broke ranks with the Arctic 8, and asserted a new formula for the identification of stakeholders regarding an important component of the Arctic agenda.²² The Arctic 5 met again in Canada in March 2010. Needless to say, neither the other members of the Arctic Council (Finland, Iceland, and Sweden) nor the Permanent Participants are happy about this development. The result is a cloud of uncertainty regarding the division of labor between the Arctic Council and other venues for addressing various Arctic issues.

The position of the coastal states articulated in the Ilulissat Declaration has had broader impacts as well. While the declaration asserts that the coastal states are committed to the framework provided by the law of the sea and that they will behave as responsible stewards regarding the ecosystems of the Arctic Ocean, others are not entirely convinced by this argument. Both the Arctic Ocean proper and the seabed beyond the outer limits of the jurisdiction of coastal states are international commons. All the signatories to the 1982 UN Convention on the Law of the Sea (LOSC) have a legitimate interest in what happens in and to these commons. Recognizing expansive boundaries of coastal state jurisdiction over the seabed under the provisions of LOSC Article 76 will of necessity reduce the scope of the commons, a development that has obvious consequences for the interests of others. Some have suggested that the coastal states would be justified in adopting the view that the Arctic Ocean is an enclosed or semi-enclosed sea under the terms of LOSC Part IX, a position that would accord them authority to manage this region. But

22. Ilulissat Declaration, 2008

it is unlikely that other states will acquiesce in such a claim. In any case, LOSC Article 123 calls on coastal states to co-operate with “other interested States” in managing activities occurring in enclosed or semi-enclosed seas.²³

In the meantime, a number of non-Arctic states and organizations are moving to assert claims to be treated as legitimate stakeholders with regard to Arctic issues. Perhaps the most dramatic case in point is the European Union (EU). The European Parliament has passed a resolution articulating the interests of the EU in the Arctic and staking out a claim to be accepted as a legitimate stakeholder in addressing Arctic issues.²⁴ The Council of the European Union has articulated a set of conclusions about the Arctic that many observers regard as a precursor to a more formal Arctic policy statement.²⁵ But the EU is not alone in this regard. China has taken a number of steps to assert its right to be treated as an Arctic stakeholder, especially with regard to matters relating to the Arctic Ocean.²⁶ Japan is developing a similar position, albeit in the low-key manner characteristic of Japanese diplomacy. Even Korea has gotten into the act. One of Korea’s provinces has become a member of the Northern Forum; Korean shipyards are major players in the construction of ice-strengthened ships.

One consequence of these developments at the intergovernmental level is the emergence of uncertainty regarding the role of various non-state actors in Arctic affairs. Indigenous peoples organizations have acquired a high profile in the Arctic Council, but it is notable that they were largely ignored in the process of crafting the May 2008 Ilulissat Declaration.²⁷ They are understandably angry regarding this apparent shift in the rules of the game in handling Arctic issues and have taken steps to assert their right to be consulted regarding Arctic issues.²⁸ Other non-state actors (including sub-national governmental bodies like the Northern

23. Article 122 of the United Nations Convention on the Law of the Sea (LOSC) states that the phrase ‘enclosed or semi-enclosed sea’ “... means a gulf, basin, or sea surrounded by two or more States and connected to another sea or the ocean by a narrow outlet or consisting entirely or primarily of the territorial seas and exclusive economic zones of two or more coastal states.” In addition, Article 234 of the LOSC on “ice-covered areas” accords coastal states the right to “adopt and enforce non-discriminatory laws and regulations for the prevention, reduction and control of marine pollution from vessels ...”

24. European Parliament, 2008.

25. Council of the European Union, 2009.

26. Jakobson, Linda, 2010.

27. Petersen, Nikolaj, “The Arctic as a New Arena for Danish Foreign Policy: The Ilulissat Initiative and its Implications,” *Danish Foreign Policy Yearbook 2009*. Copenhagen 2009

28. Inuit Leaders, “Towards an Inuit Declaration on Arctic Sovereignty: Statement issued by Inuit Leaders at the Inuit Leaders’ Summit on Arctic Sovereignty, 6–7 November 2008.” URL: : <http://arctic-council.org/filearchive/official%20Rules%20and%20procedures.pdf>

Forum), which have found their status as observers in the Arctic Council frustrating, are beginning to think about new opportunities arising from the current state change in the Arctic. The issuance of the Ilulissat Declaration involved a top-down process closely controlled by the foreign ministries of the coastal states. Still, the current sense of flux in the handling of Arctic affairs offers room for maneuver among a variety of non-state actors disgruntled with their marginal status within the framework provided by the Arctic Council.

