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The emerging politics of the Arctic Ocean

Future management of living marine resources

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Abstract: This article seeks to identify and analyze the most important political issues at stake with respect to the ongoing process regarding the future management of living resources in the high seas of the Arctic Ocean. Through assessing the potential for future commercial utilization of marine resources in the Arctic Ocean and analyzing the differences between the interests of engaged stakeholders in the process, the article seeks to answer whose interests and norms seem to most strongly influence the unfolding political processes and preliminary outcomes. The article concludes by identifying how the five Arctic coastal states have retained the upper hand in this process through skilled political entrepreneurship, the devotion of necessary resources and the political commitment of their respective governments.

Keywords: Central Arctic Ocean, high seas, A5, management, living marine resources

1. Introduction

As the Arctic sea ice is shrinking due to global warming, human activity is increasing in the Arctic Ocean. With expectations rising concerning the potential for Arctic shipping routes, along with high hopes of finding rich untapped natural resources from the region, Arctic politics has been increasing in importance on the global policy agenda. This article investigates a key dimension of this topic of current relevance, namely the emerging politics concerning the management of living marine resources in the Arctic Ocean. The article hence has an objective to review the ongoing political process playing out concerning the regulation of the high seas of the central Arctic Ocean. To contextualize this political process, the article will also assess and point out the key biological and physical changes taking place in the Arctic Ocean, as well as embed the abovementioned political process in its legal and multilateral-organizational contexts. While the article addresses scientific and legal issues, as well as multilateral institutions dealing with resource management beyond the Arctic Ocean, the article's main scope and research focus will be limited to issues that are mostly relevant to the high seas of the Arctic Ocean.

1.1. Research questions, delimitations and article structure

This article seeks to identify and analyze the most important political issues at stake with respect to the management and governance of the living resources of the Arctic Ocean. The

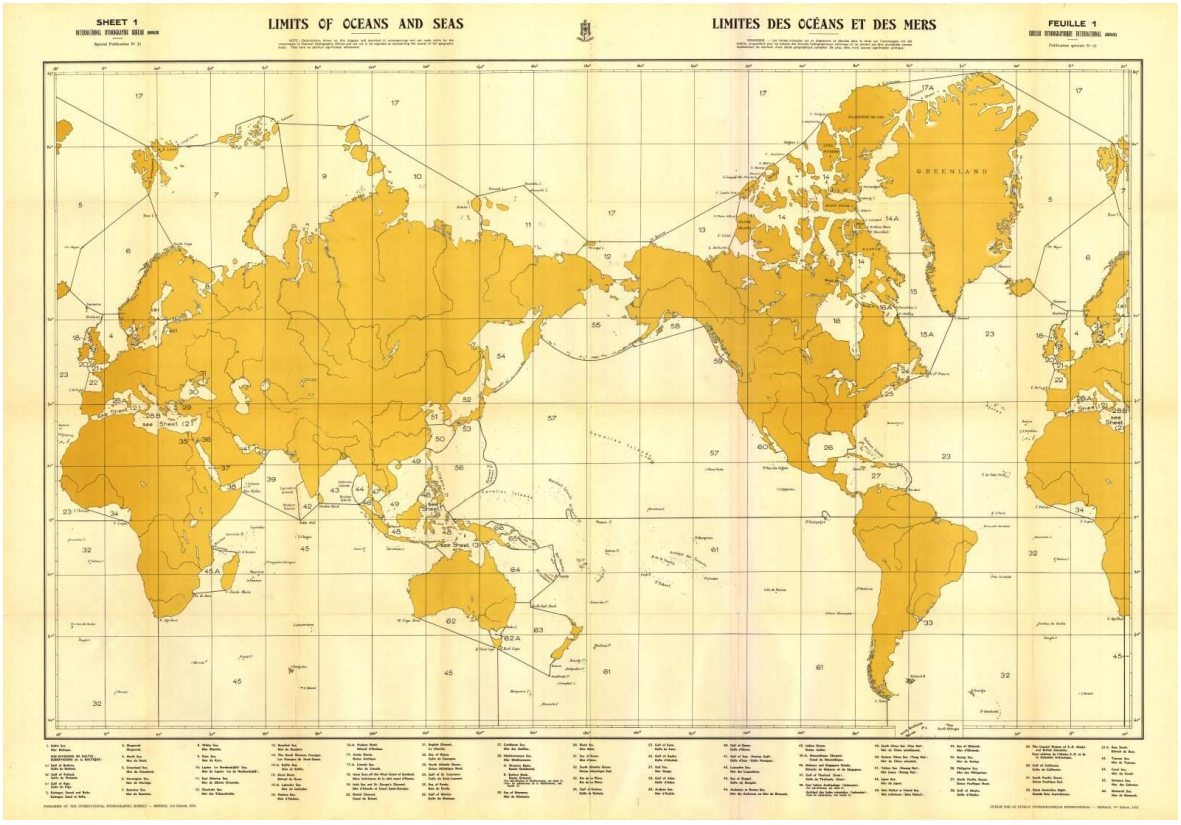
article will in particular investigate the interests and policies of the Arctic Ocean's coastal states, often shortened to the "Arctic Coastal states" or simply "A5" (that is, the five Arctic countries: Canada, Denmark/Greenland, Norway, Russia and the USA), but also other actors, including NGOs such as Pew Charitable Trust, will be analyzed. Specifically, the research questions are as follows:

1) What is the potential for future commercial utilization of marine resources in the Arctic Ocean? **2)** Are there differences between engaged governmental and NGO stakeholders concerning the future management of the Arctic Ocean, and, if so, what explains the dividing lines between them? **3)** Whose interests and norms seem to most strongly influence the unfolding political processes concerning the future management of the Arctic Ocean, and what explains why some actors seem to have more control than others with regard to the unfolding processes and preliminary outcomes?

Different delimitations exist concerning the definition of the Arctic Ocean (AO). While more or less all definitions include the High Seas of the central Arctic Ocean—the sea beyond 200 nautical miles (nm) from the shores of the coastal states—the southern border in areas such as the Chukchi or Beaufort Seas varies more. The drawing of the outer limits of the AO matters, as this defines who is entitled to be an AO "coastal state". The most authoritative chart of limits of seas and oceans in the world is found in the International Hydrographic Organization's (IHO) Special Publication no. 23, 1953 on the Limits of Oceans and Seas [1]. In this special issue, all major oceans and seas are defined by the IHO, and recognized by the UN as the authority on hydrography and nautical charting.[1] The article will apply the IHO's established boundaries as my own definition of the AO in this article (See figure below).

This article will be structured in the following manner: It will start out by briefly reviewing the general legal basis for issues regarding the jurisdiction and management of living resources in the world's seas and oceans, before specifically addressing the case of the AO. Second, it will assess the potential for the commercial harvesting of marine living resources in the AO, through giving an update of the current evaluations made by marine researchers. After having sketched out the legal and biological basis for the management of living resources, the views of the stakeholders who are engaged in the politics pertaining to the management and ownership of these marine living resources will be analyzed. Finally, the article will investigate differences in opinion among the key stakeholders and also assess and analyze the reasons why and the degree to which some actors seem to have the upper hand in the unfolding process.

[1] According to the IHO, the Arctic Ocean is (approximately quoted) defined to be the ocean area to the north of Svalbard, Frans Josef Land, New Siberian Islands, Cape Molotov on Severnaya Island, Wrangel Island, Point Barrow in Alaska, the north-western shores/points of the Canadian Archipelago and Cape Morris Jesup, Greenland. With respect to the many marginal seas to the south of the AO, such as the Beaufort Sea, the Chukchi Sea, the East Siberian Sea, the Greenland Sea or the Barents Sea, these seas are not regarded as a part of the Arctic Ocean. In practical use though, the border lines might on some occasions be more blurred than the IHO's strict definition.



2. Method

The data collected and analyzed in this article stems from scientific journals, news reports, governmental documents, and information from interviews conducted with representatives from the A5, engaged NGOs, as well as scientists doing research on the biological data addressed in this article. As the political talks and scientific meetings among A5 representatives on the future regulation of the high seas of the AO are an ongoing process, interviewing participants and representatives from the five countries as well as other relevant states and stakeholders has been crucial in order to obtain the most reliable and updated information. The interviews were conducted during the period from January through August 2014, and were primarily done in person, even though some informants were reached only by phone or e-mail. The number of informants amounts to about 15-20 persons, some of whom have been directly participating in the A5 meetings or working in engaged ministries in the relevant state capitals. Others interviewees represent involved NGOs, and experts at research institutes or universities. The questions posed to the informants have particularly focused on how the state or NGO assesses the current as well as future situation with respect to the need for managing living marine resources in the AO. Questions have also focused on their views on the ongoing political process, including assessments of the other participating stakeholders' influence and importance, or the representatives' own views on what ought to be the desired outcome with respect to a potential future management regime for the ocean. It has been important to collect data from as many relevant stakeholders as possible. Hence, the interviewees represent a variety of backgrounds (diplomats, scientists, NGO-representatives and bureaucrats. The data from the interviews were in the end qualitatively analyzed, compared and held up against official documents and scientific documentation.

