

‘Real interest’? Understanding the 2018 Agreement to Prevent Unregulated High Seas Fisheries in the Central Arctic Ocean

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Potted biography

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Policy implications

- Political space is never innocent, and the territorial practices of states deserve careful scrutiny.
- The Central Arctic Ocean is an emerging area of policy concern, and the 2018 Agreement to Prevent Unregulated High Seas Fisheries in the Central Arctic Ocean is notable for its willingness to address fisheries management before it occurs.
- The 2018 Agreement actively creates a ‘Central Arctic Ocean’ and makes it an object of and for governance. Anthropogenic climate change continues to alter the water, ice and air around the North Pole.
- While the 2018 Agreement addresses commercial fisheries, it does not address other areas of interest (e.g. resources on the seabed of ‘the area’) and other stakeholders interested in the high seas of the Arctic Ocean, including indigenous peoples and militaries.
- The implementation of the 2018 Agreement will provide valuable insights into how interested parties deal with information and management gaps regarding

fish species, geographical areas of application, control and surveillance, and membership gaps. Further investment and negotiation will be necessary in science diplomacy environmental peace-building in order to protect the CAO from possible military tension.

- The management of the CAO raises not only issues of adjacency with the five Arctic Ocean coastal states such as Canada and Russia but also ecological connectivity. International conventions such as the Convention on the Conservation of Migratory Species of Wild Animals recognises parties and 'range state', acknowledging the scale and scope of migratory animals and their habitats.
- One area to watch is whether state parties actively encourage the incorporation of indigenous and local knowledge into science-based fisheries management of the CAO. 'Incorporation' is not unproblematic as indigenous peoples have warned in the past that indigenous knowledge is often used by settler colonial states to consolidate their privilege and sovereign interests.

Abstract

The 2018 Agreement to Prevent Unregulated High Seas Fisheries in the Central Arctic Ocean (Agreement) is a notable intervention in living resources management. The Agreement seeks to anticipate future fisheries management and serves as a reminder as how international legal frameworks such as UNCLOS 'regionalise' seas and oceans. But thus far analyses of the Agreement have tended to focus on its legal and managerial qualities and implications. This paper offers a different reading of the Agreement, informed by critical geopolitics, which focuses on how the Agreement actively produces 'the Central Arctic Ocean' (CAO) which it then seeks to manage. The Agreement will shape not only the future geopolitics of the Arctic Ocean but also the diverse array of interests held by Arctic Ocean coastal states, indigenous peoples, environmental groups, and extra-territorial parties such as China.

Keywords: Central Arctic Ocean, living resources, UNCLOS, geopolitics, and high seas.

The Central Arctic Ocean and Ocean Governance

‘Rising nations require to know what their resources are’, Sir William Edmond Logan, Geological Survey of Canada Report of Progress (1875-6)

‘Ice has traditionally covered the high seas of the central Arctic Ocean year-round. Recently, the melting of Arctic sea ice has left large areas of the high seas uncovered for much of the year.’ Statement by National Oceanic and Atmospheric Administration (NOAA) on the signing of the 2018 Agreement to Prevent Unregulated High Seas Fisheries in the Central Arctic Ocean (CAO), 3 October 2018

The central proposition of this paper is that the 2018 Agreement to Prevent Unregulated High Seas Fisheries in the Central Arctic Ocean (henceforth Agreement) is an important moment for ocean governance, which is bedevilled *inter alia* by the challenges of climate change, the presence of trans-national pollution including micro-plastics and the spectre of resource exploitation in the future (Brewer 2019, Harris 2019). The Arctic Ocean is a complex space facing challenges and issues with varying intensities, temporalities and distributive qualities. New maps are being drawn to demarcate a Central Arctic Ocean (CAO) and its identification coincides with a period of intense interest amongst five Arctic Ocean coastal states (Canada, Denmark/Greenland, Norway, Russia and the United States, A5) in mapping, surveying and interrogating the geological qualities of their respective outer continental shelves in the Arctic Ocean (Dodds 2010). In May 2019, Canada was the latest to submit its materials to the UN body of the Commission on the Limits of the Continental Shelf (CLCS) for the purpose of obtaining international recognition of the limits of its outer continental shelf in the Arctic Ocean (Government of Canada 2019). The water and seabed of the Arctic Ocean provide textbook examples of how the intersection of international law, geopolitics, and science create extractive and grabbing potentialities (Ranganathan 2019). How commercial fishing is informed and implemented with reference to internationally recognised management principles and

practices is a moot point given the interests and wishes of Arctic and non-Arctic stakeholders. Those interests and wishes could, in the future, converge around common benefit rather than competitive extraction.

The Agreement, however, deserves further analysis that extends beyond predominantly legal readings of its content and implications for future activities (for example, Rayfuse 2018, Schatz, Proelss and Liu 2019). There are four reasons why this might be so, some related to the Agreement and some that speak to a concern for how seemingly 'empty spaces' are identified and reified as hydro-territorial entities (Bille 2019). First, it is highly significant that the Agreement speaks explicitly of a CAO. This is a comparatively recent innovation. It should not be simply taken for granted. It reveals something important about how oceans, and segments of maritime space, are made and remade through naming practices. It is not a straightforward territorial container of water and seabed. Global flows of water, heat, ice and air circulate and interact through and beyond the CAO. As political geographers such as John Agnew and Stuart Corbridge remind us, space is never innocent and the territorial practices of states need to be interrogated (Agnew and Corbridge 1995, Agnew 2018). Second, the CAO should be recognised as a 3D volumetric space that is attracting ever greater interest from parties eager to visualise it, define it, access it, manage it and relate to it (on the idea of the territorial volume, Elden 2013). It is much more than a navigable surface and space of resource potential. The subterranean dimensions of the Arctic Ocean are attracting ever more attention (on subterranean geopolitics, Squire and Dodds 2019). New incentives to act (e.g. defining outer limits of the continental shelf) and invest in technologies of control (e.g. underwater drones, science programmes) are making themselves felt. Third, the Agreement's geopolitical history deserves to be better understood in terms of how it came to materialise. It is integral to current iterations of Arctic geopolitics. Finally, the paper uses the term 'real interest' (which is embedded in the Agreement) to stage a discussion about how the CAO is tied up with the interests and wishes of multiple users that extend far beyond fisheries. These include indigenous peoples, militaries, scientists, and extra-territorial parties such as China (Schatz 2019). It is not clear, for example, how indigenous and local knowledge would be incorporated into CAO science-based fisheries management. The CAO, as with the North Pole, is space capable of entertaining and facilitating multiple projects and stakeholders (Bravo 2019).