What are the implications of these developments with regard to Arctic governance? There is no way to put the genie back in the bottle and to return to the previous informal consensus regarding the role of the Arctic 8 as the primary stakeholders in Arctic affairs. Whatever the merits of the situation in normative terms, the current state change is strengthening the links between Arctic affairs and global processes, an occurrence that is shifting the geopolitical underpinnings of Arctic issues. While it is easy to understand the desire of the coastal states to maintain control over the action in the central Arctic, it is hard to imagine that this strategy will succeed in the long run. If current forecasts regarding the region's natural resources prove to be correct, the Arctic will be seen by players like China and the EU as too important to be left to the Arctic 5 with regard to matters of governance. The other three members of the Arctic 8 are unlikely to come to the defense of the coastal states in this realm. And a variety of non-state actors, which are by no means wedded to the Arctic Council as the vehicle of choice in this realm, will seek opportunities for advancing their own interests in this unsettled situation. Just as the original members of the Antarctic Club found it politically expedient to admit new members during the 1980s,²⁹ it seems probable that the members of the Arctic Club – whether in the form of the 5 or the 8 – will be forced in due course to acknowledge the claims of other stakeholders in the far North.

These developments regarding stakeholders could prove disruptive for the Arctic Council, a body that owes its existence to the decoupling state change of the 1980s and 1990s. Because the Council lacks the authority to operate as a regulatory body, some stakeholders – including actors located in the Arctic – may see little reason to be distressed by the impacts of such disruptive forces. Still, we can expect a period in which a fair amount of time and energy will be expended on debates about the identity of the relevant stakeholders and about the character of the Arctic Council, in contrast to focusing on the substantive concerns giving rise to a demand for governance in the Arctic. This is not necessarily a bad thing. But to the extent that developments like climate change produce a need for prompt

29. Peterson, M.J., *Governing the Frozen South: The Creation and Evolution of the Antarctic Treaty System*. Berkeley, CA. 1988

responses to specific problems of governance, the expenditure of time and energy on resolving questions about the identity of the relevant stakeholders and the character of the venue within which they interact may prove costly.

4. Policy discourses

All policy agendas are crowded with issues defined in concrete terms.³⁰ In the Arctic today, there are numerous specific issues, such as how to delineate jurisdictional boundaries on the seabed, what sort of regulatory code to develop to deal with enhanced commercial shipping, how to anticipate pressures to initiate industrial fishing in the far North, how to prepare for the possibility of oil spills under Arctic conditions, what rules to impose on tour operators, and so forth. All these issues are significant; they are likely to give rise to vigorous debates that result in decisions that may well have significant impacts on human activities in the circumpolar north.

Underlying such debates, however, are deeper or broader issues regarding the conceptual frameworks we employ to organize thinking about specific policy issues and the discourses we develop to bring these frameworks to bear in specific situations. Although they do not prescribe detailed answers to specific questions about policy, the influence of such discourses is enormous. They shape the way we formulate questions, and they can direct our thinking in ways that favor some answers and rule out others.³¹ The current state change in the Arctic raises fundamental issues about the character and the content of the policy discourse we use in coming to terms with Arctic affairs. Two discourses, in particular, are in competition at this stage. I shall call one the discourse of geopolitics/political realism and the other the discourse of ecosystem-based management or EBM.

The writings of many of the pundits suggest, at least implicitly and often explicitly, that the Arctic is being overtaken by the discourse of geopolitics/political realism.³² They anticipate an era of “high politics” marked by aggressive assertion of jurisdictional claims, a growing competition for control over the Arctic’s natural resources, a remilitarization of the region, and more or less frequent clashes among leading states active in the Arctic.³³ This discourse, which assumes that states are the major players and that relative power among the key states or coalitions of states is the critical determinant of outcomes, anticipates that the emer-

30. Kingdon, J.W. *Agendas, Alternatives, and Public Policies*. 2nd ed. New York 1995

31. Litfin, Karen T., *Ozone Discourses: Science and Politics in Global Environmental Cooperation*. New York: 1994

32. Waltz, Kenneth N., *Theory of International Politics*. Reading, MA. 1979

33. Borgerson 2008

gence of a new ‘great game’ may well lie in store for the Arctic. As a region that is sparsely inhabited but that appears to contain a treasure trove of natural resources, including large quantities of oil and natural gas, the Arctic on this account will become an irresistible target of opportunity for powerful states as well as leading corporations engaged in the exploitation of natural resources. Implicit in this account is the proposition that the Arctic will be of interest to influential non-Arctic states, such as China, or associations of states, such as the EU. As we move into a world in which the U.S. no longer holds sway as the world’s sole superpower, it will become harder and harder to exclude actors like China, Japan, and the EU when it comes to negotiating deals regarding Arctic issues. The Arctic will become a theater of operations for extractive industries and military forces, a fact that makes the prospect of an “Arctic meltdown” giving rise to armed clashes a real and present danger.³⁴

