

PART V

THE EVOLUTION OF ARCTIC OCEAN GOVERNANCE

4. The Evolution of Arctic Ocean Governance: Challenges and Opportunities

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WHAT IS THE ISSUE?

The transformative changes now occurring in the Arctic have led many observers to forecast that the future of this dynamic region will be marked by increasingly severe conflicts. They foresee a scramble for control of the Arctic's natural resources (e.g., oil, gas, hardrock minerals) and commercial shipping routes made accessible by the dramatic recession and thinning of sea ice in the Arctic Basin. The result, they predict, will be growing frictions among powerful states and corporations desiring to take advantage of these assets, a remilitarization of the Arctic, the emergence of an Arctic "Great Game," and ultimately the occurrence of armed clashes brought on by the vagaries of intensifying conflict in a heavily armed setting (Borgerson 2008; Howard 2009; Sale and Potapov 2010).

By almost any measure, however, the Arctic is today a "zone of peace," to use a phrase made famous by Mikhail Gorbachev in his October 1987 Murmansk speech regarding the future of the Far North (Gorbachev 1987). By most accounts, the Arctic is on track to remain a peaceful region during the foreseeable future (Collins et al. 2013). There are few severe conflicts in the region; those conflicts that have arisen are being handled through peaceful means. The Arctic coastal states have pledged to address issues arising in the Arctic under the provisions of the law of the sea, as set forth in the 1982 UN Convention on the Law of the Sea (UNCLOS) and other related international agreements (Ilulissat Declaration 2008).¹ For the most part, non-Arctic states have agreed to proceed on the same basis. Even the current buildup of military capabilities in the Arctic pales by comparison with the militarization of the region during the Cold War era (Osherenko and Young 1989; Wezeman 2012). To a large extent, the placement of military assets in the Arctic today is driven by considerations that have little

to do with concerns about prospects for conflicts in the Far North.²

What accounts for the persistence of peaceful conditions in the Arctic, despite the dire warnings of many pundits? Clearly, a number of factors need to be taken into account in constructing a satisfactory answer to this question (Berkman and Vylegzhaniin 2012). Most of the Arctic's coastal and marine resources (including offshore oil and gas reserves) lie in areas located within the undisputed jurisdiction of the five Arctic coastal states—Canada, Denmark/Greenland, Norway, Russia, and the United States—often referred to as the Arctic 5 or A5. Major outside actors (e.g., China, the European Union) are interested in the Arctic's resources, but they have reasons of their own not to act in ways that would interfere with the jurisdictional authority of the coastal states, raising more general questions about the existing rules governing maritime spaces in the process. Peaceful conditions featuring well-defined and stable rules of the game are in the interests of multinational corporations taking steps to pursue existing stakes in the Arctic or hoping to operate in the region in the future. It probably helps as well that the super heated forecasts of several years back regarding an Arctic “gold rush” have cooled significantly over the last year or two as realism has set in regarding the difficulties of operating under conditions likely to prevail in the Arctic for some time to come, and developments elsewhere (e.g., the shale gas revolution) have altered calculations regarding the attractiveness of tapping the Arctic's energy resources (Mikkola and Käpylä 2013).

In this chapter, I examine the proposition that the emergence of an increasingly effective Arctic Ocean governance system is one factor that plays an important role in the maintenance of peace in the Arctic. The Arctic is not the “Wild West” with regard to matters of governance (Corell 2008). The end of the Cold War triggered a burst of initiatives aimed at promoting international cooperation in the Arctic region. Perhaps the most prominent case in point centers on the creation in 1991 of the Arctic Environmental Protection Strategy (Young 1998) leading in 1996 to the establishment of the Arctic Council (Koivurova and VanderZwaag 2007). But a number of other initiatives, which I analyze in some detail in this chapter, have contributed to this development, leading to the evolution in the Arctic of what students of international affairs have come to think of as a regime complex (Young 2012a). This complex and the cooperative practices associated with it, I argue, have contributed substantially to the development of a regional governance system for the maritime Arctic that

has emerged as a force for peace in this dynamic region.

In developing this argument, I proceed as follows. Section 2 provides a brief introduction to some key concepts needed to organize thinking about governance and governance systems. Section 3 addresses the constitutive foundation for Arctic Ocean governance and identifies the three major elements of the regime complex that is emerging to address specific issues of governance in this area. Sections 4-6 then take up and analyze each of these elements in turn. Section 7 focuses on two underlying conceptual and normative concerns that are likely to make an important difference to the continued development of the Arctic Ocean governance system during the coming years.

HOW SHOULD WE THINK ABOUT GOVERNANCE?

Governance is a social function centered on steering societies toward socially desirable outcomes and away from socially undesirable outcomes (Young 2013a). At the international level, avoiding mutually harmful arms races and spirals of competitive tariffs constitute prominent examples. We normally think of governments as the appropriate mechanisms for addressing challenges of governance. But it is important, especially in thinking about governance in international society, to recognize both that the presence of a government is not sufficient to ensure that the needs for governance will be addressed and that it is not necessary to meeting challenges of governance in some settings.

Governments regularly fail to perform the social function of governance effectively due to some combination of a lack of capacity, the effects of rigidities arising from institutional arthritis, the impacts of widespread corruption, and the behavior of repressive regimes. The resultant governance failures in the realm of public affairs are counterparts to the familiar market failures occurring in the realm of economic affairs. Even more important for purposes of this analysis, the presence of a government in the ordinary sense is not always necessary for the achievement of success in performing the function of governance. There are many examples in small-scale societies of arrangements that are successful in avoiding the tragedy of the commons and in sorting out problems associated with the side effects of self-interested behavior on the part of individuals (Ostrom et al. 2002). As the case of the successful effort to reduce the production and

consumption of ozone-depleting substances makes clear, such arrangements can flourish in large-scale settings as well (Parson 2003). In addressing issues like the maintenance of peace and the promotion of sustainability in the Arctic treated as an international region, the focus of attention falls on what we have come to think of as the pursuit of governance without government (Rosenau and Czempiel 1992).

Governance systems are collections of rights, rules, and decision-making procedures that define social practices, assign roles to the participants in these practices, and guide interactions among the occupants of these roles (Young 1999). Some of these arrangements are constitutive in nature in the sense that they establish general practices applicable to a wide range of substantive issues. A prominent example central to this discussion of Arctic Ocean governance is the constitutive system set forth in the 1982 UNCLOS (United Nations 1983). More focused arrangements, normally referred to as regimes, build on these constitutive foundations (Krasner 1983). Individual regimes usually address issues arising in spatially defined areas (e.g. Antarctica, the North Sea, the Svalbard Archipelago), functionally defined issue domains (e.g., transboundary air pollution, the conservation of whales, the harvesting of fur seals), or some combination of the two (e.g., the conservation of polar bears in the Arctic).

A regime complex is a set of distinct governance elements or components that are related to one another in functional or spatial terms but that are non-hierarchical in the sense that none of the individual elements that make up the complex is subordinate to the others (Raustiala and Victor 2004; Keohane and Victor 2011; Orsini, Morin, and Young 2013). What we know as the Antarctic Treaty System is a case in point (Berkman et al. 2011). This system comprises, in the first instance, the 1959 Antarctic Treaty itself together with the 1972 Convention on the Conservation on Antarctic Seals, the 1980 Convention on the Conservation of Antarctic Marine Living Resources, the 1991 Environmental Protocol to the Antarctic Treaty, and various Agreed Measures adopted at Antarctic Treaty Consultative Meetings. Other arrangements that play significant roles in this complex include the International Convention on the Regulation of Whaling, the Agreement on the Conservation of Albatrosses and Petrels, the Montreal Protocol on the Protection of the Ozone Layer, and the non-governmental International Association of Antarctic Tour Operators.

Regimes and regime complexes are dynamic; they change continually

once they are initially established. New components are added as additional governance challenges arise, often affecting the internal dynamics of a regime or the interactions among the elements of a regime complex. The effectiveness of these arrangements also varies over the course of time (Young 2010). Some regimes or regime complexes go from strength to strength, becoming steadily more effective with the passage of time. Others exhibit a pattern of punctuated equilibrium, resisting progressive development on an incremental basis but occasionally undergoing major adjustments to address new problems or challenges. Still others experience arrested development in the sense that they run into a wall of resistance that severely limits their ability to perform the function of governance successfully. There are even cases in which regimes collapse and disappear, regardless of their effectiveness in earlier times. The analysis of the determinants of regime dynamics is not only a major focus of attention on the part of students of international regimes; it is also a topic of obvious importance with regard to this examination of the evolution of Arctic Ocean governance.

WHAT ARE THE PRINCIPAL COMPONENTS OF THE ARCTIC OCEAN GOVERNANCE SYSTEM?

The constitutive foundation for Arctic Ocean governance is the overarching framework of the law of the sea articulated in its most comprehensive form in the UNCLOS. Opened for signature in 1982 and in force since 1994, UNCLOS provides general principles applicable to most marine issues as well as a set of procedural mechanisms for applying these principles to specific situations (e.g. the International Tribunal on the Law of the Sea, the Commission on the Limits of the Continental Shelf). With the exception of the U.S., all the Arctic states and most other members of international society have ratified UNCLOS, signifying acceptance of its role as the constitutive foundation for issues relating to marine affairs. The U.S. accepts the provisions of UNCLOS, with the exception of Part XI dealing with deep seabed mining, as constituting customary international law and therefore acknowledges the law of the sea as applicable to its own activities in the realm of marine affairs.

Other than Article 234 on the regulation of maritime activities taking place in ice-covered waters, UNCLOS does not contain provisions that

are specific to the Arctic. Rather, it sets forth a system of rights, rules, and decision-making procedures applicable to marine affairs on a global basis (Stokke 2007). This system is state-centric in the sense that UNCLOS treats sovereign states as the subjects of the law of the sea, accords a variety of rights to states (e.g., the right to regulate the use of resources located within their Exclusive Economic Zones or EEZs, the right to flag commercial vessels), and establishes mechanisms for them to use in resolving differences relating to marine affairs (e.g., delimiting the boundaries of EEZs in the cases of opposite or adjacent states). The Arctic coastal states have stated explicitly that they regard the prevailing law of the sea as the constitutive basis for handling matters of governance relating to the Arctic Ocean and its marginal seas (Ilulisaat Declaration 2008); other states, including major powers such as China and Japan, have indicated that they accept this arrangement.

Given the speed of change in the Arctic in recent years and the prospect that change will trigger a rapid growth in efforts to exploit the region's natural resources and make use of its potential shipping routes, a number of observers have called for the negotiation of a legally binding Arctic Treaty to ensure that these activities develop in a peaceful and sustainable manner (Huebert and Yaeger 2006; Rayfuse 2007; Koivurova and Molenaar 2009). Such a treaty would take the provisions of UNCLOS as a point of departure and build a more focused and integrated regime on this foundation, addressing a range of Arctic-specific issues. However, there is little prospect of such a treaty being negotiated, much less entering into force, during the foreseeable future (Young 2011b). The Arctic states, and especially the A5, have stated flatly and repeatedly that they are opposed to any such initiative. Efforts to develop an Arctic Treaty would encounter knotty problems, even if the A5 were not set against it. Among other things, issues would arise regarding criteria for membership, the treatment of sensitive issues like the status of the Northwest Passage and the Northern Sea Route (NSR), the rights and responsibilities of non-Arctic states, and the status of indigenous or aboriginal peoples. Inevitably, negotiations would be protracted; the U.S. would be unlikely to ratify such a treaty, even if others were willing to participate.

What is emerging today is a regime complex for Arctic Ocean governance that is pan-Arctic in scope and encompasses three principal elements in addition to the constitutive foundation.³ One element consists of a growing collection of international arrangements dealing with

functionally defined issues and including, on a case-by-case basis, those actors needed to address these issues successfully. The second element of the complex consists of the Arctic Council and its various working groups and task forces. Some years ago, it appeared that the A5 would take steps to establish a separate mechanism among themselves to address matters of Arctic Ocean governance. But this prospect has receded into the background; the A5 now acknowledges the Arctic Council as the principal forum for addressing marine as well as terrestrial concerns of interest to the Arctic states (Kankaanpää and Young 2012; Arctic Council Secretariat 2013). Although it is conceivable that interest in establishing a separate mechanism for addressing Arctic marine issues will reemerge in the future, such a development seems unlikely at this stage. The third and so far least developed element of the Arctic Ocean regime complex deals with global forces affecting the future of the Arctic and centers on the need to establish some mechanism to facilitate constructive engagement at the policy level between the Arctic states and interested non-Arctic states and other actors regarding Arctic Ocean governance. The Arctic Council has a provision allowing non-Arctic states to attend meetings and engage in some council activities as observers (Koivurova and Gracyck 2012). But for reasons to be discussed later, this arrangement does not provide a basis for addressing important matters involving interactions between the Arctic and international society as a whole (Young 2013b).

Compared to a comprehensive Arctic Treaty, this complex is somewhat fragmented, but it has the cardinal virtue of being both politically feasible under current conditions and adaptable in the face of changing circumstances. It is thus useful to examine each of the elements of this system in some detail, considering opportunities for growth within each element and touching on issues relating to interactions among them. The next three sections explore issues relating to each element in turn.

WHAT IS THE STATUS OF ISSUE-SPECIFIC ARRANGEMENTS IN THE ARCTIC?

There is a substantial history of efforts to devise international regimes addressing the Arctic issues that are functionally defined and often spatially delimited in nature (Young and Osherenko 1993). Among the most successful of these arrangements are: the regime governing the harvesting

of northern fur seals in the Bering Sea and Gulf of Alaska established initially in the 1911 North Pacific Sealing Convention among Great Britain (on behalf of Canada), Japan, Russia, and the U.S.; the regime for the Svalbard Archipelago set forth in the 1920 Treaty of Spitsbergen concluded as an element of the peace settlement following World War I, and the arrangement dealing with the management of polar bears created in the 1973 Agreement on the Conservation of Polar Bears. Although the fur seal regime collapsed in the 1980s under the weight of changes in both biophysical and socioeconomic conditions in the Bering Sea region (NRC 1996), it remained in force for a number of decades and is widely regarded as one of the first and most successful international regimes dealing with the conservation of wildlife (Lyster 1985). The regime for Svalbard, which grants sovereignty over the archipelago to Norway coupled with a number of substantial restrictions designed to protect the interests of other countries, remains in force and now has 40 signatories, including a wide range of non-Arctic states (Ulfstein 1995). The polar bear conservation agreement, which calls for coordinated efforts on the part of the A5 acting as the range states for polar bears, does not have a lot of regulatory content, but it was established during the midst of the Cold War and continues to operate today as a useful framework for collaborating across international boundaries on research and management practices relating to this iconic species (Fikkan, Osherenko, and Arikainen 1993).

Given this history, it should not come as a surprise that interested parties have continued to address governance concerns relating to the maritime Arctic through arrangements that are defined largely in functional terms and that include as members those parties whose participation is needed to deal with the particular issues at stake. For purposes of this analysis of the evolution of the Arctic Ocean governance system, it makes sense to group these arrangements into four distinct categories: (i) Arctic-specific arrangements that include non-Arctic participants, (ii) functional arrangements covering areas both within and outside the Arctic, (iii) regional arrangements centered outside the Arctic that nevertheless include parts of the Arctic within their catchment areas, and (iv) global arrangements of particular importance to the Arctic.