In 2011, so one of my research informants told me, the term 'Central Arctic Ocean' (CAO) was first used in formal discussions about living resource management. Clearly, other scholars have referred to a central Arctic Ocean but have not capitalised the C in central. My source for the 2011 reference was a member of an official delegation meeting to consider what might be done, in terms of fisheries management, with the high seas around the North Pole, and later served on a national delegation involved in the negotiation of a fisheries agreement.¹ It was important to have a term that offered some precision because the interested parties in the early stages of discussions were nervous that the descriptor 'Arctic Ocean' was too expansive. If not defined carefully then it was possible that discussions could extend to where they were not needed or wanted by coastal states such as Russia, Norway and the United States in the Barents Sea and Bering Strait.

A year later, *Global Policy* published an essay on the 'Central Arctic Ocean' by a distinguished American lawyer and judge-advocate, Ashley Roach (Roach 2012). The essay was part of a special issue on the global commons (see, for example, Vogler 2012). The capitalization of the Central Arctic Ocean (CAO) reflects a seminal intervention in the way in which the Arctic Ocean is considered to be an object of and for governance (for example, Van der Zwagg 2013, Pan and Huntington 2018, Vestergaard et al 2018, Schatz et al 2019). Rather than being used to make reference to the physical stratigraphy of the central Arctic Ocean basin as environmental scientists might have done in the recent past, the term CAO has taken on heightened legal and geopolitical significance. My interest is less with the line managerial contents and legal ramifications of the Agreement (see Schatz et al 2019), and more with the manner in which fisheries management is generative of state territorial practices and volumetric geopolitics. The migratory patterns of fish stocks such as cod, the disappearance of sea ice and the acidification of polar waters, coupled with the economic and geopolitical 'globalization' of the Arctic, have encouraged coastal states such as Canada and Russia and extra-territorial parties such as China and the European Union to be ever more concerned about the management of the Arctic Ocean, including high seas (Dalby 2003, Dodds and Nuttall 2019, Finger and Heininen 2019).

There are multiple imaginaries that inform and influence the North Pole/Central Arctic Ocean. The 2018 Agreement reminds us that the CAO is going to be an object of growing interest for multiple stakeholders. The first section argues that the CAO is a meta-geographical construct that needs to be deconstructed and not taken for granted. Thereafter, we consider the more immediate background to the 2018 Agreement, and in particular the desire of the five Arctic Ocean coastal states (Canada, Denmark/Greenland, Norway, Russia and the United States) to dominate discussions about the management of the Arctic Ocean. The third section considers the 2018 Agreement itself before concluding with the other stakeholders and their interests in the CAO. The Arctic's indigenous peoples, for example, have their own distinct interests and framings of the Arctic Ocean. The high seas around the North Pole continue to host scientific diplomacy. Finally, the return of so-called Under Ice submarine operations by the United States and the UK in and around the North Pole remind us that militaries have 'real interest' in the CAO. Others might well point to the possibility of a future trans-polar shipping route, which gives a whole new meaning to travelling 'over the top' of the earth (Dittmer et al 2011, Smith 2011).

In short, the CAO, as with the fabled North Pole, is caught up in wider cultures of speculation, allure, opportunism and intrigue (Cosgrove 2001, Bravo 2019). It is a complex geographical space that demands further analytical investigation. There is so much more at stake than simply the (possible) management of commercial fisheries. Ocean governance is more than institutional design, regime development and legal alignment. As this paper posits, it is entangled with and made by geographical forces and imaginaries.

CAO as Emerging Space

Conventional maps of the world's oceans tend to obscure the very thing that they seek to represent; a lively, volumetric liquid (Steinberg and Peters 2015). For much of the western history of cartography, the Arctic Ocean has been represented as either a frozen desert, the world's northern polar waters are warming, acidifying and being affected by meltwater discharge, ocean and surface air temperatures, sea ice decline, cloud formation, and a complex network of feedback loops between ocean, ice and air within the Arctic and beyond (Wassman 2011, PAME 2013). Recent research has

revealed that there has been a decline in trans-polar sea ice drift with less sea ice (originally forming in the Arctic Russian marginal seas) now reaching the central Arctic Ocean (Krumpfen et al 2019). Thanks in part to satellite technologies and marine monitoring networks, there have been substantial improvements in the real-time mapping and surveillance of the entire Arctic Ocean. Organizations such as the National Snow and Ice Data Center are able to produce an array of dynamic maps and metrics, detailing daily, monthly and yearly shifts in sea ice extent, air and sea temperatures and/or transpolar drift.

In their account of global geographies, Martin W. Lewis and Kären E. Wigen use the term 'meta-geography' to highlight how the world is often divided into regions, zones and areas of interest (Lewis and Wigen 1997, Dodds and Woon 2019). These (often) taken for granted geographical structures help to frame and empower social, political and legal interpretation and engagement. A simple example might be to note that in medieval European mapping it was not uncommon to place Jerusalem at the centre of the world. A meta-geography is composed of three elements – pattern, content and meaning. Maps of nation-states provide another example of how geographical space is organised, filled in with details and given meaning and significance because of the bordering involved. Modern meta-geographies were and are integral to the development of the modern nation-state system, colonialism and imperial expansionism and the global-economy. European oceanic exploration helped to re-engineer dominant meta-geographies, as new continents and oceans were 'discovered' by voyagers, traders and settlers (Lewis and Wigen 1997, Cosgrove 2001).

When we turn our attention to the North Pole, Michael Bravo (2019) has shown that there was a rich and varied visual tradition of representing thinking more cosmologically – the North Pole was intimately linked to the celestial star. If the North Pole mattered it was because it was connected to a far wider cosmology encompassing the earth, the heavens and skies, and beyond. Over the centuries, the North Pole becomes a more grounded point on the earth's surface that attracted exploration and scientific investigation, as nation-states and empires sponsored searches for trans-oceanic passages, open polar seas and proverbial 'ends of earth'. As a space inimical to permanent human occupation, the North Pole attracts

considerable allure because of its relative inaccessibility and environmental harshness (McCannon 2012).