The alternative policy discourse, based on the concepts of ecosystem-based management and spatial planning, starts from the premise that we should think about the Arctic as a complex and dynamic socio-ecological system. Such systems are prone to the impacts of tipping points, non-linear changes, and system flips that can lead to state changes that are undesirable in anthropogenic terms and that are hard to reverse once they occur.³⁵ On this account, we should focus on large socio-ecological systems (e.g., large marine ecosystems), avoid the fragmentation resulting from battles over jurisdictional issues, and devise co-operative regimes that make it possible to address interrelated Arctic issues in an integrated manner. There may be scope for the development of sectoral arrangements (e.g., distinct regimes for oil and gas development, fishing, shipping) within this framework. But the key to sustainability lies in paying attention to the complex linkages arising from interactions between human activities and biophysical forces.³⁶ A matter of particular importance arising from the application of this discourse to the Arctic centers on the connections between the Arctic and the Earth System as a whole. Nowhere is this more apparent than in the case of climate change. The Arctic is already experiencing far-reaching impacts of climate change, and the region may well shift from sink to source with regard to greenhouse gas emissions during the foreseeable future. But other regional/global links are important as well. For example, persistent organic pollutants, which are released in the mid-latitudes, regularly show up at high levels in the Arctic. The global interest in the Arctic’s oil

34. Ibid.

35. Gunderson, L.H. and C.S. Holling eds. *Panarchy: Understanding transformations in human and natural systems*. Washington, DC 2002.

36. Rayfuse, Rosemary, “Melting Moments: The Future of Polar Oceans Governance in a Warming World,” *RECEIL*, 2007 (16) pp. 196–216.

and gas reserves is fueled by the needs of industrial societies far removed from the region rather than by any significant demand for energy arising in the Arctic itself.

The Arctic Council, operating in the setting produced by the state change of the late 1980s and early 1990s, has played an important role in developing and disseminating the discourse of ecosystem-based management as applied to Arctic affairs. In a stream of influential scientific assessments, starting with the 1997 *State of the Arctic Environment Report* and running to the 2004 *Arctic Climate Impact Assessment*, the 2009 *Arctic Marine Shipping Assessment* and beyond, the Council has commissioned and disseminated a set of well-documented and highly accessible reports that make it indisputably clear both that major biophysical changes are occurring in the Arctic and that there are strong and well-delineated links between what goes on in the Arctic and what happens elsewhere on the planet.³⁷ In the case of climate change, many analysts have taken to treating the Arctic as the canary in the mine in the sense that the region is providing us with a mass of information about impacts of climate change that can be expected to occur in lower latitudes in the future. If anything, the fact that the Arctic Council lacks the authority to operate as a regulatory body has enhanced its influence in developing and disseminating a discourse of ecosystem-based management applied to the Arctic.³⁸ Because the Council is not embroiled in the complexities and inevitable antagonisms of regulatory politics, it is comparatively free to engage in generative activities whose influence takes the form of shaping the underlying discourse on Arctic policy rather than making decisions about specific issues.³⁹ The Council's current effort to apply the ideas of ecosystem-based management and spatial planning to the Beaufort Sea treated as a large marine ecosystem is illustrative of this situation.⁴⁰

Yet, this comparative freedom comes at a price in terms of political connections that raises serious questions about the future of the Council's influence in the wake of the new state change that is tightening the links between the Arctic and global concerns and that may well exert pressures that increase incentives to look

37. *State of the Arctic Environment Report (SOAER)*, Arctic Council, 1997; *Arctic Climate Impact Assessment (ACIA): Impacts of a warming Arctic*. Cambridge, U.K. 2004; *Arctic Marine Shipping Assessment (AMSA)*. Arctic Council, 2009.

38. Hoel, Alf Hakon ed., *Best Practices in Ecosystem-based Oceans Management in the Arctic*. Tromsø 2009.

39. Young, Oran R., *Governance in World Affairs*. Ithaca, NY. 1999.

40. Baker, Betsy, "Filling an Arctic Gap: Legal and Regulatory Possibilities for Canadian-American Cooperation in the Beaufort Sea," *Vermont Law Review*, 2009 (34), pp. 57-128.

at Arctic issues through the lens of the geopolitics/political realism discourse.⁴¹ Under its current mandate, the Council is expressly prohibited from addressing conventional security issues.⁴² It is lacking in authority that would induce important stakeholders to pay attention to its views regarding regulatory issues associated with the opening of the Arctic to oil and gas development, industrial fishing, or commercial navigation. The fact that the Arctic coastal states have elected to bypass the Council in addressing the delineation of seabed jurisdiction is not a good sign. Powerful outsiders, like China and the EU, are not likely to be content to follow the lead of the Council in addressing Arctic issues, even though they profess to be motivated by a concern for matters of environmental protection and the rights of indigenous peoples.