3. The legal framework

The main international legal framework pertaining to the AO is the UN Convention on the Law of the Sea (UNCLOS) [2]. The UNCLOS naturally benefits the coastal states, particularly those states with long coastlines, as it establishes the concept of 200 nautical miles EEZs (Exclusive Economic Zone), giving coastal states rights to very large resources. The UNCLOS applies globally, and while there has been debate about whether or not a "special legal regime" is needed for the Arctic, the prevailing view is that the UNCLOS is a sufficient framework for the Arctic Ocean, a view that was cemented by the A5 in their Illulissat declaration of 2008 [3]. [2]

The UNCLOS, Article 3, ensures coastal states a 12 nm territorial sea outside their baselines. Within this area, the coastal states have full regulatory powers, including absolute rights over fish and seabed resources. Between 12 and 200 nautical miles, the coastal states can establish an EEZ where they can claim ownership of all living marine resources [4: 6].[3] The coastal state also owns the resources found on and in the continental shelf within 200 nm from the baselines. Beyond 200 nm, the coastal states may be entitled to an extended continental shelf; however, the coastal states are not entitled to exclusive rights over the living resources in the water column above, as the sea beyond 200 nm is classified as high seas, that is, international waters.[4]

Movement of living organisms across the EEZs of different states, as well as from the EEZs to the high seas and back, is the normal state of affairs. Hence, the UNCLOS alone does not provide sufficient practical regulations on straddling stocks and highly migrating species, as there is a general freedom of fishing in the high seas [5: 294]. Since soon after the establishment of the 200nm limit, nations with high seas fishing fleets started fishing just outside the EEZs, the "free rider" problem occurred—if some coastal states pose strict regulations on a fish stock within its EEZ, such regulation seems of little value if all other states can fish the same stock just outside the 200nm line [6]. The need for regulating shared stocks (Article 63(1)) and straddling stocks (Article 63(2)) was hence imminent soon after the accomplishment of the UNCLOS in 1982.

The most important regulatory framework, specifically addressing the migratory nature of fish stocks, is the so-called "1995 Fish Stocks Agreement".[5] The agreement, formally a supplement to the UNCLOS, was implemented on December 11, 2001, and "sets out principles for the conservation and management of [straddling and highly migratory] fish stocks and establishes that such management must be based on the precautionary approach and the best available scientific information" [7]. The agreement reiterates the UNCLOS, which requires states to cooperate in fisheries management outside of the EEZ (Part V, Article 63.2). The agreement also set forth the fundamental principle, "that States should cooperate to ensure conservation and promote the objective of the optimum utilization of fisheries resources both within and beyond the exclusive economic zone" [7]. The UNCLOS, with its

[2] The preeminent role of the UNCLOS is (paradoxically) displayed by the US, which, in spite of not having ratified the treaty, in practice accepts the framework as customary international law. The US hence follows the constraints that UNCLOS provisions put on state parties, while still not being qualified to receive several of the conventions' benefits, such as sending national representatives to UNCLOS committees in the UN, or having an American judge in the International Tribunal for the Law of the Sea in Hamburg [4] .

[3] See UNCLOS Part V, Article 62.

[4] See UNCLOS Part VI, Article 77 and Part VII Article 116

[5] The full title of agreement reads as follows: "The United Nations Agreement for the Implementation of the Provisions of the United Nations Convention on the Law of the Sea of 10 December 1982 relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks"[7].

1995 Fish Stocks Agreement, also provides the basis for the establishment of regional fisheries management organizations (RFMOs), through which high seas fisheries are to be managed. The RFMO should be open to all states with a real interest in the fishery concerned, as stated in Article 8(3) and (4).

NEAFC (The North East Atlantic Fisheries Commission) is a RFMO with a regulatory area in the Arctic, as it covers the AO between longitudes 42° west and 51° east. The NEAFC hence also manages a small part of the high seas that are located in the AO. The OSPAR Convention (named after the original Oslo and Paris Conventions) also covers parts of AO, as it largely overlaps with the NEAFC area. In being the mechanism through which fifteen governments of the western coasts and catchments of Europe, along with the European Union, cooperate to protect the marine environment, it could potentially be of relevance to the fisheries management of the high seas of the AO [8]. However, neither NEAFC nor OSPAR have thus far displayed an active interest in addressing management issues of the high seas of the AO, nor have the A5 states themselves individually or collectively promoted this possibility. The two regimes should therefore not be regarded as being of key importance in the ongoing process pertaining to the future management of the high seas of the AO, even though their future role should not be entirely dismissed.