Arctic-specific arrangements that include non-Arctic participants cover a range of concerns, such as the management of fish stocks in the central Bering Sea, the regulation of commercial shipping in ice-covered waters, and the coordination of scientific research dealing with Arctic issues (Young

2012a). The Central Bering Sea Pollock Agreement, whose signatories include Japan, Korea, Poland, and Taiwan, as well as Russia and the U.S., was negotiated in 1994 as a freestanding regional fisheries management organization to protect pollock stocks located beyond the limits of coastal state jurisdiction in the central Bering Sea. Although the stocks in question have been slow to recover following depletion due to unregulated fishing prior to 1994, this regime has succeeded in banning fishing for pollock on the part of those hoping to take advantage of recovering stocks. In 2002, the International Maritime Organization (IMO) adopted a set of Guidelines for Ships Operating in Ice-covered Waters (Jensen 2007). Revised in 2009, this non-mandatory regime seemed adequate to address key issues relating to commercial shipping in the Arctic prior to the recent surge of interest in commercial shipping arising from increased accessibility associated with the decline of sea ice. Today, it is clear that there is a need for a more substantial mandatory regime to govern the design, construction, and operation of commercial ships operating in the Arctic. The IMO Guidelines are of interest at this stage largely as a point of departure for efforts to devise a legally binding Polar Code covering commercial shipping in the Arctic as well as the Antarctic (discussed more fully below). For its part, the International Arctic Science Committee (IASC) is an organization founded in 1990 to coordinate scientific research on the Arctic issues and to facilitate access to marine and terrestrial areas in the Arctic on the part of scientists. The IASC is, strictly speaking, a non-governmental organization; its members are national academies of science of 21 countries, including 13 located in non-Arctic states. Among other things, the IASC provides input to the deliberations of the Arctic Council on a range of matters, including climate change, contaminants in the Arctic, and matters relating to biodiversity.

The most prominent functional arrangements whose areas of operation encompass both Arctic and non-Arctic spaces involve fisheries management and wildlife conservation. The North Atlantic Salmon Conservation Organization, for example, covers the traditional range of wild North Atlantic salmon, an area extending as far south as New England on the western side of the Atlantic and Portugal/Spain on the eastern side. Since North Atlantic salmon are now wild caught mainly in Greenlandic waters, the work of this international arrangement focuses on protecting salmon from the side effects of other human activities. Arrangements featuring wildlife conservation typically address concerns relating to migratory

species, such as seals, whales, and birds. The harvesting of whales in Arctic waters on the part of Inuit, for example, is subject to the provisions of the International Convention on the Regulation of Whaling dealing with “aboriginal subsistence whaling.” A bone of contention from time to time, this management regime now seems to provide a system for harvesting on the part of indigenous peoples in the Arctic that is broadly acceptable to the major stakeholders.⁴ With regard to the management of birds that migrate into the Arctic in the spring and return south in the fall, a complex mosaic of bilateral and trilateral arrangements has evolved. In the case of the Western Arctic, for example, there are agreements involving Russia and the U.S., Japan and the U.S., and Canada, Mexico, and the U.S. The result is a somewhat messy system that is sometimes hard to apply to the activities of subsistence harvesters located in remote communities in Alaska and Chukotka. Nonetheless, there is a general agreement that this complex fabric of arrangements has played a role of some importance in protecting migratory birds.

Prominent examples of functional arrangements centered in other areas whose geographical scope encompasses portions of the Arctic include regional fisheries management organizations (e.g., the North East Atlantic Fisheries Commission, the Northwest Atlantic Fisheries Organization) and regional arrangements addressing problems of marine pollution (e.g., the OSPAR convention on dumping of pollutants at sea and land-based marine pollution). The OSPAR Convention, to take a specific example, includes many European members and covers the waters between Greenland and Norway extending into the Arctic Basin. Some of those concerned about environmental protection in the Arctic have argued that there are opportunities to use these arrangements in addressing various needs for governance in the Arctic arising today. To a limited extent, these arguments make sense. The North East Atlantic Fisheries Commission, for example, may well prove helpful in managing fish stocks (e.g., Atlantic mackerel) moving beyond the EEZ of Norway in the Norwegian Sea, perhaps as a consequence of the effects of climate change. Nevertheless, there are obvious limits on the roles that these arrangements can play in tackling Arctic Ocean governance in more general terms.

Global regimes of particular importance to the Arctic include the arrangements established under the 1987 Montreal Protocol on the Protection of the Ozone Layer, the 1992 Convention on Biological Diversity, the 1992 Framework Convention on Climate Change, the 2001

Convention on Persistent Organic Pollutants, and the newly completed (but not yet in force) Minamata Convention on Mercury. Because the Arctic is a sink for long-lived pollutants traveling northward via airborne and waterborne channels, health problems arising from human activities in the mid-latitudes constitute a serious concern in the Arctic. Both the convention on persistent organic pollutants and the new mercury convention make specific reference to the consequences of contaminants in the Arctic in articulating their rationales. An interesting feature of the biodiversity regime involves the identification of ecologically or biologically significant areas (known as EBSAs) deserving a special measure of protection. Efforts are now underway to establish protective arrangements for EBSAs in the maritime Arctic, though it is likely that these efforts will provoke opposition on the part of those pursuing activities like commercial shipping or offshore oil and gas development.

As this account makes clear, there is no shortage of functional arrangements that have developed to address specific issues relevant to Arctic Ocean governance. A closer examination would reveal a wide range of concerns relating to the performance of these regimes. The pollock stocks of the Central Bering Sea remain depleted. The extent to which any human harvesting of whales is permissible is hotly debated on ethical if not on biological grounds. Persistent organic pollutants remain a severe health hazard in many Arctic communities. Concerns relating to marine pollution in the Arctic are rising as plans for offshore oil and gas development move forward. Even so, it is undeniable that human activities taking place in the Arctic or affecting the Arctic have given rise to a rich tapestry of functional regimes, and that some of these regimes have made a real difference in governing human-environment interactions.

Given the changes occurring in the maritime Arctic today, the highest priorities for progressive development of functional arrangements in this region involve the completion of a mandatory Polar Code and the development of a regulatory regime dealing specifically with ship-based tourism. The Polar Code, covering the design, construction and operation of commercial vessels plying polar waters and intended to replace the 2002/2009 IMO Guidelines, has been under negotiation over the last three to four years (Deggim 2012; Deggim 2013).⁵ The urgency of reaching agreement on the provisions of the code is related to forecasts regarding the pace of development of commercial shipping in the Arctic, a matter that is subject to a wide range of projections even among knowledgeable

observers. The most contentious issues appear to involve conflicts between commercial and environmental interests. Ship owners/operators, who compare the costs of Arctic routes with other options such as the Suez Canal Route and who are uncertain about the profitability of commercial shipping in the Arctic, are naturally anxious to avoid costly environmental regulations. Conservationists are equally concerned about the need to protect the region's sensitive ecosystems in the face of rising commercial operations. Some have proposed separating some of the environmental concerns from the Polar Code itself in the interests of accelerating the completion of negotiations on this matter. But this strategy, which assumes that once in place the code will evolve to incorporate stronger environmental provisions, does not seem fully convincing. What is needed is active engagement on the part of one or more states willing to act as "pushers" regarding the terms of the code. At this juncture, it appears that the parties are close to agreement on the terms of the Polar Code and that it will enter into force within the next two to three years, a timeline that may well be compatible with the actual growth of commercial shipping in the Arctic.

The case of ship-based tourism is another matter. This form of tourism, which attracts a wealthy clientele, has emerged as a growth industry in recent years. There exists already a non-governmental body known as the Arctic Expedition Cruise Operators, but this organization focuses mainly on the area around northern Norway and the Svalbard Archipelago and is, in any case, a minimal effort compared with its Antarctic counterpart, the International Association of Antarctic Tour Operators. The essential concern at this stage is to regulate the activities of large cruise ships that are not ice-strengthened but that nonetheless enjoy freedom to operate in a largely unregulated fashion under the provisions of the law of the sea. Key issues involve preventing or minimizing the loss of life in the event of accidents and dealing with questions of liability for the loss of life and damages to ecosystems. These are matters of considerable urgency. The key Arctic states, together with those states in which cruise ships are registered, should insist on the establishment of an effective counterpart to the International Association of Antarctic Tour Operators or intervene more directly to establish an intergovernmental regime addressing these concerns.

WHAT ROLES CAN THE ARCTIC COUNCIL PLAY?

Created under the terms of the 1996 Ottawa Declaration, the Arctic Council is "... a high-level forum 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" (Ottawa Declaration, 1996). The members of the council are the eight Arctic states – Canada, Russia, the U.S. and the five Nordic countries – often referred to as the Arctic 8 or A8. A unique feature of the council is that it accords indigenous peoples' organizations the special status of Permanent Participants. The Ottawa Declaration is not a legally binding instrument; the council has neither the legal status of an intergovernmental organization nor the authority to make binding decisions on matters of policy. Six working groups (e.g., the Arctic Monitoring and Assessment Programme, the Working Group on the Conservation of Arctic Flora and Fauna) have carried out much of the substantive work of the council. While the scope of the council's remit is broad, the Ottawa Declaration states explicitly that the council "should not deal with matters related to military security."

Tension between the A5 and the A8 has clouded the role of the Arctic Council regarding maritime issues from time to time. At the Ilulissat meeting in May 2008, the A5, acting as an informal gathering of coastal states, articulated an approach to Arctic Ocean governance without consulting either the other members of the Council (Finland, Iceland, and Sweden) or the Permanent Participants. A second meeting of this group held in Canada in 2010 caused increased concern among groups interested in Arctic governance. But this divisive initiative soon collapsed. The Nuuk Declaration issued at the end of the Danish chairmanship in 2011 reaffirms the primacy of the Arctic Council regarding marine as well as terrestrial issues. Recent initiatives of the council pertaining to search and rescue and marine oil spill preparedness and response (to be discussed later) have served to focus particular attention on issues of governance relating to maritime issues. Clearly, the Arctic states have realized the importance in terms of their own interests of avoiding friction among themselves, especially in the light of the need to address matters involving the growing interest of non-Arctic states in matters of Arctic governance.

The Arctic Council has proven more effective than many of those

present at its creation in 1996 anticipated (Axworthy, Koivurova, and Hasanat 2012; Kankaanpää and Young 2012). But this is not because the council has acquired the capacity to make authoritative decisions about matters of Arctic policy. Several factors account for this development. The council, largely through the efforts of its working groups, has made a significant difference through processes involving issue framing and agenda setting. For example, the council has highlighted the onset of climate change, the impact of contaminants on human health, and the multidimensional character of human development in the Arctic. The transformative changes occurring in the Arctic in recent years have enhanced the influence of these efforts. The fact that climate change is progressing more rapidly in the Arctic than anywhere else, for example, has drawn attention to this region among those concerned with the impacts of climate change on socio-ecological systems (UNEP Yearbook 2013). Under the circumstances, a project such as the Arctic Climate Impact Assessment, clearly significant in its own right, has acquired a high level of visibility in the outside world as well as within the Arctic (ACIA 2004). The establishment of a permanent secretariat for the Arctic Council, located in Tromsø, Norway has added significantly to its ability to take on functions that are more ambitious than those identified in the Ottawa Declaration.

Increasingly, the members of the A8 have found the Arctic Council to be useful as a vehicle for addressing matters that lend themselves to treatment at the regional level. The 2011 Agreement on Cooperation on Aeronautical and Maritime Search and Rescue in the Arctic is a prominent case in point; another is the 2013 Agreement on Cooperation in Marine Oil Spill Preparedness and Response in the Arctic. In each case, the Arctic states not only expect to be those most affected by the problem; they also expect to be in the best position to take effective steps to address the problem. Formally, these agreements are not actions of the council itself; they are agreements negotiated within the forum provided by the council and signed by representatives of the Arctic states attending Arctic Council ministerial meetings. But the pattern is clear. These agreements address policy issues of particular and understandable concern to the Arctic states because they will suffer the negative impacts, as in the case of the effects of oil pollution in Arctic marine systems, or because they will be called upon to assume the lion's share of the responsibility for addressing the issue, as in the case of search and rescue.⁶ The case for action on the part of the A8 to coordinate their efforts to address issues of this sort is therefore both easy

to understand and entirely legitimate.

Are there additional issues whose attributes make them suitable for treatment under the auspices of the Arctic Council (Molenaar 2012)? Possibilities include cooperative efforts to control drug trafficking and other forms of smuggling in the High North, to regulate bio-prospecting in the Arctic, and to thwart potential activities of terrorists in the region.⁷ Perhaps the most prominent candidate for this treatment involves the possibility that climate change will bring about changes that open up opportunities for commercial fishing in the Arctic Basin. Despite the acknowledged biophysical effects of climate change, there are good reasons to doubt whether fish stocks of interest to commercial fishers will develop in the region during the foreseeable future (Hollowed, Planque, and Loeng 2013; *The Economist* 2013). Still, there is a case to be made for establishing a regulatory arrangement in anticipation of the development of commercially significant stocks; the proposal to impose a moratorium on fishing in the region until more is known about the existence and nature of these stocks makes sense from a precautionary perspective. Nonetheless, this case differs in several respects from the cases of search and rescue and oil spill preparedness and response. Non-Arctic states have rights under the law of the sea to fish in waters beyond the boundaries of EEZs. Just as there is a need to include non-Arctic states in the management regime for the pollock stocks of the central Bering Sea, the interests of non-Arctic states in potential fisheries of the Arctic Basin cannot be ignored. One way to make progress under the circumstances would be to treat the Arctic Basin as a semi-enclosed sea under the terms of Article 123 of UNCLOS. This strategy could provide a basis for establishing a regulatory arrangement dominated by the Arctic states but include provisions designed to take into account the legitimate interests of relevant non-Arctic states. Nevertheless, it makes sense to conclude that the Arctic Council is the right venue for efforts to address this issue. Curiously, several of the coastal states are now pushing for an agreement among the A5 rather than the A8 on this issue (Kramer 2013), a move that is understandable in some respects but likely to engender unnecessary complications in terms of the development of the Arctic Ocean regime complex.⁸

At the same time, there are issues of equal or greater importance that are not well-suited to action on the part of the Arctic Council. Consider short-lived climate pollutants (e.g., black carbon, hydrofluoro carbons or HFCs) as an example. The fact that these sources of climate change are

matters of concern to the Arctic states is understandable. Black carbon is now thought to account for as much as a third of the warming occurring in the Arctic (Quinn et al. 2011); HFCs may have a similar impact (Xu, forthcoming). But much of the black carbon reaching the Arctic originates outside the Arctic and even outside the jurisdiction of the Arctic states. With regard to HFCs used as replacements for ozone-depleting substances, China, India, and Brazil are key players. Unlike the cases of search and rescue and oil spill preparedness and response, therefore, the Arctic states cannot take effective steps to address issues of this sort through the council. It may be helpful to use the council in an effort to draw public attention to such issues, but there is a real danger that the result will be a demonstration of the weakness of the council and a diminution of its reputation for effectiveness.

A different and potentially promising role for the Arctic Council arises from the growing need to address issues relating to the Arctic Ocean in synoptic terms. General discussions of such matters often emphasize the value of thinking in terms of concepts like ecosystem-based management and marine spatial planning (McLeod and Leslie 2009). But it is important to be clear on the underlying issue at stake in this context. The various functional arrangements described in the preceding section are developing along separate tracks. Even the council itself has tended to deal with individual issues (e.g., search and rescue, oil spills, the effects of black carbon) in segregated terms. Yet it is clear that these arrangements interact with one another in a variety of ways; they will do so more and more as human activities in the Arctic expand and the regimes created to manage them become more numerous and complex. This is not necessarily a bad thing. Research on the interplay of distinct governance systems has shown that it is often possible to make adjustments that alleviate potential conflicts between or among them; there are even cases where interplay can lead to synergy (Oberthür and Gehring 2006). But there is nothing automatic about the achievement of harmony among multiple arrangements, especially as the relevant space becomes populated with a larger and larger number of discrete regimes (Oberthür and Stokke 2011).