It is possible that the discourses of geopolitics/political realism and ecosystem-based management will exert influence simultaneously in the handling of Arctic issues during the near future. The two discourses are incompatible with one another as applied to most policy issues in the Arctic. The discourse of ecosystem-based management seeks to transcend jurisdictional boundaries, approach socio-ecological systems in holistic terms, and provide a rationale for collaborative management practices, after all, whereas the discourse of geopolitics/political realism focuses on matters of control or influence and anticipates more or less severe conflicts between or among those seeking to exploit specific natural resources like oil and natural gas. Nonetheless, there is nothing new about the occurrence of cognitive dissonance in the world of public policy. It is perfectly possible, under the circumstances, that neither of these discourses will triumph over the other in the near future and that many debates about policy issues in the Arctic will take the form of arguments between those who see the issues through the lenses of these disparate discourses.

5. A regime for the Arctic Ocean

What does this analysis have to tell us about the desirability of establishing what advocates describe as a “regional agreement on management and conservation of

41. Koivurova, Timo, “Alternatives for an Arctic Treaty – Evaluation and a New Proposal,” *RECIEL* 2008 (17) pp. 14–26.

42. A footnote to the main text of the 1996 Ottawa Declaration on the Establishment of the Arctic Council states that “The Arctic Council should not deal with matters related to military security.”

the Arctic marine environment”,⁴³ “a comprehensive treaty regime for the Arctic Ocean beyond national jurisdiction”,⁴⁴ or a legally binding instrument for the “governance and regulation of the marine Arctic”.⁴⁵ Given the dramatic biophysical changes arising from the melting of sea ice in the Arctic and the prospect that this process may trigger a rapid expansion of economic activities in the region, it is hardly surprising that those concerned with environmental protection and sustainable development see a need for the creation of new governance arrangements focused on the marine systems of the Arctic.⁴⁶ But is a treaty or some other legally binding arrangement focused on the Arctic Ocean the way forward in this connection? There are several reasons to conclude that such a strategy may be neither necessary nor desirable as a means of providing the protection the Arctic Ocean will need in the coming years.

The Arctic Ocean is fully covered by the LOSC which “provides for important rights and obligations concerning the delineation of the outer limits of the continental shelf, the protection of the marine environment, including ice-covered areas, freedom of navigation, marine scientific research, and other uses of the sea”.⁴⁷ Canada, Denmark/Greenland, Norway, and Russia have all ratified the LOSC; the U.S. accepts most of the LOSC’s provisions as a matter of customary law or practice. The Arctic coastal states have made a point of asserting that they “remain committed to this legal framework and to the orderly settlement of any overlapping claims”.⁴⁸ This does not mean that there is no need for more specific regulatory arrangements tailored to emerging uses of the sea and its resources in the Arctic. But there is nothing to be gained by starting over, endeavoring to devise a new constitutive framework for the Arctic Ocean, an arrangement whose exist-

43. Huebert, Rob and Brooks Jaeger, “A New Sea: The Need for a Regional Agreement on Management and Conservation of the Arctic Marine Environment,” WWF International Arctic Programme. Gland, Switzerland 2008.

44. Rayfuse 2007.

45. Koivurova, Timo and Erik J. Molenaar, “International Governance and Regulation of the Marine Arctic: A Proposal for a Legally Binding Regime,” WWF International Arctic Programme. Oslo 2010

46. Huebert, Rob, The Need for an Arctic Treaty: Growing from the United Nations Convention on the Law of the Sea,” *Oceans Yearbook*, 2009.

47. Ilulissat Declaration 2008.

48. Ibid.

ence could only create confusion given the status of the LOSC as an overarching legal regime.⁴⁹

It is important to note as well that a new regime focusing on the Arctic Ocean would not be effective in addressing a number of the fundamental challenges to the integrity of the marine environment in this region. The land/ocean boundary is artificial in the Arctic. Coastal adaptations on the part of human communities, featuring shore-based harvesting of marine mammals, have been a critical part of the system for millennia.⁵⁰ Discharges from a number of large rivers (e.g., the Mackenzie, the Ob, the Yenesei, and the Lena) ensure that the ocean will feel the effects of activities occurring hundreds of kilometers upriver from the coast. Any regime for the Arctic Ocean that fails to take these considerations into account is likely to fail. Yet a more inclusive regime would need to cover the whole of the circumpolar Arctic, a fact that makes it inappropriate to think of a regime for the Arctic Ocean that differs in some way from a comprehensive regime for the whole of the Arctic.