4. The biological basis

The effects of global warming are not only observed on land but also through increased temperatures in the world's oceans. In the northern hemisphere, the most spectacular effect of the warming water is the rapidly decreasing summer-sea ice extent in the AO and its surrounding adjacent seas [9: 325][10: 45].

In 2012, the decline of sea ice reached an all-time low, where the ice only covered 3.423 million km2, only about half of the average extension from 1981-2010 of 6.728 423 million km2 [11]. As physical factors are changing in Arctic waters, so are the conditions for marine life in the area. Diminishing sea ice allows more sun to reach the sea surface, potentially leading to increased primary production of organic matter through photosynthesis. However, as sea ice provides the habitat for ice algae and sub-ice phytoplankton, traditionally accounting for about 57% of the total primary production in the AO, the changes make the long term ecological consequences hard to predict, as several ice-dependent species indigenous to the Arctic might be put under pressure [12] [13: 520]. Wassman et. al. (2011), McBride et. al (2014), and Christiansen et. al (2014) point out how one of the key footprints of climate change in Arctic marine ecosystems is the northward expansion of various subarctic as well as temperate species, while the abundance and reproductive outcome of indigenous species are in decline [14][15][16]. The first records of Atlantic mackerel caught as far north as Isfjorden in Svalbard (78°15'N, 15°11'E) in September 2013 underscores these changes very well [17] Berge et. al). However, the lack of a reliable biological baseline, especially for the central AO, remains a key problem when assessing the overall impacts of climate change on the ecosystem [14: 1237][15].

In a recent article in *Fisheries Oceanography*, Hollowed, Planque and Loeng assess the potential for movement of fish and shellfish stocks to the Arctic Ocean. The article is based on assessments made by a panel consisting of 35 experts, who evaluated the likelihood of species movement from the sub-Arctic to higher latitudes due to climate change [18]. Based on an evaluation of environmental factors such as "the spatial distribution of suitable thermal conditions, availability of prey, the depth of migration corridors" as well as "key life history

and behavioral characteristics", including "growth potential, fidelity to spawning sites, foraging plasticity, thermal tolerances and habitat depth", the authors put forward a well-argued assessment of the likelihood of future northward migration of certain species [18]. By concretely evaluating 17 fish, shellfish stocks or stocks groups, the article concludes by pointing out six stocks with a "high potential" to expand into the Arctic Ocean: polar cod (*Boreogadus saida*), snow crab (*Chionoectes opilio*), Bering flounder (*Hippoglossoides robustus*), Greenland shark (*Somniosus microcephalus*), Arctic skate (*Amblyraja hyperborea*), and beaked redfish (*Sebastes mentella*) [18]. At the same time, south of the central AO, several sub-arctic fish stocks, such as cod, can be observed moving northwards, even into the periphery of the AO, e.g., to the coastal areas north of Svalbard[16].[6]

From a resource-management and political point of view, it should be emphasized that the abovementioned migration takes place and is expected to take place almost exclusively within shallow waters, and within the A5's EEZ. If seeking to identify species that are both likely to thrive in the high seas of the AO, and also be of commercial interest, the polar cod stands out as the most likely exception [18]. Nevertheless, as noted above, due to limited scientific knowledge and great practical challenges in the collection of samples from the AO proper, reliable data of the current situation is scarce [19]. The lack of knowledge is particularly emphasized by environmental NGOs such as Pew Charitable Trust or Greenpeace, who, in using the high degree of uncertainty as a key point in an argument for precautionary action, essentially want a memorandum of all commercial activities in the High Seas of the Central AO [20].

5. Reviewing the political process regarding the future management of the Arctic Ocean

On June 22, 2010, senior officials of the A5 met in Oslo and agreed on the need for enhanced scientific research on fish stocks and their ecosystems in the AO. Through agreeing on the "terms of reference" concerning the future objects of investigation, the meeting gave a mandate from the coastal states and represented the starting point for several subsequent meetings, both on the scientific as well as the senior official level among the A5 [21] .