As a body with a broad remit covering issues of environmental protection and sustainable development, the Arctic Council may be in a position to play a constructive role in addressing this challenge. But concretely, what steps could and should the council take in the near future to make progress regarding this matter? The first step is to map the full

range of functionally and spatially specific arrangements that apply to the Arctic and to undertake an assessment of the ways in which these arrangements currently interact with one another or can be expected to do so during the foreseeable future (AOR 2013). Will rules pertaining to the activities of those engaged in offshore oil and gas development be sufficient to ensure that these activities are not harmful to marine mammals in polar waters (e.g., whales, walrus, seals, and polar bears)? Should operators of cruise ships plying Arctic waters be expected to contribute to the cost of maintaining search and rescue operations covering areas of particular interest to tourists? Is the establishment of EBSA's under the auspices of the Convention on Biological Diversity likely to interfere with commercial shipping in the Arctic?

Once these issues are identified and prioritized, the Arctic Council could provide a forum for bringing the key players together and exploring ways to alleviate matters that call for early intervention. It may well be possible, for instance, to devise rules governing the siting and operation of offshore energy infrastructure to avoid or minimize harm to marine mammals without imposing excessive costs on energy companies. Similar observations are in order regarding the location of shipping lanes in a manner that minimizes harm to EBSAs or to Particularly Sensitive Sea Areas (PSSAs) that may be established in the Arctic under the auspices of the Convention on Biological Diversity and the IMO. In recent years, the council has made a start toward tackling such concerns through the work of the Arctic Ocean Review (AOR 2013) and the Arctic Resilience Report (ARR 2013). In some respects, these initiatives highlight the limitations of the council in dealing with issues of this sort. Yet, relative to expectations regarding the role of the council at the time of its inception in 1996, activities of this sort constitute evidence of real growth in the capacity of the council to play an important role in the evolution of Arctic Ocean governance.

IS A THIRD LEG OF THE ARCTIC OCEAN REGIME COMPLEX NEEDED?

The most significant development of recent years affecting Arctic governance is the tightening of links between the Arctic region and the overarching international system (Young 2012b; Young 2013b; Hough 2013). As a theater of operations for sophisticated weapons systems,

the Arctic was an area of considerable interest to those concerned with military security during the Cold War (Osherenko and Young 1989). With the end of the Cold War, however, the Arctic moved to the periphery of international relations, a fact that reduced interest in the region on the part of those concerned with high politics but that at the same time made it relatively easy for policymakers with a particular interest in the Arctic to launch cooperative initiatives largely free of the complications associated with matters of high politics. The Arctic Council itself is a product of these circumstances.

The transformative changes occurring in the region in recent years have brought the Arctic to the attention of both non-Arctic states and non-state actors (e.g., multinational corporations) interested in the economic potential of the region. One effect of this development is to tie the fate of the Arctic intimately to actions that are occurring outside the region and beyond the control of the Arctic states. China and India, for example, have emerged as leading emitters of greenhouse gases; China alone is responsible for about 28% of global carbon dioxide emissions. Various forces that the Arctic states are not able to control drive the world energy market. Even in cases like the shale gas revolution, where the U.S. is in the lead, the American government does not occupy the driver's seat. The rise of China, the American pivot toward Asia, and the growing role of Asian players in international commerce are reshaping geopolitical relations in ways that are likely to have profound implications for the Arctic but that are not subject to regional control. Insofar as Asian markets loom large as destinations for Arctic resources, non-Arctic forces will become critical drivers of Arctic development.

Under the circumstances, both leading non-Arctic states (e.g., China, Japan, Korea, the UK) and major non-state actors (e.g., multinational energy and mining corporations) have become interested in the Arctic at the policy level. They are no longer content to leave issues of governance in the region exclusively in the hands of the Arctic states. This makes it impossible simply to deny or ignore the growing interest in Arctic affairs on the part of a number of non-Arctic actors.

One way to respond to this development is to use the mechanism of (permanent) observership in the Arctic Council (Graczyk and Koivurova 2013).⁹ Under its rules of procedure, the council can accord the status of observer to non-Arctic states (as well as intergovernmental and non-governmental organizations). As the Arctic has become a focus of attention

on the part of those interested in natural resources and commercial navigation, numerous non-Arctic states, including major powers such as China, India, and Japan, have applied for the status of permanent observer. For their part, the A8, not to mention the Permanent Participants, have become increasingly sensitive to the implications of accepting a flood of new observers into the activities of the council. In 2011, they adopted new and rather restrictive rules of procedure regarding observers. Observers are expected to “recognize the Arctic States’ sovereignty, sovereign rights and jurisdiction in the Arctic,” accept severe constraints on the nature of their participation in the activities of the council, offer to provide financial support for the activities of the Permanent Participants, and agree to periodic reviews of their credentials (Arctic Council 2011).

Observers can play a role in some activities of the council; specific projects carried out by one or another of the working groups are prime examples. But this status does not provide a basis for serious engagement between Arctic and non-Arctic states regarding matters of policy. Despite these limitations, numerous non-Arctic states have persisted in applying for the status of permanent observer, and some members of the A8 have persisted in raising concerns about the consequences of opening up the council to representatives of major non-Arctic states. For several years, tensions relating to observership proved disruptive for all parties concerned. In a move to defuse this issue, the A8 agreed at the 2013 ministerial meeting in Sweden to accept China, India, Italy, Japan, Korea, and Singapore as Observer States (Kiruna Declaration 2013).¹⁰

This is an important step, and there is every reason for the new observers to make a concerted effort to engage with the council and its working groups on an active basis. Nonetheless, it is clear that the council, a regional body dominated by regional interests, does not offer a suitable venue for addressing issues (sometimes described as trans-regional issues) arising from the links between the Arctic as a region and international society as a whole (Guo 2012). The members of the council regard it as a forum designed to provide a means for the Arctic states to pursue cooperative measures regarding matters of interest largely to themselves. This makes good sense in cases like search and rescue and oil spill preparedness and response. But it does not provide a recipe for effectively addressing issues like regulating pollutants (e.g., persistent organic pollutants or black carbon) originating outside the region that make their way to the Arctic or governing a range of commercial activities in which

non-Arctic states and non-state actors are major players.

What is to be done regarding this matter? Here is where the idea of a third leg of the Arctic Ocean governance complex comes into focus. The Arctic Council is not in a position to deal with critical links between the Arctic and the global system. A careless effort to assert control in these terms could easily backfire, undermining the gains the council has made in recent years in addressing regional issues (Axworthy, Koivurova, and Hasanat 2012; Kankaanpää and Young 2012). For their part, there is no reason to expect major non-Arctic states and non-state actors to accept the authority of the Arctic Council to make policy decisions regarding matters of this sort. The solution to this problem may well lie in the creation of a mechanism allowing Arctic and non-Arctic actors to engage in a thoughtful and mutually beneficial dialogue about certain Arctic issues without competing with the council, now acknowledged by all as the primary forum for handling Arctic issues of a regional nature (Young 2013b).

What form should a third leg of the Arctic Ocean regime complex take? This question is beginning to come into focus in policy circles. As the April 2013 initiative of Iceland's President Grimsson to establish an "Arctic Circle" makes clear, concrete initiatives to flesh out this component of the Arctic Ocean regime complex are beginning to emerge (Arctic Circle 2013).¹¹ Other initiatives relating to this need for governance are likely to arise during the foreseeable future (Humrich 2013). It is appropriate at this stage, therefore, to offer some preliminary observations on ways to structure this element of the Arctic Ocean regime complex that may prove both politically feasible and functionally effective.

The remit of this mechanism would be to address issues of governance featuring clear links between the Arctic and the outside world. There is no need for such a mechanism to deal with an issue like search and rescue in the Arctic or, for that matter, with the activities of the armed forces of the Arctic states in the region. On the other hand, there is a need to engage in an open dialogue about Arctic issues featuring economic initiatives on the part of non-Arctic states, including steps these states could take to alleviate any environmentally disruptive impacts of development in the region. Consider Chinese interests in engaging in mining in Greenland and in the development of infrastructure in Iceland useable to support future maritime commerce, or Korean and Japanese interests in gaining access to the hydrocarbons of the Russian Far East, as illustrative cases. There is nothing inherently wrong with these interests, but they present issues that the Arctic

Council is not in a position to address constructively. Or consider the issue of controlling the deposition of black carbon in the Arctic as a major source of biophysical changes in the region. Given the fact that much of the black carbon originates outside the Arctic, there is much to be said for creating a body that could promote dialogue between the Arctic states and those non-Arctic states that are the sources of the problem.

The first principle governing such a consultative mechanism is that it should operate as a coalition of the willing. Since the goal would be to engage in a policy dialogue regarding matters of mutual concern, this body should welcome participation on the part of all those with significant stakes in the links between the Arctic and the outside world. In the first instance, this means representatives of major states. But since the emphasis would be on bringing key stakeholders to the table and since there would be no formal requirements for membership, it would make sense to use this mechanism as a venue in which major corporations, environmental organizations, coastal communities, and indigenous peoples' organizations could meet and interact in an informal environment.

The forum would not be endowed with the authority to make formal decisions, an arrangement that should alleviate concerns about rights to participate and rules of procedure to be used in arriving at collective choices. A critical function of the body would be to foster a sense of community among key players in both Arctic and non-Arctic states to allow for candid, off-the-record discussions of contentious or potentially contentious issues. There is no reason to suppose that this would produce simple solutions to difficult issues such as the impacts on indigenous peoples of the European Union's ban on the importation of seal products. But it should be possible to examine the implications of such issues in a manner that would be conducive to the search for constructive solutions and especially to anticipate the prospect of such issues arising in the future with the goal of heading them off before they become intractable. Whether or not such a process could have led to a less disruptive outcome in the case of the seal ban is difficult to say, but the goal would be to explore options for addressing such issues in a manner acceptable to all parties concerned.

It goes without saying that this consultative mechanism would need to be highly adaptable. Because the Arctic is experiencing transformative changes whose implications for governance cannot be anticipated with certainty, there is a need for a mechanism that can adjust rapidly to changing circumstances. Because the venue under consideration here would

be highly informal with regard to membership and rules of procedure, it should be able to shift ground easily in terms of participation, agenda formation, and mode of operation. In some respects, these conditions are indicative of the weakness of such a body; it would lack a fixed mandate and the authority to make formal decisions regarding issues on its agenda. But this may not be a problem given the existence of other elements of the Arctic Ocean governance system that are more formal in nature and that (at least in some cases) possess the authority to make binding decisions on specific matters of concern in the Arctic (e.g., the rules governing commercial shipping). The added value of this third leg of the Arctic regime complex would be to provide an informal setting in which individuals from both Arctic and non-Arctic states could engage in candid exchanges of views regarding issues featuring links between the Arctic and the outside world.

ARE THERE WAYS TO STRENGTHEN THE FOUNDATION OF THE ARCTIC OCEAN GOVERNANCE SYSTEM?

The preceding sections have identified cutting-edge concerns arising in each of the elements of the Arctic Ocean regime complex and suggested next steps in responding to them. But it is natural to ask whether there are foundational considerations that will affect the evolution of the Arctic Ocean governance system as a whole. If so, are there feasible steps that we can take to strengthen the foundation of this system and, in the process, promote an outcome in which the overall effectiveness of Arctic Ocean governance is enhanced? While an Arctic Ocean treaty is not a realistic option at this stage, it may well be possible to take steps to encourage the development of an analytical and normative matrix underpinning this governance system (Young 2011b). Two elements of this matrix deserve particular attention at this stage: (i) a common narrative or discourse to guide the evolution of the Arctic Ocean governance system and (ii) a set of operating principles to provide backing for efforts to strengthen specific components of the system.

Governance systems that are effective generally reflect underlying analytic narratives or discourses that participants use, consciously or unconsciously, to interpret seemingly disparate events pertaining to a

particular issue domain. An example well-known to those who think about international economic regimes is the role of the narrative of embedded liberalism as a foundational discourse for the international economic order arising in the aftermath of World War II (Ruggie 1983). I have argued elsewhere that the discourse of neorealism, which filters developments through the lens of power politics or geopolitics, does not provide a useful framework for understanding developments occurring in the Arctic today, despite its influence among journalists and policy pundits (Young 2012c). For the most part, the Arctic is a zone of peace; most informed analysts expect it to remain peaceful for the foreseeable future. On the other hand, the discourse of environmental protectionism, which filters observations about ongoing events through a lens emphasizing the protection of biophysical systems from the impacts of human actions, seems equally wide of the mark as a way of organizing thinking about current developments in the Arctic. Environmental concerns are important and are likely to make a difference regarding some issues, but any idea of closing the Arctic to influential actors interested in exploiting the region's natural resources and developing the Arctic's potential for commercial shipping is unlikely to make much headway.

What is needed is a distinctive Arctic discourse, one that acknowledges the influence and even the legitimacy of forces favoring economic development in the region, while at the same time placing a high priority on sustaining the distinctive human cultures of the Arctic and protecting the region's unique environmental assets. What this suggests is the usefulness of a discourse emphasizing sustainable development adapted to the conditions prevailing in the Arctic. The essential feature of such a discourse is the idea of the triple bottom line or, in other words, the requirement that human activities in the region fulfill economic, environmental, and sociocultural goals at the same time. There is nothing in this perspective that would justify a total ban on the extraction of natural resources or on the development of commercial shipping routes in the Arctic. But this discourse calls for strict limits on economic activities likely to prove destructive to major ecosystems or to undermine human communities in the Arctic. The idea of imposing a moratorium on commercial fishing in the Arctic Basin until more is known about the relevant stocks and ecosystems, for instance, makes sense from this perspective. So, too, does the idea that those engaged in energy development in the Arctic should be required to avoid disrupting traditional indigenous practices, as in the case of oil and

gas development on Russia's Yamal Peninsula, and to provide appropriate jobs for Arctic residents as in the cases of mining in northwestern Alaska and oil development on Alaska's North Slope and adjacent offshore areas.

A sustainable development discourse for the Arctic faces the same challenges that arise in efforts to bring this discourse to bear in other settings. Can we devise a metric for comparing gains and losses across the three pillars of sustainable development? In cases where actors disagree about the pros and cons of tradeoffs among the three pillars, are there acceptable ways to adjudicate these differences? Finding ways to address hard cases in this connection is essential. For example, should indigenous hunters be allowed to harvest whales, especially in cases where there is no reason to expect that hunting will threaten relevant stocks? Should operators of cruise ships be required to comply with stringent regulations emphasizing safety, as well as rules dealing with liability, in cases of accidents? Should energy companies be allowed to engage in offshore oil and gas development when there is no realistic way to preclude the prospect of severe harm to marine ecosystems arising from oil spills? There are no easy answers to questions of this sort; even those who subscribe to a common discourse of sustainable development may arrive at different answers in specific instances. Nevertheless, the discourse of sustainable development does provide a useful lens, making it clear that economic development is acceptable but that it must proceed in a manner responsive to both sociocultural and ecological concerns specific to the Arctic.

While governance systems feature explicit rules and decision-making procedures, it is often helpful to embed them in sets of broader operating principles. Such principles do not prescribe specific actions on the part of clearly identified actors, but they do provide normative guidance for the efforts of those seeking to address specific issues in a given issue area. A prominent example relating to climate change is the principle articulated in Article 2 of the UN Framework Convention on Climate Change, which calls upon all parties to prevent "dangerous anthropogenic interference with the climate system." Another example is the principle of common but differentiated responsibilities, which serves to justify the practice of assigning differentiated obligations to developed and developing states under the terms of international environmental agreements. Principles, unlike rules, do not spell out specific requirements and prohibitions with which subjects are expected to comply. Rather, they create general expectations that offer guidance regarding appropriate behavior in

reasonably well-defined issue areas (Young 2001).