An effective initiative in this realm would also need to pay attention to the importance of spatial/functional crosscuts. Most species of great whales and many species of birds are highly migratory. They spend a portion of each year in the Arctic, but they also travel far to the South in the course of their annual migratory cycles. They are covered by functional regimes, such as the arrangements established under the terms of the 1946 International Convention for the Regulation of Whaling and a sizable number of migratory bird treaties to which various combinations of Arctic states are parties. At a minimum, therefore, efforts to create an effective governance system for the Arctic Ocean would have to address the issue of interplay between a spatially defined regime for this area and a variety of functionally defined regimes whose operation affects the area.⁵¹ There is no reason to be pessimistic about the prospects for handling these issues of coordination in an effective way. But this matter must loom large in the thinking of those desiring to take steps to protect the Arctic Ocean in anticipation of new human activities stimulated by the melting of sea ice.

49. Corell, Hans, "The North is not the Wild West," *The Globe and Mail*, 28 April 2008, URL: http://www.theglobeandmail.com/news/opinions/article_682229.ece; Corell, Hans, "The Arctic: An Opportunity to Cooperate and to Demonstrate Statesmanship," *Vanderbilt Journal of Transnational Law*, 2009 (42) pp. 1065–1079.

50. Krupnik, Igor, *Arctic Adaptations: Native Whalers and Reindeer Herders of Northern Eurasia*. Hanover, NH. 1993.

51. For a more general treatment of institutional interplay, see O.R. Young, L.A. King, and H. Schroeder eds., *Institutions and Environmental Change: Principal findings, applications, and research frontiers*. Cambridge, MA, 2008.

These observations are reinforced by the fact that a number of the most serious threats to the integrity of marine systems in the Arctic originate far outside the region and would not be subject to control under the terms of a regime for the Arctic Ocean. These include emissions of persistent organic pollutants (POPs), ozone-depleting substances (ODSs), and greenhouse gases (GHGs). Efforts are underway on a global scale to address these problems; some of these efforts have borne considerable fruit (e.g., the negotiation of the 2001 Stockholm Convention on POPs and the various amendments to the 1987 Montreal Protocol on ODSs). In some areas (e.g., POPs), evidence regarding environmental impacts occurring in the Arctic has made a difference in key negotiations (Downie and Fenge 2003). Nevertheless, it would be naïve to think that we can take effective steps to protect the marine systems of the Arctic without addressing, at the same time, these global concerns that have far-reaching implications for the Arctic Ocean.

Does this mean there is no need for more specific agreements dealing with human activities affecting the Arctic Ocean? All such efforts should be nested into the overarching framework provided by the LOSC and the global arrangements dealing with issues like POPs, ODSs, and GHGs.⁵² But it may well be timely to promulgate mandatory rules regarding commercial shipping in the Arctic, to extend the coverage of existing regional fisheries management organizations (RFMOs), like the North East Atlantic Fisheries Commission, to encompass (a larger sector of) Arctic waters, and to create an association of Arctic tour operators somewhat similar to the International Association of Antarctic Tour Operators (IAATO) that has been in place for the south polar region for some time. Current efforts under the auspices of the Arctic Council to develop co-operative practices dealing with search and rescue and under the auspices of the International Maritime Organization to upgrade existing guidelines for shipping under Arctic conditions into a mandatory Polar Code are notable in this connection. The trick in all these cases will be to develop effective regulatory arrangements covering specific activities that do not fall prey to the problem of sectoral fragmentation that is a major problem in efforts to manage large marine ecosystems worldwide.⁵³ Perhaps it would make sense to adopt a sophisticated strategy under which an Arctic Ocean coordinating body endowed with teeth would be created alongside a number of

52. Young, Oran R., "Institutional Linkages in International Society: Polar Perspectives," *Global Governance*, 1996 (2) pp. 1–24.

53. Crowder, L.B. et al., "Resolving Mismatches in U.S. Ocean Governance," *Science*, 4 August 2006 (313) pp. 617–618; Interagency Ocean Policy Task Force, "Interim Framework for Effective Coastal and Marine Spatial Planning," 9 December 2009, URL: <http://www.whitehouse.gov/administration/eop/ceq/initiatives/oceans/interim-framework>.

regulatory arrangements designed to deal with functionally specific activities, such as commercial shipping or tourism.