The meeting in Oslo was a result of a long process that started with a resolution passed in the US Senate, initiated by Republican US Senator Ted Stevens of Alaska, and signed into law in 2008. The law, "Directing the United States to initiate international discussions and take necessary steps with other Nations to negotiate an agreement for managing migratory and trans-boundary fish stocks in the Arctic Ocean", is key for understanding the proactive role of the US that was to come [22]. Stevens's initiative had its background in the experiences of international overfishing of Alaska Pollock (*Gadus chalcogrammus*) in the Bering High Sea's' "donut hole" in the early 1990s. The initiative resonated well on Capitol Hill, as no immediate US economic interests were at stake. At this stage, the role of the environmental NGO, Pew Charitable Trust, also stands out as being significant. As Pew at this time had decided to give priority to enhanced protection of the maritime areas of the Arctic, the organization allocated substantial funding to this end and formulated a coherent and deliberate strategy seeking to influence the A5 through tailor-made national "campaigns", in which key governmental officials and research environments within the A5 were targeted. The effort also included an aggressive campaign on behalf of Pew, where 2000 marine scientists from the A5 as well as several other countries signed a letter calling for "the international community to

[6] Personal communication, marine biologist, Tromsø February 13, 2014.

create a precautionary management system for central Arctic Ocean fisheries" [23]. Pew's effort was particularly welcomed by the US State Department, as the US found Pew more or less working to fulfill the 2008 Senate resolution. Acknowledging the NGO's pragmatic stance on the issues, in comparison to radical environmental groups such as Greenpeace, Pew was an "allied" driving force the Americans were willing to embrace.

The Oslo meeting was followed up by a meeting among scientific experts from the A5 held in Anchorage on June 15-17, 2011. The main topics of discussion were the conditions of Arctic and sub-Arctic invertebrate organisms, fish and marine mammal stocks, their ecosystems and the effects of climate variability and change. As the national experts reviewed the current information available and mutually informed each other about ongoing and planned scientific activities within their states, they identified several gaps in the information available and pointed out priorities for future research activities [24]. As the need for gathering more information with regard to potential future fisheries in the central AO was acknowledged, the experts also noted the need to develop a coordinated research plan. The experts also underscored the idea that the "Inclusion of scientists from countries outside the Arctic coastal states would greatly enhance our collective ability to address these priorities and would also likely bring additional resources to support research and monitoring needs. Therefore, we encourage broader international participation in this endeavor" [24].

As the central AO is far away from any waters where indigenous hunting practices had taken place, traditional knowledge was generally assumed to be of limited relevance. However, in the case of Canada and Denmark/Greenland, representatives from indigenous groups were deliberately included in the process as representatives for their communities. Similarly were also scientists arguing for the need to integrate traditional/ community knowledge held by arctic peoples [25]. Still, the prevailing view among the A5 was to not regard the subject of the meetings as an issue of direct relevance for indigenous peoples of the north.

The meeting in Anchorage was followed by a meeting in Washington, D.C. from April 29 – May 1, 2013, and included scientists, managers, and senior policymakers of the A5. The meeting established a consensus on how the A5 should play a leading role in managing the living marine resources of the AO even though "it was generally understood that commercial fishing in the high seas area of the central Arctic Ocean is unlikely to occur in the near future" [26]. The meeting underscored the need for future A5 meetings and decided that the Institute of Marine Research in Norway should host a second scientific workshop with the chief objective being to "examine the data and monitoring requirements for providing answers to questions about the status of Arctic living marine resources with particular focus on the central Arctic Ocean region" [26].[7]

At the second scientific meeting, which took place in Tromsø on October 28-31, 2013, fisheries science experts from the five Arctic coastal states were summoned again to address three topics: 1) the establishment of baselines for the measurement of change, 2) the evaluation of relevant scientific meetings, and 3) a discussion of future meetings. In acknowledging the need for more knowledge about the ecosystems of the Arctic, including the need to both standardize data and model potential change, the meeting also emphasized the particular importance of enhancing knowledge on the distribution and abundance of the

[7] Additional terms of reference were also pointed out for the following meetings, including (1) the production of a series of questions pertaining to the establishment of baseline conditions for scientific measurements of change in the Arctic Ocean, (2) evaluations of the outcomes of other relevant scientific meetings (such as the ICES/PICES workshop in St. Petersburg in May 2013), and (3) considerations of future meetings and cooperation.

polar cod [21]. The polar cod was identified as particularly interesting by the scientists, as it was considered to be the fish stock of the greatest commercial potential in the high seas of the AO, and it is also considered to play *the* key role in the entire AO food web. The polar cod is small and scarce in meat. It has never held an appeal or been of commercial interest as a food source for humans. However, the species has been commercially harvested, particularly by the USSR and Russia, and it is rich in fat and valuable for fishmeal and as food for farmed fishes [28]. Hence, while little suitable as a food for humans, the polar cod stands out as the Arctic fish species having the highest relevance for scientists and government officials alike.