Swedish scholar Sverker Sorlin, in his reading of the human and non-human histories of the Arctic Ocean, deploys the term 'meta-geographical ocean project' (Sorlin 2018: 269). As he notes, it was not until 1921 that the International Hydrographic Organization recognised the Arctic Ocean as an 'ocean'. Over the following decades, the geographical delimitation of the Arctic Ocean shifted as the IHO produced successive iterations of its *Limits of Oceans and Seas* (1937, 1952, 1986). For an ocean that was thought of frozen, barren and lifeless, it attracted considerable interest from two states, Canada and Russia, who thought the North Pole represented the apex of their national territories. In her reading of how geographical spaces such as ocean, air and water resist cultivation and colonization, Carroll argues that, 'The poles remain a site of imperial ambition, and elements of 19th century's literature construction of polar mythology can be seen in the competing political theatres of Canada and Russia, two nations trying to claim sovereignty over the uncultivated North Pole' (Carroll 2015: 18). As it happens, the first crossing of the Arctic Ocean was not achieved until the late 1890s, carried out by the Norwegian explorer Fridtjof Nansen. There was never any prior trans-oceanic travel, as indigenous communities such as Inuit in Canada and Greenland were and are coastal peoples.

Despite the absence of extensive human activity, the Arctic Ocean has not been isolated from meta-geographical shifts and episodes of explicit territorialisation (Agnew 2018). From early 20th century explorer and geographer Vilhjalmur Stefansson to late 20th century Soviet leader Mikhail Gorbachev, the Arctic Ocean was imagined as a proverbial 'Polar Mediterranean' where interests, continents and peoples could and should come together (Steinberg 2016). The semi-enclosed nature of the Arctic Ocean helped to funnel a particular geographical imaginary of transit and contact while others imagined that the Arctic Ocean might reveal itself to be an 'open polar sea'. An ice-free Arctic was first considered in the 1950s, and the geographer Paul Siple thought that it was perfectly possible to imagine an Arctic Ocean stripped bare of summer season sea ice (Siple 1953). As he noted, 'if the climatic trend continues as at the current rate, it is conceivable that the North Polar basin might be an ice-free ocean in mid-summer within another fifty years... The significance of major climatic

changes within the next few decades to our modern civilization is not to be taken lightly' (Siple 1953 cited in Sorlin 2018: 290).

Reflecting on these multiple imaginaries of the Arctic Ocean, Sorlin concluded that, 'Up until World War II, the central Arctic Ocean was seen as largely frozen and potentially next to lifeless and with no significance for the rest of the world... It was not a dead zone, but not far from it. Yet in just a brief period the Arctic Ocean became precisely the opposite: full of life, with a sensitive environment and the world's most drastically changing climate' (Sorlin 2018: 291). So there has been a seismic shift in the manner in which the CAO had been imagined. As Wheeler et al (1996: 697) noted in their description of the sea ice and waters in question, 'The notion of a barren central Arctic Ocean has been accepted since English's pioneering work on drifting ice-islands.' In English's paper, published in 1961, he referred to the 'central Arctic Ocean' (English 1961). He was not alone, and the reason why the term was used was because it usefully summarised the activities of Drifting Station Alpha during the International Geophysical Year of 1957-58. Station Alpha was not alone, however. A series of drifting ice stations were established by both the Americans and Soviets, as scientists gathered insights into the physical geology, oceanography and meteorology of what English also described as the 'central North Polar sea' (English 1961). What the work of the drifting ice stations helped to create was a referent object, the central Arctic Ocean, which enabled scientists to refer to a region's oceanographic and geological features such as submarine ridges and oceanic currents.

During the cold war, the intersection of geopolitics, law, science, resources and technology all contributed to mapping, administration and mobility within the Arctic Ocean (Roberts 2014). It helped to cultivate and sustain a geo-politicization of Arctic Ocean subterranean and water environments. US and Soviet militaries were eager to better understand the waters, ice and seabed of the Arctic Ocean, as they planned under ice submarine operations and icebreaker voyages. Oceanography and physical geology were pivotal between the 1950s and 1980s in helping to bring into sharper focus a 'central Arctic Ocean basin', the 'Arctic Ocean floor' and the 'central Arctic Ocean' (for example, Hunkins 1959, Lagoe 1976). What emerged was a distinctly volumetric appreciation of the Arctic Ocean – an ocean with a geo-tectonic, magnetic, climatological and biological history and geography. In the late 1960s, the US

proposed to their Soviet counterparts that it would be helpful to standardize common seabed nomenclature of the Arctic Ocean. Updating charts and maps of the Arctic Ocean, however, was stalled by the cold war sensitivities of both the US and Soviet militaries (for further details, Weber 1983).

International maritime law has been pivotal in staging a series of encounters between coastal and non-coastal states, geophysical sciences, and the Arctic seabed and submarine environments. For some international lawyers, the post-1945 era is one characterised by 'ocean land grab' by coastal states and international administrative bodies such as the International Seabed Authority (Ranganathan 2019). As legal regimes for seas and oceans developed, they replaced the uncodified law of the sea and circumscribed the general principle of freedom of the seas. Legal instruments such as the UN Convention on the Continental Shelf (1958) and later the UN Convention on the Law of the Sea (UNCLOS, 1982) ensured that seabed, living and non-living resources and the water column became subject to national and international jurisdiction. The net result was not only to expand the sovereign reach of coastal states but also empower colonizing, extractive and privatizing imaginaries (Steinberg 2001, Carroll 2015). Rock, water and ice become 'resources' enabling the territorialisation of state power.