The Arctic Council deserves considerable credit for documenting and drawing attention to a number of threats to the integrity of Arctic marine systems. Everyone recognizes the role the Council has played in building the case for regulating POPs under the terms of the Stockholm Convention; evidence regarding the effects of climate change in the circumpolar Arctic compiled under the auspices of the Arctic Council is making itself felt in negotiations aimed at reaching agreement on extending and strengthening the 1997 Kyoto Protocol beyond 2012 and fulfilling the mandate of the 2007 Bali Road Map to reach agreement on a more comprehensive and legally binding climate regime. The Council may well continue to play a generative role of this sort during the future. The ongoing efforts of the Council's Task force on Short-lived Climate Forcers constitute a particularly interesting effort of this sort. But it is highly unlikely that the Council will evolve from its current function as a "high-level forum" for the consideration of Arctic issues into a regulatory body with the authority to make and implement rules regarding matters like the protection of the Arctic Ocean. This is not to belittle the work of the Council. But this conclusion does have important implications for thinking about the landscape of Arctic governance during the foreseeable future.

6. A comprehensive Arctic Treaty

An alternative approach that many find appealing features the development of a more comprehensive and legally binding Arctic Treaty (some Europeans prefer to speak of an Arctic Charter).⁵⁴ For example, in its 9 October 2008 Resolution on Arctic governance, the European Parliament suggests that "... the [European] Commission should be prepared to pursue the opening of international negotiations designed to lead to the adoption of an international treaty for the protection of the Arctic, having as its inspiration the Antarctic Treaty, as supplemented by the [Environmental] Protocol signed in 1991".⁵⁵ A number of commentators and legal scholars have proposed similar initiatives. Although they vary in significant ways, all these proposals are alike in advocating a regime for the Arctic that is comprehensive, articulated in a legally binding convention or treaty, and open to participation on the part of legitimate stakeholders located beyond the confines of the Arctic *per se*.

54. Nowlan, L., "Arctic Legal Regime for Environmental Protection," *IUCN Environmental Policy and Law Paper No. 44*. Gland, Switzerland 2001; Koivurova, Timo, "Alternatives for an Arctic Treaty – Evaluation and a New Proposal," *RECIEL* 2008 (17) pp. 14–26.

55. European Parliament 2008.

Any effort to proceed in this way would be politically charged, to say the least. As the Ilulissat Declaration states explicitly, the Arctic 5 "... see no need to develop a new comprehensive international legal regime" to govern the Arctic Ocean, much less the circumpolar Arctic as a whole.⁵⁶ And there is no reason to believe that the Arctic 8 would be any more receptive to a comprehensive agreement along these lines, despite the fact that three members of the Arctic Council (Denmark, Finland, and Sweden) are full members of the EU and two others (Iceland and Norway) maintain close ties to the EU.⁵⁷

Beyond this, there are good reasons to doubt whether a comprehensive legally binding Arctic Treaty would be desirable, even if it were feasible politically to reach agreement on the terms of such an instrument. Legally binding treaties have a number of limitations as mechanisms for providing effective governance for complex and dynamic systems that are apt to experience non-linear and abrupt changes that have important implications for efforts to meet needs for governance. As many thoughtful commentators have observed, legally binding agreements are attractive to the extent that they generate a greater normative pull than more informal arrangements affecting the actions of those expected to comply with their provisions. This is not a trivial virtue; the problem of compliance is arguably the single greatest challenge facing international law.⁵⁸ Yet legally binding agreements typically (i) require protracted negotiations to reach agreement on their substantive provisions coupled with time-consuming procedures to meet the requirements for entry into force, (ii) avoid issues expected to prove contentious in the interests of building consensus, (iii) are difficult to adapt to changing circumstances in a timely manner, and (iv) do not accord roles to non-state actors that are commensurate with their importance in the relevant system.⁵⁹ A few comments regarding the significance of each of these limitations as they pertain to the Arctic will serve to flesh out these concerns.

Negotiations regarding the terms of legally binding agreements sometimes move forward relatively rapidly. The Montreal Protocol to the 1985 framework convention on stratospheric ozone came two years after the original agreement; the Environmental Protocol to the Antarctic Treaty came less than three years

56. Ilulissat Declaration 2008.

57. There are ongoing discussions regarding the possibility of full EU membership for Iceland. But the outcome is difficult to predict at this juncture.

58. Chayes, Abram and Antonia Handler Chayes, *The New Sovereignty: Compliance with International Regulatory Agreements*. Cambridge, MA. 1995.