Finally, from February 24-26, 2014, senior government officials from the A5 met again in Nuuk, Greenland and agreed on "the desirability of developing appropriate interim measures to deter unregulated fishing in the future in the high seas area of the central Arctic Ocean" [27]. While still not ruling out a future commercial interest in species such as the polar cod, the meeting reaffirmed that, "based on available scientific information, commercial fishing in the high seas area of the central Arctic Ocean is unlikely to occur in the near future". Adding to this, the agreement emphasized the participating states' commitment to prohibiting their national vessels from fishing in the unregulated waters of the AO, and it committed the states to establishing programs for joint research and monitoring of the AO high seas, while also stating that "there is no need at present to develop any additional regional fisheries management organization (RFMO) or arrangement for this area" [27].

6. Analysis

When assessing the relevant stakeholders' positions concerning the process of managing the high seas of the AO in the future, an interesting picture emerges. On one hand, the very issue of precisely who should be "entitled" to sit at the table was not obvious. Iceland was in this respect particularly dissatisfied with being left out, in viewing itself as an Arctic coastal state. Iceland even formally argued that its EEZ in the Greenland Sea, was "an outlying portion of the Arctic Ocean" [29]. With the meetings of the foreign ministers of the A5 in Ilulissat in 2008 and Chelsea 2010 fresh in mind, Iceland again felt left out on issues of great relevance to them. Hence, Iceland did request to take part in the consultations, stating a "real interest" in accordance with the UN Fish Stocks Agreement.[8] Nevertheless, in applying a geographic definition of the Arctic Ocean, the A5 did not view Iceland (along with Sweden, Finland or any other non-Arctic state, such as China, Singapore, South Korea, Japan or the EU) as an appropriate actor to participate in these meetings [26][27].[9] Moreover, as organizations like Pew and Greenpeace and even individual scientists had stated an interest in taking part in the process as observers, the A5 had to address whether non-state actors should be included in the process, and if so, in what way. In the end, no NGO actors were allowed to participate as observers in the meetings, while the individual national delegations of the A5 decided for themselves whether they wanted to include NGO representatives. In this respect, it should be noted that Pew, to the dissatisfaction of representatives from other delegations, was included as an "internal observer" in the US 2014 Nuuk delegation.[10] The process hence demonstrates an example where the roles of NGOs versus the roles of states are not clear cut. It also illustrates a multilateral process in which the NGOs are likely to influence the policy process in addition to potentially also contributing to policy formation and final outcomes. [30][31][32][33].

[8] Personal communication, Icelandic governmental official, February 25, 2014.
[9] Personal communication, March 24, 2014, Canadian governmental representative.
[10] Personal communication. May 9, 2014 diplomat from one of the non-American Arctic littoral states.

When reviewing the role of involved NGOs, Pew stands out as having been exceptionally active. As Pew, in its rather pragmatic approach, was easy to accept by many engaged officials, there is no doubt that through its close cooperation with the US delegation, it has played an important agenda-setting role. At the same time, it is hard to determine the degree to which the final outcome in Nuuk would have been different without engagement from this NGO. In fact, several of the informants from the different Arctic States interviewed in this article object to the idea that Pew had actually influenced their viewpoints. On some occasions (representing at least three of the five Arctic coastal states), Pew's high profile caused the officials to need to distinguish themselves from the Pew agenda. Yet most A5 representatives seemed to appreciate the scientific information brought to the table by the NGO.

In seeking to identify any substantive issues dividing the A5 or other governmental or non-governmental stakeholders, a somewhat mixed picture arises. With respect to the A5, it is indeed difficult to pinpoint specific disagreements in their desired long-term goals. None of the A5 countries disagreed on the need for acquiring more knowledge or establishing a scientific basis before eventually deciding what could potentially be considered sustainable fisheries. In the same way, none of the A5 countries promoted—in principle—a ban on commercial AO high seas fisheries. Ultimately, none of the Arctic Ocean coastal states viewed the high seas of the AO as different from any other ocean in the world, e.g., with respect to the role of UNCLOS and the UN Fish Stocks agreement. The A5 hence rejected the need for a special treaty arrangement specifically aimed at protecting this northernmost ocean, while still not ruling out "a binding international agreement" that would potentially pave the way for a RFMO [27]. Thus, the A5 deviated from the viewpoint held by other Arctic states, such as Finland, as the Finnish government in their Arctic Strategy of 2013 had expressed a desire to create a "…network of conservation areas in the Arctic region, particularly in the sea areas surrounding the North Pole…"[34:14, 57]. A similar viewpoint was also put forward by the European Parliament in a resolution of March 12, 2014 supporting "the development of a network of Arctic conservation areas and, in particular, the protection of the international sea area around the North Pole outside the economic zones of the coastal states" [35]. Similar preservation-oriented views were also advocated by NGOs such as Greenpeace, while Pew had a somewhat more pragmatic approach in promoting a "science- and community-based conservation of the Arctic Ocean" that did not by necessity rule out future commercial resource utilization in the AO high seas [36][37][38].[11] Finally, if differences could be detected among the A5 on their long-term objectives, it seems reasonable to interpret the American position as leaning more towards promoting preservation, and being open to a moratorium, while the Norwegian and Russian attitudes were less inclined to consider unique preservation arrangements. On this issue, Canada and Denmark/Greenland had less clear inclinations from the outset.