Can we devise a set of operating principles that would be acceptable to all parties concerned with Arctic Ocean governance? Of course, there is no definitive answer to this question. Still, it may be helpful to offer some examples of possible principles of Arctic Ocean governance. Consider the following principles as candidates for inclusion in this set:

- The Arctic is a zone of peace in which the expectation is that all disputes will be settled through peaceful means.
- Arctic development should be based on the precepts of stewardship in an era of human domination of biophysical systems.
- Arctic development should proceed in a manner respectful of the preferences of recognized rightsholders, including the region's indigenous peoples.
- Adaptive governance is needed to maintain the resilience of Arctic systems in an era of rapid change.

Each of these principles is subject to further development, but their general thrust is clear. They seek to establish the premise that the Arctic is a dynamic region in which economic development is acceptable, but only when it is subject to well-defined limits required to avoid the ecological destruction we associate with the concept of “roving bandits” (Berkes et al. 2006) and to ensure that activities are carried out in a manner that respects the rights of local and especially indigenous peoples. In essence, the purpose of these principles is to define an alternative to the familiar pattern of core-periphery relations in which the Arctic is perceived as a resource frontier to be exploited for the production of raw materials of value to outsiders who have little concern for the long-term effects of this form of development on either the cultures or ecosystems of the region itself. Even in this age of heightened sensitivity regarding the impacts of extractive industries, distant decision makers involved in such activities are often poorly informed about remote regions like the Arctic and concerned about profit maximization to the exclusion of the requirements of stewardship in a region containing sociocultural and biophysical systems especially sensitive to exogenous shocks.

CONCLUDING OBSERVATIONS

The Arctic is in the midst of a transformation that is not only changing the biophysical and socioeconomic systems of the region itself (e.g., sea ice in the Arctic Basin) but also altering the perspectives of outsiders regarding the significance of the region. One result of this development is the emergence of new needs for governance. In this regard, the recent cooling of super heated projections regarding an Arctic “gold rush” is probably good news; it provides some relief from the pressures to engage in a competitive race to exploit the riches of the region regardless of the consequences. Nonetheless, it is timely to move forward now with the development of a suite of innovations relating to Arctic Ocean governance. There is little prospect of reaching agreement on the terms of a comprehensive and integrated Arctic treaty any time soon, but this does not mean that we should be pessimistic about the prospects for progressive development regarding Arctic Ocean governance. What is emerging is a regime complex founded on the constitutive provisions of UNCLOS and encompassing three substantial elements. In each element, there is progress to report, but more to be done. The cutting-edge issues relating to each element are distinctive. It is therefore important to be alert to the need to ensure that the evolution of the Arctic Ocean governance system proceeds in such a way that the whole is greater than the sum of the parts. One way to achieve this goal is to pay attention to the value of articulating a guiding narrative or discourse informing developments in the various components of the Arctic governance system and developing a set of operating principles that can strengthen the foundation of Arctic Ocean governance.

Notes

1. The “Vision for the Arctic,” released at the 2013 Arctic Council Ministerial Meeting, asserts as its first operating principle that “The further development of the Arctic region as a zone of peace and stability is at the heart of our efforts. We are confident that there is no problem that we cannot solve together through our cooperative relationships on the basis of existing international law and goodwill” (Arctic Council Secretariat 2013).
2. For Russia, for example, basing naval assets on the Kola Peninsula is a matter of geographical necessity rather than an indication of concern about conflict in the

Arctic.

3. A number of more limited, sub-regional arrangements (e.g. the regime for Svalbard) also play some role in Arctic Ocean governance.
4. One exception involves disagreement regarding the quotas provided to Greenland under the provisions relating to “aboriginal subsistence whaling.”
5. One complication arises from the fact that the Polar Code (unlike the 2002 Guidelines) is framed as a bipolar arrangement covering both Arctic and Antarctic waters.
6. A number of environmental groups have criticized the oil spill agreement mainly because it focuses on oil spill preparedness and response rather than on oil spill prevention. This is an understandable criticism. But it is unlikely that a substantial agreement covering prevention as well as preparedness and response would be feasible politically at this stage.
7. While the Ottawa Declaration states explicitly that the Arctic Council should not address matters of military security, there are recurrent proposals for the council to play a role in the initiation of an Arctic nuclear-weapon-free zone (Canadian Pugwash 2013).
8. The coastal states assert that they are the key players in functional terms and that they intend to open any agreement they negotiate regarding fisheries to participation on the part of others in due course. But given the political fallout arising from earlier initiatives on the part of the A5, it is hard to avoid the conclusion that this approach is ill-advised.
9. The previous distinction between permanent and ad hoc observers has become less relevant under the criteria regarding observership that the council adopted in Nuuk, Greenland in 2011.
10. Since France, Germany, Poland, Spain, the Netherlands, and the UK were already observers, 12 non-Arctic states are now officially Arctic Council observers.
11. The first meeting of this body took place during October 2013 in Reykjavik. Time will tell whether this initiative gains traction.

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Comments on Chapter 4: American perspective

Robert W. Corell

OVERVIEW

Oran R. Young's paper provides an excellent overview of the evolution of Arctic Ocean governance and the challenges and opportunities arising as a result of substantial climate and other environmental changes in the Arctic region together with changes resulting from globalization that affect socioeconomic conditions in the region. The major premise, noted early in the paper, which posits that "one factor that plays an important role in the maintenance of peace in the Arctic is the emergence of an increasingly effective Arctic Ocean governance system," is well documented and defended. The paper develops the proposition that not only is an increasingly effective Arctic Ocean governance system emerging but also, it is becoming more robust as the issues of access to natural resources, transportation routes within the Arctic, and the evolution of the Arctic Council as an increasingly effective intergovernmental body in which non-Arctic nations are benefitting from increased access to dialogue and the council progresses (e.g., in working groups, task groups and other sub-bodies). The paper develops these ideas well and gives the reader enhanced insights into the importance of these evolutionary changes within the council.

The discussion of these evolving changes within the Arctic Council (e.g., extending official observer status to Korea, China, Japan and others) is well done; placing them in the context of the recent development of the Arctic Circle is outstanding. The Arctic Circle documents state that it seeks to support, complement and extend the reach of the work of the council by facilitating a broad exchange of ideas and information among a range of global decision-makers from all sectors, including political and business leaders, indigenous representatives, nongovernmental and environmental representatives, policy and thought leaders, scientists, experts, activists, students and representatives of the media. The discussion of this topic in the paper is well done and of critical importance to an understanding of the evolution of Arctic Ocean governance and the challenges and opportunities that are increasingly evident.

Finally, the positing of candidate principles for Arctic Ocean governance provides a basis for important discussions during NPAC 2013. The paper

sets forth the following principles as candidates:

- The Arctic is a zone of peace in which the expectation is that all disputes will be settled through peaceful means.
- Arctic development should be based on the precepts of stewardship in an era of human domination of biophysical systems.
- Arctic development should proceed in a manner respectful of the preferences of recognized rights-holders, including the region's indigenous peoples.
- Adaptive governance is needed to maintain the resilience of Arctic systems in an era of rapid change.

The paper correctly observes that the Arctic is an increasingly dynamic region within which socioeconomic changes (e.g., increased interest in access and trade routes within the Arctic Ocean, natural resources development from fisheries to minerals, oil and gas, and altered land uses) are already underway and have profound implications for regional societal development. The paper suggests that these principles for governance could provide a framework for guiding development within expanded venues of Arctic Ocean governance.

Finally, the issues addressed in the paper rightly focused on the central importance of international governance, bi- and multilateral agreements, and international instruments and laws essential for future Arctic maritime operations and shipping issues, along with the importance of placing international governance in a context that incorporates socioeconomic factors, and how governance is an enabling part of the infrastructure of trans-Arctic shipping.

ADDED THOUGHTS AND COMMENTARY

While the paper focuses on the evolution of Arctic Ocean governance, challenges and opportunities, changes in the coastal regions of the Arctic raise governance issues of profound importance not only for the eight Arctic nations, but also for many other nations as well (i.e., those engaged in the NPAC conference series). An additional focus on changes in coastal civil infrastructure investments along the coastal margins of the Arctic and nearby regions is likely to raise governance issues that affect maritime

operations, particularly along the Northern Sea Route (NSR). As suggested in a recent report,¹ “The coast is a key interface in the Arctic environment. It is a locus of human activity, a rich band of biodiversity, critical habitat, and high productivity, and among the most dynamic components of the circumpolar landscape. The Arctic coastal interface is a sensitive and important zone of interaction between land and sea, a region that provides essential ecosystem services and supports indigenous human lifestyles; a zone of expanding infrastructure investment and growing security concerns.” A high proportion of Arctic residents, both indigenous and others, live on the coast, and many derive their livelihood from marine resources. Hence, national governance strategies, which often differ among the eight Arctic nations, will have profound implications for all countries with increased interest in access, maritime operations, and trade routes within the Arctic Ocean, as well as in the emerging natural resources development in fisheries, economically important minerals, and oil and gas.

As the paper implies, the emerging leadership in governance will control the pace and successes of evolving Arctic Ocean governance and the responses to its challenges and opportunities. This suggests that there is first a major need for region-wide, high-level strategic leadership, whether within and through the Arctic Council or other existing international institutions or by an individual nation taking on a leadership role. History is replete with examples where region-wide governance challenges were resolved through the leadership of an individual nation working with all interested and invested parties. Such might be appropriate in the Arctic.

It is difficult to project the way forward, but this paper offers a framework for discussions and focused dialogue. To expand on some of the governance issues implied by the paper, but not explicitly developed, we can identify two additional framing themes that may be useful for the 2013 NPAC discussions on the evolution of Arctic governance and the challenges and opportunities both for the oceanic regions of the Arctic and for the nearby coastal regions.

THEME ONE: GOVERNANCE INTERDEPENDENCES AMONG THE ENVIRONMENT, ENERGY, AND ECONOMICS

The framing of strategies for the evolution of Arctic governance will need

to focus on three inexorably interconnected elements essential to modern societies.

- **Environment and natural resources:** The natural environment and resources it contains provide the essential materials of socioeconomic development. In fact, everything that societies need for subsistence, growth and sustainability comes from the environment and its resources. Modes of governance, or lack thereof, affect the use of these essential resources, hence the issues of air and water availability and quality, climate change, and its influence over weather.

Partial listing of natural resources that are derived from the environment

- Forest resources (pertaining to plant and tree life)
- Aquatic / Marine resources
- Hydro geological resources (water bodies of all kinds)
- Animal resources (domesticated animals, or those that can be easily approached by humans)
- Microbial resources (organisms that aren't visible to the naked eye)
- Human resources (the population at large)
- Atmospheric resources (anything that humans cannot control - rainfall, sunlight, temperature, and the like)
- Crop resources (agricultural growth)
- Geological resources (naturally occurring formations - rocks, valleys, minerals, precious metals, and the like)
- Edaphic resources (anything related to the soil and its properties)
- Wildlife resources

Source: Sourabh Gupta, Samuels International Associates, Inc. (SIA)

The Earth's natural environment and its resources provide the essentials for human life and well-being; governance strategies control the ways in which it is used. However, these resources need energy to make them available for use, and an economic structure is essential to make them affordable. Finally, there must be adequate governance structures to guide their long-term use.

- **Energy sources and end uses:** Energy provides the vehicle to use the resources available to humankind, and it is the means for heating/cooling buildings, enabling transportation, cooking food, and providing the electrical power to fuel our industries and businesses and light our way in the darkness.² Energy is essential for human development, and energy systems are a crucial entry point for addressing the most pressing global challenges of the 21st century, including sustainable economic and social development, poverty eradication, adequate food production and food security, health

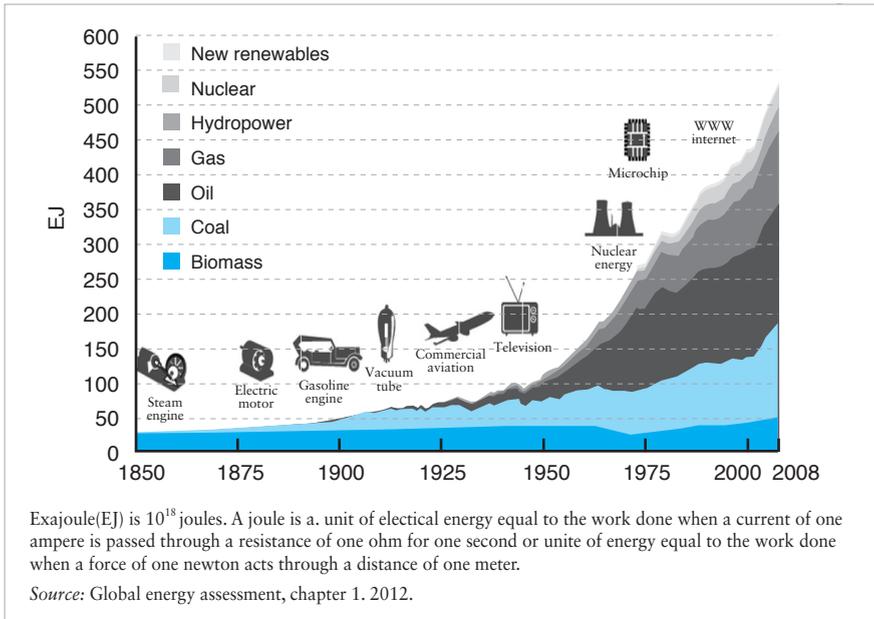


Figure V-1 History of world primary energy use by source

for all, climate protection, conservation of ecosystems, peace and security. Yet, more than a decade into the 21st century, current energy systems do not meet these challenges. A major transformation, fueled by governance strategies and policies, is required to address the challenges and to avoid a potentially major challenge for humankind or possibly even a catastrophic future. As the *Global Energy Assessment* notes, the transformative change in energy governance may not be internally generated within one or more nations due to institutional inertia, policy “lock-in,” incumbency, or the lack of capacity and agility of existing governance organizations to respond effectively to changing conditions. In such situations, clear and consistent external policy signals may be required to initiate and sustain the transformative change needed to meet the sustainability challenges of the 21st century. Energy is derived from a wide range of sources and provides varied means for its use, a historical perspective of which is provided in the diagram below. It is interesting to note that in 1850, virtually all energy was derived from biomass, a renewable energy source. The industrial revolution transformed the

sources so that about 75% now comes from non-renewable sources, including coal, oil, and natural gas.

In most cases, humankind's use of natural resources requires energy to make them available, and there is an obvious need for effective economic structures to make them affordable. Consequently, there is a need for governance structures to guide their long-term use, a fact that is of increasing importance in the Arctic given the expansion of oil, gas and mineral exploration and production in the region. The importance of the energy, economics and environment connections was noted in a recent policy statement on Energy Diplomacy in the 21st Century by then Secretary of State Hillary Rodham Clinton³ in which she stated that energy matters to America's foreign policy for three fundamental reasons. First, it rests at the core of geopolitics, because energy is an issue of wealth and power, which means it can be a source of both conflict and cooperation. Second, energy is essential to how we will power our economy and manage our environment in the 21st century. Third, energy is the key to economic development and political stability. This means that the governance issues discussed in Oran Young's paper will need to give increased credence to the interdependences among the environment, energy, and economics. Future governance developments in the Arctic will need to account for this inexorable interconnectedness, whether through the work of the Arctic Council or other governance institutions.