The five Arctic Ocean coastal states (A5), aided and abetted by specific articles in UNCLOS on ice-covered waters (Article 234) and extended continental shelves (Article 76), are committed to either extending their sovereign rights over the seabed of the Arctic Ocean, and/or dedicated to maintaining an active managerial grip on the shipping routes off the northern territories of Canada (Northwest Passage) and Russia (Northern Sea Route). The material condition of the Arctic, in the form of ice-covered waters, was generative not only of international legal provisions but also spatial intervention by coastal states in the form of regulating movement, surveillance and defence. Article 234 never defined the geographical extent of ice-covered waters. The International Maritime Organization's (IMO) Polar Code (2017) did define a 'Maximum extent of Arctic waters application' in their promotion of 'safe shipping in polar waters'. Two lines are drawn for the purposes of the implementation of code, one across the Bering Strait and another from Hudson's Bay to Cap Kanin in Russia, to define the start and finish of 'polar waters' in the northern latitudes.

Over the last hundred years, the Arctic Ocean has transformed from proverbial ‘frozen desert’ to a maritime space subject to multiple imaginaries and legal-judicial zoning (Sorlin 2018, Dodds and Nuttall 2019). International law has helped to separate water from seabed and make distinctions between sedentary and non-sedentary species. Physical and environmental sciences identified and interrogated the ocean basin and waters of the Arctic. Militaries contributed to the mapping and charting of the Arctic Ocean, and some scientists benefited from that strategic voyaging (Wadhams 2017). Finally, the spectre of living resource management in the Arctic Ocean in the future provoked coastal and non-coastal states to define the high waters of the Central Arctic Ocean, as part of an agreement on the prevention of unregulated fisheries. As a recent EU Council briefing concluded, in light of the 2018 Agreement:

Until recently ice has covered the high seas portion of the central Arctic Ocean on a year-round basis, thereby making fishing in those waters impossible. However, global warming has significantly reduced ice coverage in that area in recent years. Although commercial fishing is unlikely to become viable in the high seas portion of the central Arctic Ocean in the near future, the central Arctic Ocean ecosystems will be more and more exposed to human activities and, possibly to illegal fishing (EU Council 2019).

In short, over the last 100 years, we can trace how the central areas of the Arctic Ocean have been imagined, identified, inscribed, and reified as a hydro-territorial entity (Bille 2019). Technologies of control such as submarines, icebreakers and satellites have created territorial contouring (as vessels and satellites criss-cross over and under the ice, water and seabed of the Arctic Ocean), which when combined with drivers to act (e.g. surveillance, resource exploration, legal demarcation and scientific curiosity) have helped to facilitate the emergence of the CAO.

Waves of Change? From the 2008 Ilulissat Declaration to the 2018 Agreement to Prevent Unregulated High Seas Fisheries in the Central Arctic Ocean

The Arctic Ocean was never a neglected ocean in terms of military and geopolitical interest. The territorial imaginaries and practices of states have varying intensities and

geographical reach, as security, stewardship and surveillance projects unfold (Dittmer et al 2011). For much of the cold war military planners funded and supported research into the air, water and ice of the North Pole. However, in the last decade there has been an unprecedented interest in an area identified in the high seas of the Arctic Ocean,² some of which can be explained by the extraordinary media spectacle that followed the planting of a titanium Russian flag on the bottom of the ocean floor in August 2007 (Dodds 2010). While international lawyers were swift to remind audiences that the flag-planting act in itself was not significant, it spurred a great deal of commentary and reflection on Russia's ambitions for the High North (Byers 2013). Significantly, the flag pole was deposited on the ocean floor. Reminding us, in turn, that the water column and seabed of the CAO are legally and politically distinct. Such distinctions were often lost in the media frenzy that followed, which warned of a new 'scramble for the Arctic' (Dodds and Nuttall 2016).

The Russian flag-planting incident coincided with an oceanographic expedition designed to collect further scientific materials pertaining to the extended continental shelf (ECS) of the Arctic Ocean. Following their submission to the UN Committee on the Limits of the Continental Shelf (CLCS), the Russian Federation was asked to revise and resubmit its submission pertaining to the ECS of the Russian Arctic. The 2007 expedition was designed to do exactly that. It appeared that the flag-planting episode was an act of opportunism. However, the net result was to bring into sharper relief that the collective interests of the five Arctic Ocean coastal states (A5) and their desire to collect, document and submit materials to the CLCS. Under Article 76 of the United Nations Convention of the Sea (UNCLOS), coastal states can extend their sovereign rights over the seabed up to 350 nautical miles from the baseline (and possibly further if certain qualifications are met). If there was a 'scramble' then it makes more sense as a scramble to gather and secure further geophysical and oceanographic information so that formal submissions could be made to the CLCS. The latter, importantly, does not have legal personality and only issues 'recommendations', which mean in practice that neighbouring coastal states have to negotiate their mutual sovereign rights with one another.

The background to what came to known as the Arctic Ocean conference of May 2008 has been addressed elsewhere (with varying foci such as Danish-Greenlandic politics,

climate change negotiations, Russian geopolitics and US political developments) but what it did produce was the Ilulissat Declaration (for more on the varied backgrounds, Dodds 2013, Steinberg et al 2015). The five Arctic Ocean coastal states used the Declaration to pre-emptively deal with their concerns that there might be a new 'scramble for the Arctic'. As the parties reaffirmed, the Arctic Ocean was going to be managed with due reference to the 'Law of the Sea' and outstanding issues such as the delimitation of extended continental shelves resolved via procedures and rules set out in UNCLOS, especially Article 76. For the A5, the management of the Arctic Ocean was assumed, thereafter, to be a legal and scientific-technical matter. As the Declaration noted:

Notably, the law of the sea provides for important rights and obligations concerning the delineation of the outer limits of the continental shelf, the protection of the marine environment, including ice-covered areas, freedom of navigation, marine scientific research, and other uses of the sea. We remain committed to this legal framework and to the orderly settlement of any possible overlapping claims.

The Law of the Sea (references to UNCLOS were avoided at the time because the United States has not ratified the agreement) provides an adequate and appropriate legal framework for the signatories, which allows for those said states to pursue strategies and techniques designed to define and delimit their extended continental shelves. The waters of the CAO, however, were recognised as rather distinct to the seabed. The declaration articulated a stewardship role for the A5:

The Arctic Ocean is a unique ecosystem, which the five coastal states have a stewardship role in protecting. Experience has shown how shipping disasters and subsequent pollution of the marine environment may cause irreversible disturbance of the ecological balance and major harm to the livelihoods of local inhabitants and indigenous communities. We will take steps in accordance with international law both nationally and in cooperation among the five states and other interested parties to ensure the protection and preservation of the fragile marine environment of the Arctic Ocean.