59. Lipson, Charles, "Why Are Some International Agreements Informal," *International Organization*, 1991 (45) pp. 495–538; Abbott, Kenneth and Duncan Snidal, "Hard and Soft Law in International Governance," *International Organization*, 2000 (54) pp. 421–456.

after the collapse of the 1988 Convention on the Regulation of Antarctic Mineral Resource Activities (CRAMRA). But more typical are conventions that take four years or more to negotiate and additional years to enter into force. The terms of the LOSC, which is admittedly a somewhat extreme case, took almost 10 years to hammer out. The convention entered into force approximately 20 years after the start of negotiations. The U.S. has yet to accede to this convention. There is no basis for assuming that a comprehensive and legally binding treaty for the Arctic could be negotiated quickly and put on a fast track to enter into force on a timetable commensurate with the need to address problems like those associated with the melting of sea ice.

One common maneuver designed to speed up the process of treaty-making is to limit the substantive content of such agreements. The Kyoto Protocol imposes targets regarding reductions of GHG emissions only on Annex 1 countries; it does not include substantive and credible measures of the sort that would be needed to integrate non-Annex 1 countries into the effort to limit emissions. The Stockholm Convention directs attention to chemicals (the so-called “dirty dozen”) that most signatories had already banned prior to signing the agreement. Even non-binding agreements can lose content as a consequence of efforts to achieve consensus. The text of the 1996 Ottawa Declaration establishing the Arctic Council, for instance, is embarrassingly bland; it contains considerably less content than earlier drafts of the document. The other members of the Arctic 8 acquiesced in this move as a concession needed to keep the U.S. engaged in Arctic co-operation. The likelihood that the U.S. would be prepared to sign and ratify a comprehensive Arctic treaty with real substance, even under its current leadership, remains low.

Even more important with regard to the Arctic is the fact that legally binding agreements are hard to adapt to changing circumstances, especially once they have entered into force. Most treaties contain provisions for introducing adjustments; the 1959 Antarctic Treaty even authorizes the convening of a review conference at any time following 30 years after its entry into force.⁶⁰ But these provisions are seldom exercised, and adjustments to existing agreements are notoriously difficult to agree on and to implement. The case of the Montreal Protocol, which allows for the acceleration of phase-out schedules without ratification on the part of the signatories, is a prominent exception. Almost certainly, a comprehensive Arctic Treaty would have more in common with the Antarctic Treaty than with the

60. Article XII.2 of the Antarctic Treaty states that any Contracting Party may call for a review conference “after the expiration of thirty years from the date of entry into force of the present Treaty.” Once that happens, a “Conference of all the Contracting Parties shall be held as soon as practicable to review the operation of the Treaty.” (Antarctic Treaty, done at Washington, 1 December 1959, entered into force 23 June 1961, (1959) 402 *U.N.T.S.* 71.)

Montreal Protocol with regard to adjustability. What this means is that reliance on a legally binding treaty for the Arctic would run the risk of setting up a serious mismatch between the pace of change in major biophysical and socio-economic systems in the region and the ability of the associated governance system to evolve and adjust to keep up with these dynamic processes.

Equally troubling in the case of the Arctic is the fact that a legally binding Arctic Treaty would reinforce the capacity of states and their national governments to control the action with regard to governance in the circumpolar north. Generally problematic in an era marked by the growing importance of global civil society, such a development seems particularly ill suited to Arctic governance during the foreseeable future.⁶¹ Sub-national units of government (e.g., counties, states, provinces, oblasts, okrugs), indigenous peoples organizations, and environmental NGOs all have strong and legitimate interests that differ – sometimes substantially – from the interests of national governments in this realm.⁶² The current mosaic of governance arrangements in the Arctic provides opportunities for a variety of non-state actors to exercise real influence over a number of specific issues arising in the region. As both the content of the Ilulissat Declaration and the fact that the governments of the coastal states deliberately avoided engaging with non-state actors, including the indigenous peoples organizations, in crafting the text of the declaration suggest, there is reason to believe that national governments are well aware of the goal of maintaining their control over Arctic affairs. This effort is likely to fail in the long run. The growing influence of non-state actors worldwide has advanced too far to allow for traditional diplomatic practices to assume and maintain supremacy over issues like those arising in the Arctic today.⁶³ The negotiation of a traditional legally binding treaty for the Arctic would not be a progressive development in this context.

A rejection of the rationale for establishing a comprehensive legally binding treaty for the Arctic should not be read as a denial of the need for regulatory arrangements with teeth to govern a variety of human activities in the region. As I have argued, it would be unrealistic to expect the Arctic Council to metamorphose into a body with the authority, much less the capacity, to handle regulatory matters in the far North. Under the circumstances, it seems appropriate to pursue specific

61. Kaldor, Mary, “The Idea of Global Civil Society,” *International Affairs*, 2003 (70) pp. 583–593; Pattberg, Philipp H., *Private Institutions and Global Governance: The New Politics of Environmental Sustainability*. Cheltenham, UK. 2007; Anderson 2009.