- Global economics and national economic policies: The Brundtland Report, *Our Common Future: Report of the World Commission on Environment and Development*,⁴ raised the issue of the interdependences among the environment, economics and energy. Christopher Spencer⁵ and others have noted the interdependences of the environment and related scientific, economic, and energy trends, suggesting that they are the global interconnected issues of the 21st century and central challenges for the United Nations. For example, the global energy system and national policies have now assessed inherent vulnerabilities and risks that pose societal, environmental, and economic challenges. However, governments often take governance actions to address these vulnerabilities, which in turn have economic consequences. For NPAC 2013, the global economic trend that is likely to have the most profound impact on the evolution of Arctic Ocean governance and its challenges and opportunities was

outlined in *Global Trends 2030: Alternative Worlds*,⁶ prepared by the U.S. National Intelligence Council to provide a framework for thinking about the future. This report concludes that:

1. The majority of world’s people will not be impoverished: The middle class will expand in most countries. Individuals will move into the middle class as they demand sociopolitical change and increase their consumption of consumer goods, which will have consequences for trade routes and commercial activities across the Arctic, as depicted in the graph below.
2. Demand for resources will increase: The global demand for natural resources will increase owing to an increase in global population from 7.1 billion today to about 8 billion by 2030. Demand for food is projected to rise by 50% and energy by 45% over the next 15-20 years. Nearly half the world’s population will live in areas with severe water stress. The main questions will involve more effective management, wider technology use, and improved governance mechanisms globally and, hence, in the Arctic.
3. A growing food, water, and energy nexus: Demand for food, water, and energy will grow by approximately 35%, 40%, and 50%, respectively, owing to an increase in the global population and the consumption patterns of an expanding middle class. Climate change will worsen the outlook for the availability of these critical resources, and it is likely that severe weather events, such as

Table V-1. Global trends 2030: An overview

Global trends 2030: An overview	
Megatrends	
Individual empowerment	Individual empowerment will accelerate owing to poverty reduction, growth of the global middle class, greater educational attainment, widespread use of new communications and manufacturing technologies, and health-care advances.
Diffusion of power	There will not be any hegemonic power. Power will shift to networks and coalitions in multipolar world.
Demographic patterns	The demographic are of instability will narrow. Economic growth might decline in “aging” countries. Sixty percent of the world’s population will live in urbanized areas; migration will increase.
Food, water, energy nexus	Demand for these resources will grow substantially owing to an increase in the global population. Tackling problems pertaining to one commodity will be linked to supply and demand for the others.

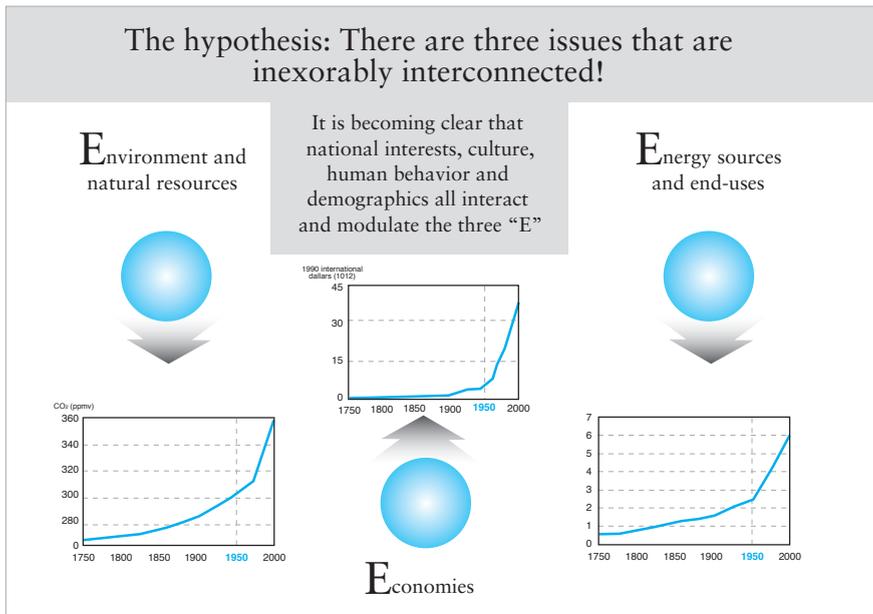


Figure V-2 The hypothesis: There are three issues that are inexorably interconnected

- hurricanes, severe storms and intense rainfall will increase, with wet areas getting wetter and dry and arid areas becoming drier.
5. Megatrends in economic and political influence: Asia will surpass North America and Europe in global power, but no hegemonic power will exist, and the power of other non-Western or middle-tier states will rise. This middle tier as a group will surpass Europe, Japan, and Russia. China’s economy will be 140% larger than Japan’s, and India’s will be 16 times larger than Pakistan’s. Many currently fragile states are likely to move onto solid ground, such as Iraq, Ethiopia, Sierra Leone, Liberia and Nigeria. Others, such as Afghanistan, Somalia, and the Democratic Republic of the Congo, will remain vulnerable. These shifts in economic and political influence will affect governance strategies across the Arctic region.

These megatrends are summarized in Table V-1 for the *Global Trends 2030 Report*.

Global macroeconomics and their interconnectedness with energy and the environment are complex and very difficult to model, much less to predict. The ideas presented here are set forth simply to stimulate

discussions and hopefully to establish a dialogue that will go beyond this conference. A graphic depicting these interacting interdependences is shown below.

THEME TWO: THE ROLE AND INCREASED IMPORTANCE OF NATURAL CAPITAL ACCOUNTS

The concepts of natural capital and natural capital accounts have been discussed for several decades. Yet progress in moving beyond conceptual thinking and experimentation toward implementation of natural capital accounting has been slow. Most economic strategies do not account for natural capital, dismissing it as “externalities.” Natural capital comprises Earth’s natural and environmental assets (soil, air, water, flora and fauna) and the ecosystem services flowing from them. Ecosystem goods and services from natural capital have been estimated to be worth trillions of U.S. dollars per year. They provide food, fibers, water, health, energy, climate security and other essential services for everyone. Neither these services nor the stock of natural capital that provides them are adequately valued compared to social and financial capital. Despite being fundamental to our wellbeing, their daily use remains almost undetected within our economic system. The financial sector at Rio+20 presented a declaration⁷ based on the proposition that current use and economic accounting for natural capital is not sustainable and should be implemented in future governance strategies for economic, environment, and energy policies as a complement to the Bretton Woods system of monetary management that established the rules for commercial and financial relations among the world’s major industrial states in the mid-20th century. Given the work on natural capital accounting at Rio+20 and the enactment of these accounting procedures within the European Union, the private sector and governments will increasingly be called upon to understand and account for our use of natural capital and recognize the true cost of economic growth and sustaining human well-being today and into the future.⁸

A major step toward achieving the vision for natural capital accounts occurred recently when the UN Statistical Commission of the System for Environmental and Economic Accounts (SEEA) adopted them. The SEEA provides an internationally agreed method, on a par with the current System of National Accounts (aggregate measures in the national accounts

often reported simply as gross domestic product or GDP), to account for material natural resources such as minerals, timber, and fisheries. The adoption of the Central Framework of the SEEA has eliminated a major barrier to widespread use of natural capital accounting. The challenge now is to build capacity in countries to implement the SEEA and to demonstrate its benefits to policy makers.

The interaction between Eurostat and national statistical offices of EU Member States was formalized in 2011 with the adoption of Regulation No 691 on European Environmental Economic Accounts.⁹ It requires member states to report data and accounts on air emissions, taxes related to the environment, and material flows from 2012.¹⁰ Eurostat is also constructing environmental accounts expressed in physical and monetary terms, and asset accounts, as a step toward developing a regional SEEA. The rationale for including these observations on natural capital accounts is that, over the decade ahead, the EU and other nations will be implementing accounts that will, of necessity, require governance arrangements to give them credence, including those discussed in the paper and in this session of NPAC 2013.

CONCLUDING OBSERVATIONS

Oran Young's paper for NPAC 2013 raises significant issues that will, of necessity, need to be incorporated into the evolution of Arctic ocean governance and the challenges and opportunities arising from the substantial changes that are the consequences of climate and other environmental changes as well as changes from globalization that impact socioeconomic conditions in the Arctic region. This commentary added two themes deemed important enough for discussion at the conference:

1. A framing of strategies deemed important to the evolution of Arctic governance and the challenges and opportunities, based on the proposition that governance systems will, of necessity, need to focus on three inexorably interconnected elements essential to modern societies: the environment and natural resources; energy sources and enduses, and global economics and national economic policies, within which is nested a projected substantial increase in the middle class globally, substantial increases in the demand for natural resources, and major shifts in economic and political influence.

2. The role and increased importance of natural capital accounts.

Young's paper and the observations of the commentators are likely to stimulate discussions on the evolution of Arctic Ocean governance and the challenges and opportunities that are arising from substantial changes occurring within and across the Arctic region both for the eight Arctic nations and for many other nations with a substantive interest in the Arctic.

Notes

1. State of the Arctic Coast 2010: A Scientific Review and Outlook (<http://ipa.arcticportal.org/files/sac/state%20of%20the%20arctic%20rept.pdf>)
2. See Global Energy Assessment for more detailed information and assessments of the future of global energy sources and uses: <http://www.globalenergyassessment.org>
3. <http://www.state.gov/secretary/rm/2012/10/199330.htm>
4. <http://www.un-documents.net/ocf-03.htm>
5. Christopher Spencer, former senior advisor, international organizations, Canadian Department of Foreign Affairs and International Trade, in an analysis in Global Issues of the Twenty-First Century and United Nations Challenges. <http://www.global-challenges.org/11environment-science.html>
6. <http://www.cfr.org/global-future-trends/nic-global-trends-2030-alternative-worlds/p29631>
7. <http://www.naturalcapitaldeclaration.org/the-declaration/>
8. Much of this is report in World Bank documents, such as: <http://web.worldbank.org/WBSITE/EXTERNAL/TOPICS/EXTSDNET/0,contentMDK:23168586~pagePK:64885161~piPK:64884432~theSitePK:5929282,00.html>
9. http://eu2013.stat.gov.lt/uploads/documents/247_EEEA_status_25July.pdf
10. Leonardo Mazza and Patrick ten Brink, "Improving Measurement to Manage Through the 7th EAP: The Role of Indicators and Accounting," Institute for European Environmental Policy, 2013.

Comments on Chapter 4: Canadian perspective

Bernard Funston

OVERVIEW

A relatively small percentage of Arctic marine areas are high seas located beyond the sovereignty or sovereign rights of the six littoral Arctic states (Canada, Denmark, Iceland, Norway, Russia and the United States of America). To date, the level of activities in these areas is low in real and relative terms.

The Arctic Ocean and its bordering seas are affected by activities that occur directly in the Arctic marine and terrestrial environments. Most of these activities do not occur now in the central Arctic Ocean and are therefore within areas subject to the jurisdiction of one or more Arctic states. Such areas are regulated and managed by an Arctic state alone or in cooperation with one or more of the other Arctic states.

However, there is another important category of activities to consider, namely those that primarily take place outside the Arctic but have significant impacts on Arctic marine and terrestrial environments. Anthropogenic activities associated with climate change, transboundary pollutants, demand for new renewable and non-renewable resources and new shipping routes, as well as tourism, are a few examples in this category. In other words, the Arctic sea ice is not melting primarily because of activities taking place in the Arctic. Nor is the search for oil and gas and minerals being driven by demand in local markets in Arctic communities. Furthermore, fundamental changes in the Arctic marine environment will have consequences and impacts in non-Arctic regions.

Therefore, in speaking about “Arctic Ocean governance,” it is important to avoid confusion about which dimension of “governance” is really the object of discussion. This is particularly true when grappling with the challenge of engaging non-Arctic states on appropriate issues in relation to the Arctic. Involvement of non-Arctic states on matters falling within the sovereign jurisdiction of one or more of the Arctic states is fraught with the same sorts of issues as the reciprocal proposition, namely Arctic state involvement on matters falling within the sovereign jurisdiction of one or more non-Arctic states.

Oran Young’s paper seems to acknowledge these challenges and

therefore looks more toward issues relating to the “commons” or, in other words, matters that require cooperation across lines of jurisdiction.

Consequently, one might ask: “Are issues that arise outside the Arctic, but have serious impacts on it, better addressed in an Arctic forum that has mechanisms for inclusion of non-Arctic states, or is it more appropriate to create a non-Arctic forum that accommodates Arctic stakeholders?” This question seems to be at the heart of Young’s paper. Corollary questions relate to how best to structure whatever forum is chosen in order to generate effective policy discussions on these globally important Arctic issues of a trans-regional nature.

INTRODUCTION

As usual, Oran Young has prepared a paper on the evolution of Arctic Ocean governance that is well-researched, well-written, insightful and thought-provoking. It contains informative and helpful descriptions and analyses of the principal components of the Arctic governance system and of issue-specific arrangements.¹ This commentary is offered in the spirit of constructive dialogue in relation to the complex and important issues raised in his paper.

As was the case with his paper for NPAC 2012, this 2013 iteration attempts to lay the foundations for “creating an informal mechanism outside the Arctic Council to provide a venue for informal consultation between Arctic states and key non-Arctic states regarding issues that involve links between the region and the broader international system.”

In dismissing the Arctic Council as inadequate to incorporate the voices of non-Arctic states on trans-regional issues, Young suggests that a new informal consultative mechanism can prove “both politically feasible and functionally effective.”

This commentary briefly examines these propositions and others and concludes that the manner in which he framed the issues, and the recommendations for possible ways forward, while superficially attractive, are fraught with practical and political difficulties. China, Japan, India, South Korea, Singapore, Italy and, on a conditional basis, the EU, were only admitted to the Arctic Council in May 2013; it is premature to dismiss the utility of the council as a forum to engage the key non-Arctic states on policy issues of a trans-regional nature.

Young's paper also argues for a new common narrative or discourse based on sustainable development concepts, to add coherence and effectiveness to the Arctic Ocean governance system. He suggests that there is a need for a general set of principles to guide behavior. This commentary also briefly examines this proposition in the context of global political economy and suggests that such an approach would currently be ineffective in the absence of a similar discourse being adopted and implemented globally.

THE RECIPROCITY ISSUE

Young's papers in NPAC 2012 and 2013 seem to call for a greater role for non-Arctic states in governance and policy matters within Arctic marine areas, based on the rationale that these non-Arctic states have valid rights and interests in international law in high seas areas of the Arctic Ocean.

However, the reciprocal proposition seems to be less well developed in these papers, namely that Arctic states have rights and interests in relation to governance and policy matters in non-Arctic regions because activities in these non-Arctic regions appears to be driving some of the most significant changes taking place today in the Arctic marine environment.

In neither case are the challenges just the problems of the commons. Indeed, in the case of the Arctic, the major drivers of change appear to be by products of state-based economic and industrial activities associated with meeting the needs of the planet's burgeoning population.

Nonetheless, in my view, Young is correct on a fundamental issue: there is an urgent need for some sort of comprehensive forum among Arctic and non-Arctic states for coordinated policy discussions. His paper seems to identify as the main task for such a policy forum the better integration of the elements of the existing Arctic Ocean regime complex. However, he does not really go into detail as to what a greater role for non-Arctic states in the Arctic Ocean would entail. Nor does he touch upon two equally important reciprocal issues: (i) how could such a forum assist in the better integration of elements of international/global ocean (and terrestrial) regimes, and (ii) what role could Arctic states play in this regard?

DISCUSSION

What is the Issue and How Should We Think about Arctic Governance?

Oran Young begins his paper by asking two questions: What is the issue, and how should we think about Arctic governance? He characterizes the underlying issue as being whether the Arctic will continue to be a zone of peace or become a zone of conflict, as suggested by some commentators. I certainly agree with his conclusion that “the Arctic is on track to remain a peaceful region during the foreseeable future.”