The Declaration was significant, but it was not the only intervention at the time pertaining to the management of the Arctic Ocean. In the United States, the Senate considered a resolution regarding the US negotiating with others on the subject of trans-boundary and highly migratory fish stocks. The resolution noted *inter alia* that, 'until the agreements come into force, the United States should support international efforts to halt the expansion of commercial fishing activities in the high seas of the Arctic Ocean' (United States Congress 2007). The resolution referred to the 'high seas of the Arctic Ocean' rather than the CAO and the US held an event at the FAO on Arctic fisheries with other Arctic Ocean coastal states in March 2009 (Molenaar 2016).

What makes the 2008 Declaration notable was that it came out of a high-level ministerial conference attended by foreign ministers including former Secretary of State Hillary Clinton. The A5 set in train a diplomatic process designed to address the responsible management of the CAO. The term, as noted earlier, was not coined until several years later. The A5 acknowledged the need to secure international co-operation for managing high seas fish stocks, and the need to secure a regional fisheries arrangement and/or organization in the absence of such a body. A second meeting of the A5 in Canada, in March 2010, sought to clarify the role of the coastal states in generating a conservation and management regime for the high seas of the Arctic Ocean. What the meeting revealed, importantly, was that the A5 were reluctant to involve the inter-governmental forum, the Arctic Council, in their deliberations. Leading Iceland to complain not only that they were not being recognised as potential Arctic Ocean coastal states but also raising concerns amongst Finland and Sweden that there might be two Arctic groupings – A5 and A8, with the former leading negotiations over the future of the Arctic Ocean.

Intervening in the high seas of the Arctic Ocean offers interesting insights as to how fisheries negotiations, alongside international law, creates new meta-geographies for structuring and re-structuring oceans and seas. UNCLOS and later measures such as the 1995 Fish Stocks Agreement (designed to address the challenge of migratory fish stocks) provided scope for regional seas agreements. At present, there are a number of bodies charged with establishing and implementing legally binding measures addressing fisheries conservation. Regional fisheries management organizations (RFMOs) are designed to perform this role and they vary in membership, scope of

operation and area of application. Some address specific fish species such as the highly migratory and lucrative species tuna; there are five RFMOs addressing tuna alone. Another RFMO-type addresses fisheries in waters that are shared between national jurisdictions and high seas. The Convention on the Conservation of Marine Living Resources (CCAMLR) is an interesting example of a RFMO serving the Southern Ocean where the 'rational use' of living resources is positioned as secondary to conservation and preservation. Finally, there are RFMOs which address specific scientific or technical issues. An example of this would be the International Council for the Exploration of the Sea.

The high seas of the CAO would appear to match the second category of RFMO discussed. Pivotal to the operation of the RFMO is an area of application. In the context of northern seas, there exists a patchwork of organizations including the North East Atlantic Fisheries Commission (NEAFC), with a regional area of interest extending into part of what might be described as the Atlantic sector of the Arctic Ocean. The RFMO, by its very nature, helps to establish particular regional lines of operation and applicability. Other tools such as marine spatial planning (including marine protected areas, MPAs) do something similar by identifying and demarcating areas of ocean and sea for resource management.³ Discussions over the CAO were by their very nature reshaping the regional geographies of the Arctic Ocean. Between 2010-2015, A5 officials met six times to discuss fisheries management and policy issues. In July 2015, the A5 adopted a Declaration Concerning the Prevention of Unregulated High Seas Fishing in the Central Arctic Ocean (the Oslo Declaration).

The Oslo Declaration, at only two pages long, considers the necessity for interim measures designed to avoid unregulated fishing in the CAO. The Declaration picks up on a general point made by the 2008 Declaration that the Arctic Ocean is changing, and that it can no longer be assumed that commercial fishing will not take place in the future. It is noted that the A5 should not authorize fishing in the CAO until there have been interim and precautionary conservation measures introduced. The Declaration recognises the special place of indigenous people and their need to be consulted over living resource conservation and management. As the Oslo Declaration notes:

We recognize that until recently ice has generally covered the high seas portion of the central Arctic Ocean on a year-round basis, which has made fishing in those waters impossible to conduct... We also recognize the interests of Arctic residents, particularly the Arctic indigenous peoples, in the proper management of living marine resources in the Arctic Ocean... We therefore intend to implement, in the single high seas portion of the central Arctic Ocean that is entirely surrounded by waters under the fisheries jurisdiction of Canada, the Kingdom of Denmark in respect of Greenland, the Kingdom of Norway, the Russian Federation and the United States of America... (Oslo Declaration 2015).

Finally, the Declaration notes that there are non-coastal states who have a legitimate interest in the prevention of unregulated and illegal fishing in the CAO. As it notes, 'We acknowledge the interest of other States in preventing unregulated high seas fisheries in the central Arctic Ocean and look forward to working with them in a broader process to develop measures consistent with this Declaration that would include commitments by all interested States' (Oslo Declaration).

The 2008 Declaration and the 2018 Agreement are linked by four themes. First, geophysical and biological change is the spur to action. It creates powerful incentives to take action to territorialise. The loss of sea ice, in extent and thickness, is acknowledged to be the primary game-changer. Second, the rights and interests of Arctic Ocean coastal states and indigenous peoples of the Arctic are foregrounded (Schatz 2019). Environmental stewardship alongside sovereign rights are said to reinforce one another. Third, it is noted that the environmental governance of the Arctic Ocean will require the support and engagement of third parties. The last sentence of the Oslo Declaration notes, however, both the 'the interests of other states' (rather than regional organizations such as the European Union) and 'interested states', which raises intriguing questions as to how other states might demonstrate 'interest' when a key activity, commercial fishing, is not yet in existence. This might in turn cultivate knowledge-making as a conduit to resource-taking. Finally, the acknowledgement of a global legal regime for high seas fisheries (UNCLOS, the 1995 Fish Stocks Agreement and the 1995 Code of Conduct for Responsible Fisheries) will

create, enable and restrain coastal and non-coastal parties inside and outside the CAO.