62. Young, Oran R., “Can the Arctic Council and the Northern Forum Find Common Ground?” *Polar Record*, 2002 (38) pp. 289–296.

63. Sassen, Saskia, *Territory, Authority, Rights: From Medieval to Global Assemblages*. Princeton 2006.

regulatory concerns through existing arrangements authorized to deal with the relevant issues. It probably makes sense, for instance, to hammer out agreement on the terms of a mandatory Polar Code for Arctic shipping within the setting of the International Maritime Organization, to rely on the North East Atlantic Fisheries Commission to cover industrial fishing throughout the Greenland and Norwegian Seas, to address issues pertaining to contaminants under the auspices of the Stockholm Convention on POPs, and to make use of the forum provided by the Convention on Biological Diversity to work on matters pertaining to the protection of species and the rights of indigenous peoples in the Arctic. In some ways, the results of this approach are apt to be messy; progress is likely to occur at different rates and in different forums regarding a range of specific issues. But a messy process that yields effective governance with respect to some important issues and that evolves over time into a governance complex seems preferable to a more comprehensive and orderly process that fails to achieve success across the board.

7. What is to be done?

I have dashed cold water on some of the more popular proposals of the day regarding Arctic governance. An Arctic Ocean treaty would not solve the problem of safeguarding the marine systems of the far North, even if it were politically feasible to reach consensus on the terms of such an agreement. The prospects for negotiating a comprehensive and legally binding treaty or charter for the Arctic as a whole seem dim. Such an instrument almost certainly would be disappointing in terms of substantive content; it could end up doing more harm than good.

How should we respond to growing needs for governance in the Arctic during the foreseeable future? Individual observers can and will answer this question in their own ways. In the light of the argument I have presented in the body of this article, however, let me offer the following package of recommendations aimed at producing a governance complex or a set of distinct but interlocking institutional arrangements for the Arctic. We should strive to frame issues of governance in the Arctic in terms of the discourse of ecosystem-based management and spatial planning and to grant all legitimate stakeholders, including a number of non-state actors, a seat at the table in addressing these issues. We should make every effort to maintain and even enhance the effectiveness of the Arctic Council, while not expecting the Council to turn into an organization with the capacity to make regulatory decisions on a variety of subjects, much less to implement and enforce them effectively. The Council has performed particularly well in the development of scientific assessments, a capacity that may prove helpful in applying

the precepts of ecosystem-based management under conditions prevailing in the Arctic. With regard to issue-specific regulatory matters, such as the development of a mandatory Polar Code, the framing of regulations pertaining to Arctic tourism, or the establishment of rules governing industrial fishing in Arctic waters, we should proceed in a pragmatic fashion, using appropriate and effective forums for handling key issues as they arise (e.g., turning to the International Maritime Organization to devise a mandatory Polar Code for Arctic shipping). This package of recommendations is likely to disappoint those who are wedded to the idea of a comprehensive Arctic treaty or charter or even a legally binding treaty focused on the Arctic Ocean. Certainly, the resultant governance system would be messier than a comprehensive and integrated regime set forth in the provisions of a single treaty. Its virtue, on the other hand, would be an enhanced prospect of providing the circumpolar Arctic with effective governance.

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Оран Янг / Oran Young

Арктика превратилась в высоко динамичную социо-экологическую систему под влиянием взаимодействующих сил, связанных с изменением климата, и ряда факторов, которые мы, как правило, объединяем под рубрикой глобализации. Результатом этого является поток развитий, которые усиливают связи между процессами в Арктике и глобальными системами, и вызывают новые потребности, связанные с управлением, для достижения устойчивых отношений между человеком и природой на приполярном Севере. Данная статья посвящена имеющимся трудностям в управлении Арктикой, и в частности строится на пяти основных темах. 1. Лежащие в основе движущие силы, влияющие на изменения в Арктике. 2. Идентичность легитимных участников при решении возникающих проблем управления. 3. Формулирование проблем в Арктике с целью выработки политических решений. 4. Требования о международном соглашении по водам Арктики. 5. Предложения по всестороннему юридически обязательному договору по Арктике в целом. Поведенный анализ показывает наличие негативных моментов, связанных с некоторыми распространенными предложениями (такими как, например, Арктический договор). Однако это не означает отсутствие возможностей для инновации в сфере управления Арктикой. В заключение приводится ряд более умеренных и более реалистичных рекомендаций, направленных на улучшение управления в этих динамических условиях.