On the matter of Arctic governance, the paper observes that “[g]overnance is a social function centered on steering societies toward socially desirable outcomes and away from socially undesirable outcomes.” He encourages us to think about “the pursuit of governance without government,” rather than just about state-centric systems. These matters are discussed later in this commentary.

Elements of the Arctic Regime Complex

A number of factors are identified in his paper as contributing to the persistence of peaceful conditions in the Arctic. One of the important factors in this regard, he suggests, “is the emergence of an increasingly effective Arctic Ocean governance system” referred to in the paper as a “regime complex.” This is described as having three principal components:

- “A growing collection of international arrangements²,”
- “The Arctic Council and its various working groups,” and
- “The rights and responsibilities of non-Arctic states regarding Arctic issues and the need to develop a forum to facilitate constructive engagement between the Arctic states and interested non-Arctic states.”

As stated above, this portion of his paper, and the examination of issue-specific arrangements that follow it, provides a very informative and helpful analysis.

RESERVATIONS

While agreeing with his conclusion that the Arctic will be a zone of peace for the foreseeable future, I have reservations about framing the central issue as Arctic peace or conflict. The most pressing current issue, in my view, is not what the Arctic teaches us about peace or conflict within the region, but rather what it teaches us about political economy just about everywhere else on the planet other than the Arctic.

Similarly, I am not comfortable with the notion that analyzing “the determinants of regime dynamics” in relation to “the evolution of Arctic Ocean governance” should be the major focus for “students of international regimes.” Arguably, the level of activity in the Arctic Ocean has been overstated, especially in areas of its high seas. The level of angst around gaps in the Arctic Ocean governance system is largely anticipatory and this can obscure and misdirect our energies at a time when we should be looking further afield.

In my view, the fundamental issue is the sustainability and practicality of the concept of “sustainable development” itself, when viewed in a global context. The Arctic is simply a new theatre in humanity’s global search for resources and support systems.

Consequently, to the extent that the changing Arctic invites us to ask “how we should think about Arctic governance,” I would answer “let’s think less about activities in the region itself and more about governance elsewhere, and about the non-Arctic drivers that are changing the Arctic in advance of development.” Young’s paper uses the analogy of the Arctic being a canary in a mine. Indeed, I have used this analogy myself. However on further reflection, the analogy might not be appropriate because again it encourages us to focus on a problem, like coal gas in a mine, which is originating and building from inside the region. A better analogy might be the Arctic as a global barometer. The pressure systems and impending storms are really creeping into the Arctic from outside the region.

Sustainable Development Discourse

Young’s paper provides a compelling argument for the need to establish an appropriate “common narrative or discourse to guide the evolution of Arctic Ocean governance system.” His interesting observations on “the narrative of embedded liberalism” and the discourse of “neo-realism” are a

prelude to recommending a discourse of sustainable development to guide our approach to the Arctic. However, he recognizes that the challenges facing a sustainable development discourse in relation to the Arctic seem to be “the same challenges that arise in efforts to use this discourse in other settings.”

In my view, these challenges are linked in many ways to the growth paradigm underlying most national economies in the world. Consumption is a key element of this growth model. Against a backdrop of ongoing economic growth, one might ask, “How well is the planet tolerating the economy at its current size?” The answer seems to be, “Not very well.” These issues are examined in depth by McIntyre, Murray and Funston in their 2012 paper “If not growth, then what?;”³ some of the main points put forward there are summarized below:

- Arguably, the level of economic growth in an economy is the benchmark statistic with which economic, and perhaps even political performance are measured. At the same time there are many indicators that Earth’s natural systems have a finite capability to withstand ever-greater economic activity.
- The focus on growth among economists and political leaders is broadly evident. Indeed, there is considerable focus on economic growth in almost every economy in the world. There does not seem to be much political tolerance for slow-, no-, or negative-growth national economies and there is precious little guiding thought on how to operate such economies successfully.
- The most recent accounting of world gross domestic product (GDP) indicates it stands at about USD \$72 trillion. Although some think this is large in relation to the planet’s ability to tolerate it, it is expected to grow substantially. There are a few key reasons for this. First, world population, which recently reached the seven billion mark, is expected to grow to 10.1 billion by the end of the century. Growth in world GDP is needed to provide for the coming additions to world population. Second, there is a general desire in the population for ever-greater consumption per capita. Growth in GDP per capita is required to achieve this. Finally, output from the world economy is distributed very unevenly across countries. Some are very poor, and their inhabitants would like to catch up to living standards in developed countries; this would require output per capita levels

similar to the richer countries. Growth in GDP is occurring in some countries to achieve this. These three pressures – more people, more consumption per capita, and catch-up among the poor – could make the world economy much larger than it is now. The IMF's GDP projections to 2015 indicate a compound annual growth rate of 4.5%, and its International Energy Outlook, 2011 bases its energy consumption projections to 2035 on a compound annual global growth rate of GDP of 3.4%.

- Few, if any, countries of the world have ever assessed their current level of consumption and decided it was enough. Rather, getting or retaining economic growth remains the main focus of almost every economy in the world. Economic growth seems to be fuelled by a deep-seated acceptance in many societies of the idea of indefinitely improving personal and social welfare, and in growing GDP to support this. Economic contraction, or negative growth as it is sometimes called, is generally regarded as undesirable. It tends to be associated with elevated levels of unemployment and declining standards of living, especially in countries with growing populations. In short, society seems to behave as if economic growth is available as alright to be pursued without question, and unreservedly.
- As an example of the stresses the planet faces McIntyre, Murray and Funston (2012) present the views of authoritative sources on five specific domains that are important to human welfare, and indeed, to human survival: the oceans, the fisheries, fresh water, food, and energy.
- The misalignment between growth expectations of economic models and the finite capacity of the planet to sustain such growth leads to a conclusion that the resources required to sustain human life are being degraded to a point that should warrant collective action. Economic growth scenarios seem to suggest that we face a growth-equity frontier that constrains humankind's choices and requires a fundamental shift in how humankind views economic success and productivity.
- The foregoing begs an important question. What happens to the size of the economy over the long term if it attempts to serve the three masters identified above: population growth, increases in standards of living for everyone, and catch-up for the poor? Conversely, what happens politically and socially if the economy can never be made

large enough to serve all three masters, and what should society focus on if this is the case?

- The Arctic appears to be next in line for development to feed the global human appetite for resources. Therefore, dealing with the associated international/global issues in the context of regional governance does not seem appropriate. Oran Young recognizes this in his paper, and this is perhaps, in part, why he rejects the Arctic Council as a body that can adequately address these larger international/global issues. Given this challenging context, what are the consequences for governance systems as humankind approaches the growth-equity frontier?

Governance and a Growth-Equity Frontier

As noted above, Young observes that “Governance is a social function centered on steering societies toward socially desirable outcomes and away from socially undesirable outcomes.”

Where are existing governance systems, in the aggregate, leading humankind? There appears to be a misalignment between human desires for ever-growing consumption in the face of the planet’s apparent finite capacity to tolerate economic activity. This leads to an important question. Can humankind develop adequate governance structures in time to deal with the misalignment between pursuit of economic growth and ecological welfare? This is surely the critical question for the 21st century. This question is also important because sustained economic growth is likely to lead to a broad range of significant challenges and choices for humankind (e.g., political, economic, social, technological and ecological choices) that will be difficult for existing governance mechanisms and individuals to handle.⁴

An Appropriate Forum for Discussing Trans-Regional Issues Associated with the Arctic

As climate change, trans-boundary contaminants, resource demands, expansion of international transportation routes, thermohaline circulation changes, loss of biodiversity, ecosystem changes and other issues illustrate, many of the most profound influences in relation to Arctic change cannot be confined by clear geographical lines. It is precisely this situation that has

both attracted external attention to the Arctic Council and placed pressure on it to provide leadership and responsive attention to Arctic-relevant issues.

I am in complete agreement with Oran Young's proposition that one area for more progress in Arctic affairs is in relation to the "rights and responsibilities of non-Arctic states regarding Arctic issues and ...the need to develop a forum to facilitate constructive engagement between the Arctic states and interested non-Arctic states..." He grudgingly acknowledges that "[o]ne way to address this matter is through the mechanism of (permanent) observership in the Arctic Council."

However, Young expresses considerable doubt as to the ability of the council to be an effective forum for engaging non-Arctic states on trans-regional issues associated with the Arctic. He notes that the council is not established by a legally binding instrument and has neither the legal status of an intergovernmental organization nor the authority to make binding decisions on policy. He concedes that "The Arctic Council has proven more effective than many of those present at the creation in 1996 anticipated... [b]ut this is not because the council has acquired the authority to make decisions about matters of Arctic policy."

His paper states that AMAP and CAFF have carried out much of the work of the council but makes no mention of PAME, SDWG, EPPR or ACAP,⁵ the other Arctic Council working groups.

PAME, for example, was instrumental in the development of the Regional Program of Action, which uses "a step-wise approach for its development and implementation and is the regional extension of the Global Programme of Action for the Protection of the Marine Environment from Land-based Activities (GPA)."⁶ PAME developed the Arctic Marine Strategic Plan (AMSP), which considers innovative approaches to integrated oceans management as a means to support effective governance for the Arctic marine environment through cooperative, coordinated and integrated approaches. PAME also conducted the Arctic Marine Shipping Assessment (2009), which is a seminal piece of work. Furthermore, PAME recently conducted the Arctic Ocean Review (AOR) project, which reported on global and regional measures in place for the conservation and sustainable use of the Arctic Ocean. The AOR report was presented to ministers in Kiruna, Sweden in May 2013, to provide guidance to Arctic states on strengthening governance in the Arctic through a cooperative, coordinated and integrated approach to the management

of the Arctic marine environment. Arctic Council Ministers approved its recommendations and requested appropriate follow-up actions, including regular reports on progress at subsequent ministerial meetings. Indeed, one of Young's suggestions is actually recommended in similar terms in the AOR final report: "The first step is to map the full range of functionally and spatially specific arrangements that apply to the Arctic and to undertake an assessment of the ways in which these arrangements currently interact with one another or can be expected to do so during the foreseeable future."

It is fair to say that the Arctic Council has indeed been inward looking for much of its existence. However, the issue of non-Arctic state involvement in the council was not avoided because of disinterest but primarily because of the complexity of the political and trans-regional issues involved. China, India, Japan, South Korea, Italy, Singapore and on a conditional basis, the EU, were all finally admitted to the council as observers in May 2013.

Nonetheless, Young concludes that "What is clear, however, is that the council, a regional body dominated by regional interests, does not offer a suitable venue for addressing issues arising from the links between the Arctic as a region and international society as a whole."

I would respectfully disagree. This is not at all clear. The evolution of the council has been dramatic since it was created in 1996. Its emergence as a true policy forum really only began after 2006, partly because the Arctic until that time was a peripheral, rather than mainstream, issue in many national capitals, including in the Arctic states. The emerging trans-national issues are arguably what moved the council from the periphery to the mainstream almost overnight.

China, for example, has been clear during its efforts to join the council as an observer that it wants to discuss trans-regional Arctic issues that are equally important to Arctic and non-Arctic states. It is not difficult to imagine ways that mechanisms could be quickly developed in the council to include trans-regional issues. A few suggestions were included in my 2012 commentary.⁷

Having all but rejected the Arctic Council as a suitable forum to engage the voices of non-Arctic states, Young proposes "an informal mechanism outside the Arctic Council to provide a venue for informal consultation between the Arctic states and key non-Arctic states regarding Arctic issues that involve links between the region and the broader international system." He also proposes some ways to structure this forum "that may prove both

politically feasible and functionally effective.”

The components of this proposed forum are as follows:

- It would “address needs for governance featuring clear links between the Arctic and the outside world.”
- It should “operate as a coalition of the willing.”
- It would “engage in policy dialogue regarding matters of mutual concern” it would “welcome participation on the part of all those with significant stakes in the links between the Arctic and the outside world...this means major states.”
- “...There would be no formal requirements for membership” so stakeholders such as “major corporations, environmental organizations, coastal communities, and indigenous peoples’ organizations” could also interact in this informal environment.
- It would not have “authority to make formal decisions,” and this would “alleviate concerns about rights to participate and rules of procedure.”
- It should “foster a sense of community among key players.”
- It could “allow for candid, off-the-record discussions of contentious or potentially contentious issues.”
- It would need to be “highly adaptable,” including on “terms of participation, agenda formation and mode of operation.”
- “...It would lack a fixed mandate.”

These components appear to be neither “politically feasible” nor “functionally effective.” Such an informal forum seems to suffer from all the deficiencies Young identifies in respect of the Arctic Council, and more. Is such an informal consultative mechanism likely to have the influence, authority, financial means or technical capability to initiate, monitor, enforce or otherwise carry out the necessary governance activities in respect to the Arctic Ocean or any of the key trans-regional issues? This seems highly unlikely.

Nor does such a new informal consultative forum appear particularly attractive from a state perspective, Arctic or non-Arctic. Earlier in his paper Young encouraged us to think about “the pursuit of governance without government.” He explained that “...it is important, especially in thinking about governance at the international level, to recognize that the

presence of a government is not only not sufficient to ensure that needs for governance will be addressed; it is also not necessary to meeting challenges of governance in some settings. Governments regularly fail to perform the social function of governance effectively...”

It is difficult to image how the informal consultative forum proposed in Young’s paper might work in practice. The lack of an agenda, procedures, membership rules and so on seem ill-suited to inter-state dialogue. To paraphrase an observation from his paper in a different context: there is nothing automatic about the achievement of harmony among multiple stakeholders, especially as the relevant space becomes populated with a larger and larger number of discrete interests and perspectives.

CONCLUSION

In conclusion, it is my view that the Arctic Council still holds the greatest promise as a forum to discuss trans-regional issues associated with the Arctic. It is premature to dismiss its potential given that key non-Arctic states were admitted as observers only in May 2013. Whichever forum might emerge as the front runner, however, further creative thinking will be required to find a structure and process that is “both politically feasible and functionally effective.” Such a forum is urgently needed and I believe this is the key message underlying Oran Young’s excellent paper.

Notes

1. See for example his discussion on pages 7-17.
2. See for example the recent Arctic Ocean Review final report tabled with Arctic Council Ministers in Kiruna, Sweden in May 2013. This Arctic Council project examined some of the international and regional instruments relating to management of activities in Arctic marine areas and proposed some opportunities for further collaboration.
3. McIntyre, Murray and Funston. 2012. “If not growth, then what?” in *International Journal of Business Governance and Ethics*, Vol. 7, No. 2, pp. 96-117.
4. Ibid.
5. The full names of these working groups are: Arctic Monitoring and Assessment

Program (AMAP); Conservation of Arctic Flora and Fauna (CAFF); Protection of the Arctic Marine Environment (PAME); Sustainable Development Working Group (SDWG); Emergency Preparedness, Prevention and Response (EPPR); and Arctic Contaminants Action Program (ACAP).

6. See: <http://www.pame.is/>

7. Funston, Bernard W. 2013. "Commentary on Listening to the voices of Non-Arctic states in Arctic Ocean governance," pp. 315-27 in Oran R. Young, Jong Deog Kim, and Yoon Hyung Kim, eds., *The Arctic in World Affairs: A North Pacific Dialogue on Arctic Marine Issues*. Seoul: Korea Maritime Institute.

Comments on Chapter 4: Chinese perspective

Kai Sun

It has become a cliché to say that the Arctic is changing rapidly. The consequences of the rapid changes in the Arctic are huge. In order to respond to those changes effectively, the existing and future governance system in the Arctic must be flexible, adaptive, and able to meet present and future challenges. Oran Young's paper "The Evolution of Arctic Ocean Governance: Challenges and Opportunities" did a terrific job in defining and analyzing the issues, elaborating the bigger picture of the Arctic governance system, and also offering some insightful and innovative policy prescriptions for the future. In the following paragraphs, I will comment on the main points of Young's paper from a Chinese perspective.