The 2018 Agreement to Prevent Unregulated High Seas Fisheries in the Central Arctic Ocean

The 2018 Agreement identifies the Central Arctic Ocean (CAO) as an area of high seas adjacent to the 200 nautical mile exclusive economic zones of five Arctic Ocean coastal states, Canada, Denmark/Greenland, Norway, Russia and the United States. Ice-covered for much of the year, it is estimated to be around 1.1 million square miles in area, encompassing nearly 20% of the Arctic Ocean. Thus far, the CAO has not witnessed commercial fishing and up to now there has been very limited maritime traffic in the waters concerned. With sea ice coverage in decline, it is a moot point as to when the Arctic Ocean becomes persistently ice-free (in other words covered with less than 1 million square kilometres). The sea ice minimum extent for September 2018, for example, was recorded via satellite data as 4.5 million square kilometres. The figure was one of the lowest in recent years and researchers have noted a persistent pattern of decline in extent and thickness. Extent is defined as the total area in which ice concentration is at least 15%. NASA scientists have concluded that between 1981-2010 Arctic sea ice has declined by approximately 50,000 square kilometres per year.

Mindful of ongoing state-change, the A5 alongside five other actors including China, Iceland and the European Union reached a draft agreement in November 2017 on the prevention of unregulated high seas fishing. In October 2018, the final text of the agreement was agreed and formally signed by the ten parties in Ilulissat, Greenland. The preamble of the 2018 Agreement reminds the parties that it is designed to, 'prevent unregulated fishing in the high seas portion of the Central Arctic Ocean through the application of precautionary conservation and management measures as part of a long-term strategy to safeguard healthy marine ecosystems and to ensure the conservation and sustainable use of fish stocks'. With the exception of the convention area of the North East Fisheries Commission, the waters of the CAO have been free from any such agreements and conventions. Thus, opportunities existed to territorialize the Arctic Ocean.

The 5+5 negotiations from December 2015 onwards involving non-coastal parties such as China, Korea, the European Union, Iceland and Japan. Three of the parties became observers to the Arctic Council in May 2013, one party (Iceland) was disappointed not to have been included in the original A5 negotiations and the final member, the European Union, has had its observer application rejected several times by Canada and Russia (the EU's seals export ban was resented by Canada and Denmark/Greenland and the imposition of EU-sponsored sanctions angered post-Crimea Russia). There was no attempt to exclude the EU from the 5+5 negotiations, an acknowledgement of the importance of EU member states in high seas fisheries and regional living resource management. Reflecting the multi-national character of the negotiations, the draft agreement notably was negotiated and produced in four languages; Chinese, English, French and Russian.

As the Agreement addresses high seas fisheries in the Central Arctic Ocean, it uses the legal geographies of the Arctic Ocean to define its area of application. As Article 1 declares, 'The single high seas portion of the central Arctic Ocean that is surrounded by waters within which Canada, the Kingdom of Denmark with respect of Greenland, the Kingdom of Norway, the Russian Federation and the United States of America exercise fisheries jurisdiction.' For the purposes of the agreement, thus, the spatial scope is not ecosystem-based rather it uses exclusively legal criteria (Schatz, Proelss and Liu 2019). Furthermore, the Agreement excludes the Norwegian archipelago of Svalbard and its fisheries protection zone and this might explain the reference to 'fisheries jurisdiction' rather than 'areas under national jurisdiction'. As legal experts note, the status of the waters around Svalbard are subject to dispute as Norway and other signatories to the 1930 Spitzbergen Treaty do not agree on the degree to which Norwegian sovereign rights exist beyond the territorial sea.

The Agreement not only distinguishes between different sovereignty regimes within the Arctic Ocean but also makes distinctions on the basis of the marine life being addressed. Sedentary species are subject to the continental shelf regime and thus likely to fall within coastal state jurisdiction. The focus is thus in the main on migratory fish stocks, and, unlike the 1994 Bering Sea Pollock Convention, is designed to be a precautionary intervention (Zou and Huntington 2018). In other words, the Agreement

seeks to establish a framework before any commercial fishing commences in the CAO (the agreement does not address non-commercial fishing). The agreement is not anti-fishing, rather it is seeking to prevent unregulated commercial fisheries from developing. The Agreement stipulates that commercial fishing must be underwritten by interim conservation and management measures. While others have provided detailed analysis of the Agreement and its contents, it contributes to the establishment of a fisheries conservation and management that sits uneasily with the marine ecologies of the wider Arctic Ocean.

For the present, the Agreement represents an important intervention not only in the management of fisheries in the central Arctic Ocean but also in the mobilisation of geographical imaginaries and territorial practices being brought to bear on the Arctic Ocean. As a referent object, the CAO, becomes a space of and for geopolitical interest, legal intervention and resource management. During the negotiations, the A5 established themselves as 'central Arctic Ocean states' alongside their self-identification as Arctic Ocean coastal states (A5). The Agreement, on entry into force, has a 16-year life, subject to renewal unless any one-party objects. Within three years of entry into force, the parties should have developed an exploratory fishing protocol, which might begin to address some knotty issues such as how will exploratory fishing be defined, will other parties have to be told about the intended actions of signatories, and will the A5, in particular, push for 'no-catch' or 'off limits' areas in the CAO. Distinguishing between marine scientific research and exploratory fishing might also be challenging. The relationship between the waters of the CAO and the seabed might be complicated further by future developments such as the possible introduction of marine protected areas (MPAs) and/or future agreement on Biodiversity Beyond National Jurisdiction.

The CAO as 3D marine volume will be entangled with a multitude of legal regimes in due course. One notable development will be to watch how the Arctic Ocean becomes an academic-policy terrain generative of ever more legal, geopolitical and environmental interventions and readings in the future.

'Real Interest' in the CAO: Inuit, Science and Military

When the 2018 Agreement was negotiated and signed, there were representatives from indigenous peoples on the Canadian and Danish delegations of the five Arctic Ocean coastal states (A5). At the 2008 meeting in Greenland, which led to the Ilulissat Declaration, the official representatives of the A5 including Canadian Foreign Minister Lawrence Cannon and his Russian counterpart, Sergei Lavrov, were photographed standing next to two representatives from Greenland, Aleqa Hammond and the prime minister of Greenland Hans Enoksen. Pointedly, therefore, the then Danish Foreign Minister Per Stig Moeller was one of three representing the Kingdom of Denmark. The Arctic Ocean conference was formally organised by Denmark and held in Greenland. The follow up 2010 A5 conference held in Canada was criticised later for not including indigenous representatives in the formal meeting itself. Between 2008-2018, the presence of the indigenous peoples of the Arctic has been patchy and other regional fisheries governance agreements such as the North East Atlantic Fisheries Commission make no mention of indigenous knowledge and participation.