While it gradually became clear that the A5 did not differ much in their principal views on issues of potential future utilization—it has to be science-based and sustainable—the process itself had instead emerged as challenging.[12] As the potential opening of a new ocean for fisheries due to climate change had no historic parallels, the A5's effort to point out a direction for management of the AO was a groundbreaking undertaking. No historic practices of fisheries existed and the negotiation also did not take place under the auspices of any specific organization. While the use of an organization such as the Arctic Council was

[11] Personal communication, participant in Pew's Oceans North International Campaign, Washington DC March 19, 2014.

[12] Personal communication, Ministry of Fisheries and Oceans, Ottawa, March 25, 2014.

considered early on by some governmental representatives, this option was quickly removed from the table as it had no mandate or relevant expertise, and also formally lacked a legal entity.[13] The inclusion of Asian observer states had similarly made the AC a less preferred venue. Instead, the A5, with the US and Ambassador David Balton in the lead, chose to pursue ad hoc formats consisting of the A5.

While Ambassador Balton, on behalf of the US government, was obliged by a legal act "to initiate international discussions and take necessary steps with other Nations to negotiate an agreement for […] fish stocks in the Arctic Ocean", this was not an obvious stance for the other AO coastal states, who doubted whether establishing an institutional arrangement such as an RFMO for the AO was a necessary undertaking [22]. In this respect, the differences in knowledge about, as well as the usage of, the different parts of the AO on behalf of the A5 stand out as an interesting factor.[14] As the Norwegian and Russian parts of the AO were the most accessible, these two countries also had the best data on the living organisms to be found there, even including quantitative estimates.[15] In the Canadian, Greenlandic and American parts of the AO, the situation was the diametric opposite, with hardly any data existing at all. A similar situation was also found in the way Russian and Norwegian fishery activities took place in much closer proximity to the central parts of the AO, e.g., in the shallow waters to the north of Svalbard. In contrast, hardly any commercial fisheries activities existed to the north of the Bering Strait in the American Arctic.

In this situation, the Norwegian and Russian experts had better data and estimates where Norway in particular questioned the necessity of pushing forward in establishing an international management arrangement (e.g. through a RFMO). Norway, as well as Russia, were reluctant to rush into an institutional arrangement, while the US, on the other hand, had the establishment of an international agreement, regardless of its necessity, as a foreign policy goal (of the government)—a goal that was even signed into law. This goal was a position that Canada and Denmark/Greenland gradually became ready to accept without giving it the same amount of consideration as Norway and Russia did. Finally, as the Norwegian and Russian reluctance towards pushing ahead with an international agreement was reported in the media, several reports inaccurately described the two countries as being opposed to the regulation of potential future fisheries [39][40]. The inaccuracy of these reports is particularly well illustrated in the way Norwegian vessels—the only ones of the A5— were already not allowed to fish in the AO high seas, as these are 'unregulated waters' to which Norway has unilaterally posed a universal ban disallowing national vessels to conduct fisheries.

Diverging viewpoints among the A5 were also found on issues concerning the following: the appropriateness of involving indigenous peoples, the appropriateness of including a ban on specific fishing gear, how a temporary "non-allowance" of commercial fishing should be worded, and questions regarding if, how or when to include other Arctic states as well as non-Arctic states in the process. The Canadian government was particularly sensitive to the issue of indigenous participation. In having a unique treaty-based relationship with its First Nations population, the Canadians had a legal obligation to consult or involve such groups if the new measures could affect the resource situation in the Canadian EEZ. With respect to gear bans, both Canada and Norway were also cautious towards the idea of bluntly ruling out specific fishing instruments or methods such as bottom trawling. [16] In order to reach an A5 agreement,

[13] Personal communication, Ministry of Fisheries and Oceans, Ottawa, March 25, 2014.
[14] Personal communication, Russian Arctic fisheries scientist, Moscow, April 28, 2014.
[15] Personal communication, marine biologist, Tromsø, February 13, 2014.
[16] Pesonal communication (phone), marine biologist, Tromsø, January 28, 2014; Ministry of Fisheries and Oceans, Ottawa, March 25, 2014.