UNDERSTANDING THE ISSUE: FROM "RACE IN THE ARCTIC" TO "ZONE UNDER RULE OF LAW"

Attention to the Arctic waned in world politics after the end of the Cold War or, to be exact, after the Murmansk speech by Mikhail Gorbachev in October 1987. In that speech, the Arctic was conceived of as a "zone of peace," which made few news headlines during the following years. Two decades later, the Arctic was "rediscovered" by the international society, catalyzed by the "flag planting case" in 2007 by Russian scientists. Newspapers, policy journals, and even academic monographs, such as the "Arctic Meltdown" (Borgerson 2008), "The Arctic Gold Rush" (Howard 2009), "The Scramble for the Arctic" (Sale and Potapov 2009), "Who Owns the Arctic?" (Byers 2010), and others, came out in short order. But more prudent scholars, such as Oran Young, observed that the Arctic is a "zone of peace" (Young 2011). There are several reasons behind this observation: most of the Arctic's resources lie within undisputed jurisdictional boundaries of the five Arctic coastal states; major outsiders abide by the rules governing the Arctic; well-defined rules exist for businesses to operate in the Arctic, and the Arctic gold rush has cooled and become more realistic in light of the harsh realities in this area.

The main changes in the Arctic can be summarized as the "three Ds": drivers, drama, and discourse. The changes in the Arctic are brought forth

by new drivers, including climate change and economic globalization, which are totally different from previous changes in scale, speed and consequences. The Arctic is no longer the scene of confrontation among a few major powers. It has become an arena for competition and cooperation with a large number of states and non-state actors contributing and playing unique roles. The discourses in the Arctic have also changed from confrontation to cooperation, from Arctic states to an Arctic society that is more inclusive of outsiders and many actors.

THE EMERGING ARCTIC GOVERNANCE SYSTEM: FROM LOCAL TO GLOBAL

There is no single and comprehensive Arctic treaty, but the Arctic is not a “governance vacuum.” A variety of functional regimes at different levels exist in this region. The most salient ones are the environmental regimes that have been cited frequently as examples of east-west cooperation during the Cold War (Young 1992). According to Young, there exists in the Arctic a regime complex that covers most issue areas in the region. “There is no shortage of functional arrangements that have developed to address specific issues of Arctic Ocean governance,” with UNCLOS as the constitutive foundation. Young sees the regime complex of Arctic Ocean governance as including three components: international arrangements for functional issues areas, including those in the Arctic; regional arrangements with the Arctic Council at the forefront; and arrangements that deal with non-Arctic states regarding Arctic issues.

Regimes and regime complexes are never static (Young 2010). With the changes now occurring in the Arctic, the regimes and regime complexes governing specific issues are also changing. As the prospects for the opening of Arctic waters become brighter, Young believes a mandatory Polar Code and regulatory regime dealing with ship-based tourism are top priorities for the development of functional arrangements. At the international level, the International Maritime Organization (IMO) has developed a set of Guidelines for Ships Operating in Ice-covered Waters, and those guidelines are still being revised in response to pressing changes in the Arctic.

ROLE OF NON-ARCTIC STATES: FROM BEHOLDER TO STAKEHOLDER

The drivers that are changing the Arctic, both climate change and economic globalization, mainly come from outside the Arctic. The consequences of these changes are influencing both Arctic and non-Arctic states. This is one of the reasons for non-Arctic countries' interest in Arctic issues. Other reasons include, but are not limited to, business opportunities from the opening of Arctic passages, the availability of natural resources in the Arctic, and the richness of biodiversity in the region. This is also true for China's active participation and presence in the Arctic during the past two decades.

Arctic governance is also changing, especially regarding the Arctic Council's treatment of non-Arctic countries. The legitimacy of non-Arctic countries' participation in scientific research in the region can be traced back almost 100 years. With the opening of the Arctic, the participation of non-Arctic states is needed to address the pressing challenges the Arctic faces today. Thus, the voices of non-Arctic states should be listened to (Young, Kim, and Kim 2012). The more inclusive approach of the Arctic Council, clearly shown by its decision in 2013 to accept six new observer states, is a welcome gesture in this regard.

MECHANISMS FOR MUTUAL COMMUNICATION: FORMAL PLATFORMS AND INFORMAL CHANNELS

According to Young both in this paper and in many of his previous writings, it is not possible to exclude non-Arctic states' legitimate interests and participation in Arctic affairs. But the question is how to foster mutual understanding between these two groups. More channels should be opened for enhanced communication between Arctic and non-Arctic states. The Arctic Circle, initiated by Iceland's President Olafur Ragnar Grimsson, is a healthy start.

Young notes that "the remit of this mechanism would be to address the needs for governance featuring clear links between the Arctic and the outside world" and that this is evidenced in the mission of the Arctic Circle "to facilitate dialogue and build relationships to address rapid changes in the Arctic," and to "include a range of global decision makers from all

sectors, including political and business leaders, indigenous representatives, non-governmental and environmental representatives, policy and thought leaders, scientists, experts, activists, students and media.”

IMPLICATIONS FOR CHINA’S PARTICIPATION IN THE ARCTIC: AMBITIOUS BUT CAUTIOUS

China’s growing interest in the Arctic is evidenced in its increased involvement in the Arctic research, greater investment in Arctic resources, enhanced bilateral and multilateral diplomatic relations with the Arctic states, and expanding connections with the Arctic through informal channels. China’s interest in the Arctic mainly includes scientific research on environmental issues, economic interests in shipping routes, and the exploitation of resources. China is clear that the realization of those interests must be consistent with international laws governing the Arctic and the domestic laws of the Arctic states.

As the Arctic governance system evolves, so does China’s participation in Arctic affairs. China now is participating in Arctic affairs not only through formal (intergovernmental) channels such as the Arctic Council and other intergovernmental organizations in the region, but also through a variety of informal channels such as bilateral dialogues between China and individual Arctic states. Sino-U.S. Arctic-related issues have been discussed since 2010 and remain on the list of issues in economic and strategic dialogues between China and the United States. The first China-Nordic Arctic Cooperation Forum was held in June 2013, and more informal dialogues, such as ones between China, Russia and Canada, have been held in the past several years, mainly through the initiation of research centers in Chinese universities. China has also enhanced its investment in Arctic states through joint projects on minerals and other natural resources.

China’s involvement in the Arctic has sparked articles with such titles as “The Chinese are coming to the Arctic,” “China Joins the Arctic Play,” “The Dragon Looks North,” and so on. It seems that most of those commenting on China in the Arctic are journalists; very few of them are prudent scholars in the field. As China’s interest and influence in the Arctic grow, the country is nevertheless cautious about its Arctic initiatives.

To sum up, Young’s analysis of the changing Arctic governance system offers insightful ways for China to participate in the Arctic. China’s

participation also must adapt to ongoing changes in the governance of the Arctic.

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Comments on Chapter 4: Japanese perspective

Fujio Ohnishi

INTRODUCTION

Oran Young's paper covers broad aspects of Arctic governance, and his analysis is helpful and insightful for students of international relations and observers wanting to obtain a better understanding of the ongoing trends in Arctic international relations.

Put briefly, the major argument in his paper is that Arctic Ocean governance takes the form of a regime complex, which is further developed from his previous year's paper on Arctic governance. He identifies three components of Arctic Ocean governance: a growing collection of international arrangements dealing with functionally defined issues; the role of the Arctic Council, and the rights and responsibilities of non-Arctic states regarding Arctic issues.

Among the many articles dealing with Arctic governance, the distinctive feature in his analysis is the inclusion of the interests and concerns of non-Arctic states as an important component of the current Arctic governance system. This is striking for non-Arctic states. Accordingly, it is difficult to oppose his suggestion for the establishment of a consultative forum to facilitate constructive engagement between the Arctic states and interested non-Arctic states regarding Arctic Ocean governance.

How should the Japanese government respond to his argument? The Japanese government appreciates the achievements of the Arctic Council as an effective high-level forum in the field of environmental protection and sustainable development in the Arctic. More recently, it also sees the council as an important instrument that helps to deal with the regional impact of climate change in the Arctic. Thus, it has sought to obtain observer status, and its application was approved at the ministerial meeting in Sweden 2013.

However, the Japanese government has not formulated a more detailed view on Arctic governance. So, it is difficult to document the government's perspective toward Arctic governance in this commentary. Instead, my commentary will address three topics Young identifies for discussion in this session:

1. Which issue areas can non-Arctic states participate in for governance

- of the Arctic Ocean in the near future?
2. What is the impact of increases in bilateral cooperation on Arctic governance?
 3. Is the Arctic region in a condition of stability and peace not because Arctic Ocean governance has evolved, but mostly because there are no significant challenges to the “Arctic regional order?”

WHICH AREAS CAN NON-ARCTIC STATES PARTICIPATE IN FOR GOVERNANCE OF THE ARCTIC OCEAN IN THE FUTURE?

As Young argues in his paper, one of the distinct features of regional governance in the Arctic is that it consists of a collection of issue-specific or functional arrangements, which he argues constitute a regime complex. The issue areas under Arctic governance are gradually expanding. The role of the Arctic Council is significant in this regard because it provides a high-level forum where new arrangements can be discussed and formulated (e.g., the 2011 Arctic Search and Rescue Agreement, and the 2013 Marine Oil Pollution Preparedness and Response Agreement).

The first agenda item that this commentary submits as a point for further discussion concerns possible issue areas in which non-Arctic states can participate. This point is not spelled out in Young’s paper, which may have been intentional as a means of limiting possibilities.

From the perspective of Japan and surely those of other non-Arctic states, this is one of the most important concerns for their future involvement in Arctic governance. To have this discussion, it is important to acknowledge that non-Arctic states hold certain rights and responsibilities under the law of sea, which applies to the Arctic Ocean. This acknowledgement naturally leads to an understanding that non-Arctic states should be included as legitimate stakeholders in future institutionalization of issue areas pertaining to their rights and responsibilities in the Arctic.

As a matter of fact, however, there are few remaining issue areas in this regard that are not covered already by the web of existing issue-specific arrangements for the Arctic. Most of these issue areas are in existing global and regional agreements, or have already been placed on the agenda. These include biodiversity, fishery management, marine and air pollution, and science.

A few exceptions are: management of fish stocks in the Central Arctic Ocean; ship-based tourism in the Arctic Ocean; and exploitation of resources in the seabed under the high seas of the Arctic.

WHAT IS THE IMPACT OF INCREASES IN BILATERAL COOPERATION ON ARCTIC GOVERNANCE?

The second item this commentary suggests for discussion is the impact of bilateral cooperation on Arctic governance, which is mainly multilateral in nature. One of the current tendencies of international relations in the Arctic is an increase in bilateral cooperation in such forms as free trade agreements between Arctic and non-Arctic states. This tendency may accelerate with further participation by non-Arctic states in the Arctic region. Will the increase in bilateral cooperation interfere with multilateral cooperation?

To date, there have been no such signals. However, it is theoretically possible for a country that complains about the current governance system to make use of bilateral cooperation in an attempt to encroach on existing multilateral cooperation. Even without such an intention, increases in bilateral relations diversify the current pattern of international relations in the Arctic, which is based on multilateral relations. The diversification in patterns of international relations will make Arctic governance more complicated. In a worst-case scenario, it might lead to the decreased effectiveness of Arctic governance. The impact of increases in bilateral cooperation on Arctic governance was not discussed in Young's paper. The impact of increases in bilateral cooperation is further discussed in the next section.

HOW ARE CURRENT INTERNATIONAL RELATIONS IN THE ARCTIC PERCEIVED?

The third topic this commentary addresses is a counter-argument to Young's perception of the modes of international relations in the Arctic. I agree with his observation that the Arctic is on track to remain a peaceful region with few conflicts for the foreseeable future. He called the current Arctic a "zone of peace," citing the famous phrase of Mikhail Gorbachev,

although he provides no explanation about whether the word “peace” means merely the absence of war or more than that. He probably intends the latter, namely that peace means not only the absence of war, but also the existence of a cooperative relationship among states. I agree that the Arctic is a peaceful region in the sense that it is marked by stable relations among the Arctic states.

However, I disagree with his view on the major force for peace in the Arctic. According to Young, the major force is the development of a regional governance system, that is, a regime complex for Arctic Ocean governance. But is this argument persuasive? There is no single nexus linking the evolution of Arctic governance to the diffusion of security concerns of the Arctic states, especially in terms of (psychological) military threats.

According to my view, the Arctic is in a condition of peace and stability mainly because there are no significant challenges to the current version of the Arctic regional order.¹ This order consists of a pattern of international activities that sustains four major goals: 1) the eight Arctic states’ membership as members of international society, 2) maintenance of rules under the United Nations Convention on the Law of Sea and other relevant international agreements, 3) the absence of war secured by the overwhelming dominance of the United States in terms of the capability of projecting its armed forces into the Arctic Ocean, and 4) a shared understanding of functional fields where the Arctic states can cooperate (e.g., environmental protection and sustainable development with a special preference for indigenous peoples).

The regional order perspective is different from the discourses of realists and liberals, in one of which Young’s view falls. This view is based on the assumption of an international society approach and possesses two advantages as an explanatory framework for international relations in the Arctic. The first advantage is to provide a broader view of Arctic international politics than the realists’ military-focused view and the liberals’ governance-focused view. The regional order perspective can improve understanding by incorporating both security and environmental concerns.

The second advantage of the examination of the Arctic regional order is that it reveals the influence of great powers on present Arctic international relations. There is an inequality in power among the Arctic states that affects their relationships. In other words, the condition of Arctic

international politics is that of an “anarchical society of states,” a term coined by Hedley Bull. An anarchical society has no government; patterns of international activity are based on power politics among Arctic states.

The Arctic regional order perspective yields two main findings.² In the first place, the leading Arctic power is obviously the U.S., which has mainly worked as a regulator placing boundaries on the range of membership and issue areas for regional cooperation in the Arctic. As a matter of fact, the U.S. has persistently supported the Arctic Eight framework since the 1990s and has limited issue areas to environmental cooperation and sustainable development until recent years. The preference for Arctic Eight membership and the two issue areas, which constituted two profound goals of the Arctic regional order, displays continuity in international Arctic politics throughout the 1990s and the 2000s.

In the second place, this perspective produces insights about the role of small powers. Although I do not focus on it significantly in my draft paper, the initiatives for regional cooperation also arise from the incentives of small states to put themselves in a better place in the power constellation of international relations.

What, then, can we expect for the future development of the Arctic regional order? One of the inferences we can draw from this study is that the participation of non-Arctic states in Arctic politics would alter the present regional order by affecting membership and issue areas in the regional society of the Arctic. The participation of non-Arctic states will gradually develop in a direction toward bilateral relations rather than multilateral ones, and from environmental protection-oriented cooperation to business-oriented activities. This may pave the way for a new pattern of international activity in the Arctic. For example, China markedly moves toward this direction. If China continues in this direction, it may undermine the U.S.’s role as a regulatory player. This is because its regulatory power mostly affects multilateral activities, not bilateral ones. Thus, increases in bilateral cooperation could be a source of disorder. In other words, diversification in international relations in the Arctic necessarily affects the present regional order regulated by the US.

If multilateral cooperation moves to adjust its role in line with business-oriented cooperation, the regional disorder will be tempered. In any case, the Arctic regional society cannot close its door to new global players, if it expects to benefit from new possibilities. Closing the door irrationally would cause unnecessary tension with the outside world. As one such

attempt to prevent the closing of the door, Young's recommendation for the establishment of an informal forum is useful and will be effective.