The 2008 Declaration did not speak of *Inuit Nunaat*. The Declaration speaks of 'interested parties' but those parties are never defined. As is noted:

The five coastal states currently cooperate closely in the Arctic Ocean with each other and *with other interested parties*. This cooperation includes the collection of scientific data concerning the continental shelf, the protection of the marine environment and other scientific research. We will work to strengthen this cooperation, which is based on mutual trust and transparency, inter alia, through timely exchange of data and analyses (2008 Ilulissat Declaration, emphasis added).

In the 2018 Agreement, the A5 were eager to protect their interests, sovereign rights and special role as coastal state parties. Indigenous representation in some of the delegations was in part a reaction to the 2009 Circumpolar Inuit Declaration on Sovereignty in the Arctic, which did challenge the sovereign rights of the Arctic states but did demand to be consulted with and respected. In 2011, the Circumpolar Inuit Declaration on Resource Development Principles in Inuit Nunaat', which called for indigenous peoples to be active participants in state-led projects and collective resource management, reminded audiences that "resource development in *Inuit*

Nunaat must proceed only with the free, prior, and informed consent of the Inuit of that region” (2011 Inuit Declaration). In 2014, the Inuit Circumpolar Council adopted the Kitigaaryuit Declaration, which called for Inuit to be included in any commissions, committees and councils addressing Arctic fisheries.

Underpinning those demands lies the UN Declaration on the Rights of Indigenous Peoples (UNDRIP 2007), which notes that indigenous communities have rights to lands, territories, and resources that they have traditionally owned, occupied and/or used. In Canada, section 35 of the Canadian Constitution Act (1982) offers constitutional protection of the rights of indigenous, aboriginal and first nation peoples. In the Canadian context, land claims agreements include the 1984 Inuvialuit Final Agreement, which established an Inuvialuit Settlement Region (ISR). The ISR established surface and sub-surface rights for indigenous communities and include a maritime component. The ISR extends into the Beaufort Sea, and follows the disputed US-Canada maritime border region. While Canada did not consult formally with Inuit when collecting materials pertaining to extended continental shelves in the Arctic Ocean, Inuit have rights as well given that they have entered into a treaty-based partnership with Canada. Furthermore, it could be argued that the very legitimacy of Canada as ‘Arctic state’ is acknowledged to rest on Inuit and indigenous occupation of the Arctic that pre-dated the establishment of the Canadian Federation.

While the 2018 Agreement acknowledges that it should be open to those with a ‘real interest’ in living resources management in the CAO, the text is silent on the complex treaties and agreements that shape Arctic states relations with their respective indigenous peoples. In Article 10, it is noted that, ‘After the entry into force of this Agreement, the Parties may invite other States with a real interest to accede to this Agreement.’ The original ten parties would have to invite them to become a party, and a consensus on their membership would need to prevail. One example might be a post-Brexit UK wishing in the future to become a party to the Agreement. While that possibility has already been thought about, the role for the indigenous peoples in the high seas of the Arctic Ocean of the Arctic deserves further reflection (see, for example Huebert 2018). Could they block and/or frustrate commercial fisheries in favour of regulated non-commercial fishing? As Schatz (2019) notes, “Time will tell whether the

incorporation of indigenous and local knowledge into CAOFA's machinery will have a noticeable impact on CAO fisheries management" (Schatz 2019: 133).

The term 'real interest' is not defined in the 2018 Agreement but its provenance lies with Article 8 of the 1995 Fish Stocks Agreement. As the latter notes, with reference to Article 8 (3), 'States having a real interest in the fisheries concerned may become members of such organization or participants in such arrangement.' Usually a 'real interest' would be displayed by participation in commercial fisheries. In this case, there is no prior activity so it remains to be seen how new parties might be able to join the Agreement and whether indigenous peoples will be granted a more prominent role in the management of the CAO. For example, in the case of the indigenous peoples living in Canada and Greenland, what would evince 'real interest'? Indigenous knowledge has not, historically, extended to the CAO region, and yet those very communities have been at the forefront of experiencing the land and marine grabbing activities of coastal and settler colonial states in the past (Bennett, Govan and Satterfield 2015). Land claims agreements in Canada do include marine areas such as the coastlines and seas. So, there is a danger that in the rush to prioritise their interests as coastal states, the 2018 Agreement becomes yet another example of indigenous peoples' perspectives being erased or downgraded. As indigenous scholars such as Zoe Todd (2016) warn, structural relations of settler colonialism can and do endure even when states speak of consultation, co-management and partnership.

The very fact an agreement was considered necessary for the self-identified CAO was because of fundamental material state-change. The loss and disappearance of sea ice was held responsible for the necessity of the agreement. While the preamble notes that, 'commercial fishing is unlikely to become viable in the high seas portion of the central Arctic Ocean in the near future', it nonetheless thinks that this is something to be acknowledged and addressed. What the Agreement does not do is speak of climate change and past episodes of Arctic marine resource grabbing. There is nothing that recognises, therefore, the role of coastal and non-coastal states in mal-appropriation and over-exploitation of the Arctic's living marine resources. The past is erased in the name of anticipating a yet to happen future. Speculative behaviour is used to justify state-based intervention while eliding over things that indigenous peoples in the Arctic

have endured repeatedly such as ecosystem collapse, species loss and drastic relocation of non-human communities.