the concrete wording of the chairperson's statements from the meetings of governmental officials would also prove difficult. As Ambassador Balton had started circulating a potential draft for an international agreement around the years of 2011 and 2012, which was inspired by the Pollock agreement of the "donut hole" in the Bering Sea in the 1990s, several of the A5 countries exhibited caution. Specifically, the Norwegian, Russian and Canadian delegations demonstrated discontent with the application of the terms "moratorium" and "ban", as such terms tended to be very exclusive and absolute in nature. Instead, these states preferred a text pointing out the core message that fisheries should not be allowed before they were regulated in a sustainable manner [41].[17] The American delegation did not necessarily prefer the term "moratorium", yet as "moratorium" was used domestically in the US with respect to the prohibition of fishing to the north of the Bering Strait, this wording was less controversial among the US delegation.[18]

Finally, at the time of writing, the question of how to include other states in the process, and in particular the non-Arctic observer states, proved difficult to answer [41][42: 25]. While the 1995 Fish Stocks Agreement is clear on the appropriateness of including relevant high-seas fishing nations into a RFMO, several of the A5 countries were and remain hesitant to do so[42: 25].[19] The Russian annexation of Crimea and the crisis in Ukraine has additionally complicated the process, making collective political involvement in the process less feasible, as political representatives of western governments have been avoiding direct interaction with their Russian counterparts.[20] At the same time, there are good reasons to believe that the process might proceed, where the Chairman's written statement from Nuuk 2014 might serve as a template for a future declaration among the A5. Consensus and signatures on a declaration can also be reached through consultations by non-political state officials alone. Finally, one might also expect the process to be open to third countries in the years to come, but with the current crisis in Ukraine, the timeline proposed in Nuuk certainly seems unrealistic. It is also likely that the third countries will first be invited after all the key decisions on how to proceed have already been made by the A5.

7. Final remarks

Recent scientific publications tend to be level-headed in their expectations of new commercial fish stocks in the high seas of the AO. While fishes are indeed migrating northwards, scientific findings suggest that the vast majority of such migrating stocks are likely to be found within the EEZs of the A5. The likelihood of establishing a new RFMO for the central AO thus seems slim and unrealistic in the near future. Speculation on the potential structure of such an organization therefore remains of little value. At the same time, data documenting new trends are scarce or non-existent, and scientists are generally left to give their best guesses for the future, particularly with regard to the central parts of the AO.

In spite of the low expectancy of future fish stocks in the central parts of the AO, the A5—led by the US—has taken an initiative towards regulating the ocean in the future. By taking advantage of their geography, and in effectively assembling themselves for governmental

[17] Personal communications: Norwegian official (phone) March 19, 2014; Ministry of Fisheries and Oceans, Ottawa, March 25, 2014; Russian Arctic fisheries scientist, Moscow, April 28, 2014.
[18] Pesonal communication Ministry of Fisheries and Oceans, Ottawa March 25 2014.
[19] Personal communication Russian Arctic fisheries scientist, Moscow April 28. 2014.
[20] Personal communications Norwegian Arctic fisheries expert, Oslo August 26 2014.

meetings, the A5 are currently creating the norms for future stewardship of the high seas of the AO.

Thus far, Iceland has particularly felt ignored by the A5, and Finland, the European Parliament as well as various NGOs have stated their opposition to the "utilization-oriented" approach of the A5. Yet, the A5 retain the upper hand on the process through skilled political entrepreneurship, the devotion of necessary resources and the political commitment of their respective governments.

In this respect, the geographic proximity of states to the AO, in combination with both policy-entrepreneurship and pro-activeness seem to matter most in explaining both which countries have taken the initiative and what direction the ongoing process has taken. Finally, even though the different AO coastal states could be said to have started out from somewhat different positions, and are particularly influenced by their diverging traditions of conducting fisheries in the proximity of the central AO (or not), the A5, in serving as the main actors, have demonstrated an ability to unite on common understandings, language as well as proposals of concrete measures and initiatives, thereby practically making all of the key decisions on the direction of the future management of the high seas of the AO.

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Glossary

A5 The Arctic Ocean littoral states: USA, Canada, Denmark/Greenland, Norway and Russia
AC Arctic Council
AO Arctic Ocean
EEZ Exclusive Economic Zone
IHO International Hydrographic Organization
ICES International Council for the Exploration of the Sea
NEAFC The North East Atlantic Fisheries Commission
NGO Non-governmental organization
OSPAR OSPAR Commission (Oslo-Paris)
PICES North Pacific Marine Science Organization
RFMO Regional Fisheries Management Organizations
UNCLOS UN Convention on the Law of the Sea