Note

1. I defined the concept of Arctic regional order and of Arctic regional society in my recent conference draft paper, "The Struggle for Arctic Regional Order: Developments and Prospects of Arctic Politics," presented at the Slavic Research Center /Global COE International Summer Symposium "Border Studies: Challenges and Perspectives in the Twenty-first Century," August 2-3, 2013, pp.1-20. At this session of the SRC/GCOE conference, I discussed my view with other speakers (Shinji Hyodo, Rob Huebert, Lassi Heininen, Alexander Sergunin and Klaus Dodds). In this paper, I argued that the development of Arctic politics is the history of the Arctic regional order. I will attach this paper with this commentary. See also the program at <http://borderstudies.jp/en/events/symposia/index.htm>.

I developed the idea of Arctic regional order based on my previous studies: "Hokkyoku gabanansu no wakugumi wo meguru kobo: hokkyoku hyogikai no obuzabaa mondai" ("Struggle for the Framework of Arctic Governance: the Issue of Observer Status in the Arctic Council"), *Hokkyokukai Kiho (Arctic Ocean Quarterly)*, Vol. 15 (2012), pp.39-51; "Hokkyoku niokeru chiiki kyoryoku" ("Regional Cooperation in the Arctic"), *Hokkyokukai Kiho (Arctic Ocean Quarterly)*, Vol. 16 (2013), pp.45-53; Fujio Ohnishi, Hwang Sehee, Satoru Nagao, "Hokkyoku to Hihokkyokuken shokoku" ("The Arctic and Non-Arctic States"), *Hokkyokukai Kiho (Arctic Ocean Quarterly)*, Vol. 16 (2013), pp.54-60; "Hokkyoku no gunji doko" ("Military Trends in the Arctic"), *Hokkyokukai Kiho (Arctic Ocean Quarterly)*, Vol. 16 (2013), pp.61-70; and "Kikohendo to Hokkyoku mondai no Genzai" ("Climate Change and the Present Arctic Issues: Increasing possibilities of economic development and Pressure on the Response of the Japanese Government"), *Interijence repoto (Intelligence Report)* Vol.59, August issue (2013), pp. 34-49.

2. These two findings were also argued in my previous paper, "The Struggle for Arctic Regional Order: Developments and Prospects of Arctic Politics," *supra* note 2, pp.18-19.

Comments on Chapter 4: Korean perspective

Sung Jin Kim

INTRODUCTION

The Arctic is one of the most dynamic regions on the Earth for symbolizing climate change and the economic value it holds. Changes in the Arctic are opening a new era in areas of resources, energy, shipping, fisheries, tourism, science and research, gathering attention around the world, let alone the Arctic states. On the other hand, the region is presenting another task to be resolved by humanity, such as minimizing damages of new challenges on the long-preserved Arctic ecosystem and natural environment as well as protecting the tradition and culture of indigenous residents. Sustainable Arctic development became a universal issue, an important proposition for peaceful and happy lives and coexistence of mankind. An in-depth discussion on these problems requires wide participation and cooperation among all stakeholders, including non-Arctic states. For that reason, the Arctic Council recently decided to give permanent observer status to six non-Arctic states, including Korea, China and Japan as a way to expand cooperative dialogue.

Now, the Arctic, the last frontier of mankind, is fast becoming the center of global attention. Therefore, a venue for more progressive and practical discussion should be prepared to address various and complex issues involving the Arctic Ocean and neighboring areas. There are rising needs for sound governance where participating nations and non-Arctic states cooperate and pool their wisdom to make effective and reasonable decisions and put them into action. This year marks the third year of the NPAC, organized by the EWC and the KMI. Encouraged by dedication and efforts of these two organizations, representative experts from the Arctic states, non-Arctic states, government of indigenous people in the Arctic, universities, companies and NGOs participated in this conference. It has contributed a great deal to highlighting major issues and seeking future development direction.

Given that issues of the Arctic are inter-connected, it is agreed that no single problem could be addressed independently and they should be dealt with from a holistic and comprehensive approach. Under the principle of sustainable Arctic development and preservation of local culture and

tradition, the Arctic should be used for universal benefits of humanity with consideration to various issues. Most of all, scientific research and analyses, cutting-edge technology and financial resources should be in place. Therefore, there is an urgent need for more evolved governance to discuss various issues and build consensus.

In this paper, I would like to present my personal opinion on new governance formation based on the discussions over the last two years and the presentation by Professor Oran Young. I will also explain the future policy direction of Korea's Arctic policies after the nation earned permanent observer status at the Arctic Council this year.

GENERAL OPINION ON THE PRESENTATION BY PROFESSOR ORAN YOUNG

The presentation by Professor Young is in the same vein of that in the previous year. Regardless, this year's study showed a more a detailed analyses and practical considerations. He said, "Governance is a social function centered on steering societies toward socially desirable outcomes and away from socially undesirable outcomes." I think that definition is crystal clear and appropriate.

Overall, Professor Oran Young proposed a very comprehensive and meaningful agenda, such as the nature of Arctic governance system, its limitations and suggestions for future development. At last year's seminar, we agreed that the current Arctic Ocean governance was not a single top-down management system. It was rather a regime complex composed of the arrangements of the Arctic Council, UNCLOS, IMO and other international norms and regulations. The Professor said that a single governance, such as 'the Arctic Treaty' was almost impossible to be agreed on, given the time required to reach such an agreement, the failure case in 2008 and negative stance of major nations including the US. Based on this diagnosis, he logically expected that unique governance in soft law form will continue with the Arctic Council at the center.

In the same vein, he emphasized that it was high time that a new type of governance be set and tangible achievement be made based on previous discussions. While respecting roles of the Arctic Council last year, he stressed the importance of an informal discussion channel with non-Arctic states, which involves companies and NGOs if necessary.

As for relations with non-Arctic states, he said that interaction and cooperative dialogue should be expanded. Given the increasing number of issues to be discussed between Arctic and non-Arctic states on an equal footing, the expansion of observer status is meaningful. However, he was concerned that some of the Arctic states are sensitive to the potential impacts of new observers. This could complicate the problem-solving procedure of the Arctic states and weaken their vested rights.

I believe that the decision in May will prove to be beneficial rather than disruptive. It will provide opportunities for non-Arctic states to directly participate in the discussion of major Arctic issues as well as raise their voices, while clarifying the responsibilities and obligations of new observer states. In this way, climate change can be effectively responded and capabilities of possible user nations can be tapped. Therefore, it is important to encourage observer nations to join in the discussions of the Arctic Council and to present their opinions. Cooperative atmosphere between to the Arctic Council and observer states should be promoted for the common good based on common sense.

In conclusion, Professor Young suggested comprehensive principles or guidelines in discourse as followed:

1. A zone of peace through peaceful means
2. Arctic development based on stewardship
3. A manner respectful of right holders including indigenous peoples
4. Adaptive governance to maintain the resilience of Arctic systems

Likewise, a need of forming a new Arctic Ocean governance, as suggested by Professor Young, can be widely shared. The principles of the new governance are actually universal and practical guidelines. Now is the time to realize them step-by-step. As Dr. Young emphasized in his presentation, “the Arctic Ocean governance system should be developed in such a way that the whole is greater than the sum of the parts.” We all hope that the Arctic Council will play a central role in harmonizing various policy demand and capability of the international society for sustainable development of the Arctic Ocean. As an observer nation, Korea actively seeks cooperation opportunities within the Arctic Council and will prepare Arctic cooperation policies at the government level. These policies will include scientific cooperation with the Arctic Council and its members, basic direction towards mutual developments of economic and

social sectors as well as concrete cooperation measures. I hope cooperation between nations, international organizations and NGOs under the mutual vision will strengthen coordination for sustainable Arctic development. To strengthen its scientific research foundation, Korea plans to build a new ice breaker and intensify the functions of the research station in Svalbard. When these efforts are added to a more active bilateral cooperation with the Arctic Council members, Korea will contribute greatly to solving practical problems.

OPINIONS AND QUESTIONS ON THE PRESENTATION

1) First, professor Young predicted that the Arctic Council might take action with a binding force to regulations on bioprospecting, anti-terror responses and a ban on commercial fisheries. Given the current worries on the issue, his prediction is reasonable.

- However, in my opinion, since bioprospecting is a basic activity for bio analysis and research, excessive limitations could hamper the understanding of Arctic changes and development of green technology. Moreover, a ban on such activities should be consistent with the existing international regulations. I would ask for the Professor's opinion on that front.
- I understand that a possible ban on commercial fisheries is a heated debate. Commercial fisheries activities are being carried out in many parts of the Arctic Ocean. However, would the ban be limited to established activities or would it also include future commercial fisheries to come? Would it be directed at the entire types of fisheries or only certain types? I expect quite a controversy around what is to be banned. If the ban on commercial fisheries is for fisheries activities in the central Arctic Ocean including high seas where no commercial fisheries activities have so far been in place, can such a decision be made solely by the Arctic coastal nations? I think the issue should be reviewed from the perspective of international laws and would like to ask for your opinion.
- The ban on fisheries activities reminds me of serious disputes over the sea lion skins between the EU and Canada. This issue should be thoroughly reviewed from a harmonized approach, considering

the tradition and livelihood of indigenous peoples as well as legal aspects. In my opinion, it would be feasible to analyze the distribution and size of fisheries resources in detail and to prepare international regulations for sustainable development. May I ask for your opinion?

- On top of that, before imposing new regulations, enough research and impact analyses should be conducted first, while stakeholders including non-Arctic states, need to have a sincere and open discussion on the issue. For that matter, a consultative body may be required. I would like to ask for the Professor's opinion on this too.

2) Opinions and Questions on the Arctic Circle

- The Arctic Circle is proposed by *Iceland President Ólafur Ragnar Grímsson*. The Arctic Circle will be welcomed if it is thoroughly discussed and contributes to solving problems surrounding the Arctic. Many have pointed out that the scope of discussion is limited at the Arctic Council and various forums have been held to complement this. However, it is also true that there have not been enough discussions on problem-solving, strongly supported by the Arctic nations. Although the Arctic Circle is positive about the possible use of various capabilities and opinions to solve problems of the Arctic, it could duplicate efforts of the Arctic Council or reach decisions that contradict those of the Arctic Council. It is also unclear whether the Arctic Circle could enlist support of all Arctic nations. So, my question is how the Arctic Circle should harmonize with the established governance, particularly the Arctic Council, and whether such efforts can be effective.
- Moreover, according to the comprehensive principles suggested by Professor Young, the Arctic Circle may develop into a new form of Arctic governance. Then, how feasible is this?

3) In the conclusion, Professor Young presented comprehensive principles to clarify the direction of the Arctic governance and to strengthen its foundation. I agree with many of the principles, as would many nations and participants. Although the standards are not easy to achieve, they are very useful in building the foundation for governance, a vital part of building a consensus. However, since the principles are all-inclusive, there may be difficulty in fully comprehending them or making relevant

decisions. Some conservatives might suggest that they are not very practical.

- The Arctic Council has already prepared various responsible measures to the regime complex in the Arctic through nine declarations, many of reports and the Arctic Vision. Then, how are the principles through Professor Young different from the activities of the Arctic Council? Which organization should be chosen and which stakeholders should be targeted to reach an agreement on the principles? I would like to suggest to Professor Young to further develop the ideas into more specific concepts. I would advise that the principles be implemented as a ‘declaration’ after gaining agreement from the Arctic Council participants and indigenous groups. Can I ask for your opinion on this?

4) Lastly, the Arctic Ocean already started changing rapidly. Therefore, adjustment to the changes will be very important in the future. Economic activities and reinvestment in the region need to constitute a virtuous cycle in this ‘adjustment.’ The Arctic Vision, which was adopted at a recent meeting, also prioritized economic cooperation. In this regard, a new approach towards economic activities is necessary. A ban or delay of activities cannot guarantee smooth adjustment. We are at a stage in which we should ponder on the possible activities with certain technologies and policy measures and their ramifications on the local community. In addition, these measures should be feasible with the current technology. Does the IMO Polar Code consider this technological aspect?

SUGGESTIONS

Arctic Ocean governance is the comprehensive destination-an outcome which reflects all issues of the Arctic. Our ultimate goal is to prepare a useful international agreement, such as the Arctic Treaty. In reality, however, it is also desirable to launch an informal consultative body which respects the rights and status of the Arctic Council and includes non-Arctic states, just as Professor Young proposed. Although the body would be an informal channel, it should act as a sound and productive venue in which a bond

of empathy is developed after various voices are shared in a reasonable procedure.

I would like to remind all participants that we need to move toward the next stage and the NPAC should initiate the first step. The following measures need to be put into action in the coming days:

1) Firstly, a system which communicates achievements of the NPAC to the Arctic Council should be in place.

- I hope that the NPAC expands direct exchanges with multiple influential bodies and prepares measures on matters of mutual interest.
- To this end, I suggest a small organization called ‘The Forum for Arctic Ocean Governance’ be established within the NPAC to further develop the presentation of Professor Young. I ask the Chairman of the NPAC organizing committee to share with us some good ideas on forming such a forum in consultation with the EWC and KMI.

2) Secondly, ‘a Round Table of Observer States’ needs to be developed along with experts from the Arctic Council observer nations which are also participants of the NPAC. The round table should make mutual efforts to contribute to activities of the Arctic Council through the process of building a consensus.

- Later, such efforts should be developed into ‘an Arctic Research Community for Observer States’ which promotes joint researches between research institutes of observer nations in the North Pacific.

3) Thirdly, as for issue-specific agendas that are being discussed or will be discussed in the future, small working groups or TFs need to be developed within the NPAC, carrying out research activities mainly through online seminars.

- For example, studies can be conducted on issues presented by AMAP, CAFF, EPPR and PAME, the environmental working groups under the Arctic Council, as well as on other global issues, such as commercial shipping, fisheries, wildlife conservation and black carbon.
- Analyses on mutual influence between the Arctic region and the

North Pacific nations will provide us with detailed cases on regional interconnectivity.

- For instance, an analysis on ramifications of Arctic changes on weather and ecosystems of the North Pacific coastal nations will help them prepare for or prevent natural disasters. Accordingly, it is necessary to seek measures for joint research on technological problems as well as information and data sharing.

4) Lastly, it would be very meaningful for research institutes in Asian observer states to have a regional cooperative mechanism on the challenges and opportunities in the Arctic. In particular, China, Japan and Korea may share a lot of common perspectives on the Arctic issues. As we are aware of, they have well-organized Arctic scientific capacity and facilities including science stations, ice-breaking research vessels and research institutes. Moreover, they have high end technology for sustainable development of the Arctic such as shipbuilding, offshore plant, telecommunications and construction. At the same time, their economic system is highly dependent on the resources imported and global shipping. So changing the Arctic could provide a new arena for cooperative research. The NPAC can be an important venue to discuss this regional cooperation. This could be developed as an open and informal regional research forum embracing science, business and policy issues in the Arctic.

CONCLUSION

As we know very well, there is a long way to go to reach a consensus on various issues of the Arctic, particularly, Arctic Ocean governance as well as to find solutions. However, Arctic Ocean governance is a task humanity should solve at some point. We should take one step at a time, rather than trying to take on the issues in a rush. That one step should be a meaningful footprint towards the prosperity of mankind. I hope this forum provides provisions for problem-solving efforts. There is a Korean saying that a journey of a thousand miles starts with a single step. It is a noteworthy lesson to be learned from our forefathers.

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The Korea Maritime Institute (KMI) is a government-affiliated research organization under the umbrella of the National Research Council for Economics, Humanities and Social Science (NRCS) in the Republic of Korea. Since its establishment in 1984, KMI has been a major think-tank in the development of national maritime and fisheries policies including shipping and logistics, port development, coastal and ocean management, maritime safety and security, and fisheries affairs.

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