Indigenous peoples' relationships with non-humans has been subject to the ongoing disruptive forces of settler colonialism, capitalism, militarism and extractive activities. So making sense of 'real interest' is a political project (on environmental justice, Whyte 2017). In the offshore areas of the Arctic, we might refer to 'creeping coastal state jurisdiction' not just as a matter of concern for third parties but also those very indigenous communities who bore the brunt of onshore settler colonialism. Warming in the Arctic might serve as a powerful reminder as to what is at stake as a consequence of that settlement and exploitation of the earth by colonial powers. As the former chair of the Inuit Circumpolar Council, Shelia Watt-Cloutier, reminded her readers, 'Climate change is yet another rapid assault on our way of life' (Watt-Cloutier 2015). In a further twist of irony, indigenous peoples have also been positioned as possessors of invaluable knowledge of climate-related resilience that might be profitably extracted by non-indigenous communities (Whyte 2018).

As I read the 2018 Agreement, there is little recognition of the extraordinary ecological qualities of the Arctic Ocean. There is little to no discussion of the long polar night, the extremities of cold, and the paradox of non-indigenous behaviour in the Arctic, which has been both scarce in terms of physical habitation and explicit in terms of material objects such as the micro-plastics now found embedded in the drifting sea ice that covers the Arctic Ocean as well as in the seabed. The hydrology, geology and atmosphere of the Arctic has had a 'real interest' in the sense of bearing the brunt of that human impact. The Agreement asks us to imagine another kind of Arctic where fishing vessels might ply their trade in the midst of a radically different seascape rather than ice-covered desert. A 'desert' that scientists in the Arctic Ocean are proving is not only affected by pollutants but also capable of sustaining diverse living communities above, below and underneath sea ice. In September 2019, the German polar vessel, the *Polar Stern*, will spend a year trapped in sea ice in the Arctic Ocean (MOSAIC expedition), for the expressed purpose of allowing scientists to generate new data on ecosystem change and environmental dynamics.⁴

Writing in the midst of the Anthropocene, the 2018 Agreement might be lauded as visionary and far-sighted in terms of its approach towards the prevention of unregulated commercial fisheries. But as other parts of the world remind us, the presence of an ecosystem approach to fisheries is no guarantee that disputes will not emerge and re-emerge over resource management. The Southern Ocean's Ross Sea marine protected area (MPA) is a case in point (Brooks 2019). Alternatively, we might have a 'real interest' in ensuring that commercial fishing never takes places in the CAO proper because ultimately it will struggle to be attentive to the scale and pace of change within the Arctic Ocean. It is worth remembering that Arctic whaling in the early part of the 19th century accelerated during a couple of seasons where warmer winters off the coast of Greenland encouraged intensive exploitation. Warmer weather also encouraged others to speculate that the Arctic might be free of ice and ushered in excitement for the prospect of an 'open polar sea'. The difference between the 19th century and the 21st century is that some of that feverish speculation about Arctic resources was blocked and frustrated by the return of colder winters and thicker sea ice. In tomorrow's world, ice is not likely to prove so resilient. Two hundred years ago European explorers spoke in awe of the elemental power of ice and now we have a fisheries agreement confidently speaking of a CAO.

Finally, we should not forget other developments affecting the high seas of the Arctic Ocean and the 'real interest' of militaries and their security projects. The Arctic Ocean as a 3D volume has proven enticing yet again to military surveillance and patrolling. The return of under-ice submarine operations (ICEX) by the British and American navies was stimulated by new fears of a resurgent Russia, eager to modernise and extend its armed forces and infrastructural capabilities (Depledge, Dodds and Kennedy-Pipe 2019). ICEX 2018, for example, involved three US and UK submarines practising breaking through sea ice, travelling under the ice and establishing base camps once they surfaced in and around the North Pole. ICEX operations depend on the specialist support provided by agencies such as the US National Ice Center, which offers an analytical tool informed by satellite imagery (Fractures, Leads and Polynyas). Submarine commanders use the tool as a predictive device for where open water might be found.⁵ Finding open water and/or thinner sea ice is crucial if you wish to push a submarine through ice-covered waters. The US Navy is planning freedom of navigation operations in Arctic waters, and both NATO and Russia conduct military

operations in and around the CAO. While the 2018 Agreement concerns itself with fish, others plot and plan activities designed to monitor, patrol and securitize polar waters.

Conclusion

The 2018 Agreement is best seen as starting point for further negotiation over the CAO as an object of interest (Schatz et al 2019). It is a recent intervention and owes a great deal to the generative intersection of law, geopolitics, science and resources. It reflects, moreover, a recognition that the Arctic Ocean is no longer a remote, barely visited and disconnected region of the world (Sorlin 2018). It provides a telling and productive example of how states territorialise spaces; how they imagine, intervene, incentivise, and securitize emerging areas of interest. Territorial practices and performances are not uniform and what we have witnessed in the last decade is intensification and amplification. Invoking the future as an imperative to act in the here and now is integral to the 2018 Agreement. It is not just a case of drawing a line around the high seas of the Arctic Ocean.

The transition from 2008 Declaration to 2018 Agreement has largely occurred in isolation from the Arctic Council and attempts to extend the involvement of other RFMOs such as the North East Atlantic Fisheries Commission have been resisted. The A5 and 5+5 parties make no explicit reference to the Council in the 2018 Agreement, and the A5 in particular were and are eager to remain the front-runners in terms of Agreement implementation. It is clear that the ten parties are not adverse to commercial fishing in the future. Legal analysis has rightly drawn attention to the challenges that lie ahead, such as implementing a legally-binding agreement on high seas fisheries and ensuring that the conservation measures adopted by the A5 are complementary with the high seas of the CAO. Co-ordinating and distinguishing between marine research and exploratory fishing in the CAO will be challenging. Finally, the legal and political geographies of the Arctic Ocean will remain dynamic. Coastal states will expect to delimit their respective extended continental shelves (which carry sovereign rights over the seabed and sedentary species such as snow crab) while extra-territorial parties will be invested in the management of living resources such as fish, and wider marine biodiversity in the CAO. This might include

more active engagement with iconic species such as polar bears, seals and whales which roam above and below the sea ice of the Arctic Ocean.

The CAO is now a significant referent object for law, geopolitics, resource management and shipping. As Schatz et al (2019: 20) note, ‘the spatial scope of the CAOF Agreement is based entirely on legal considerations rather than on ecosystem or even stock focused management considerations’. More challenging still, the 2018 Agreement states that under Article 4 (4), ‘The Parties shall ensure that the Joint Program of Scientific Research and Monitoring takes into account the work of relevant scientific and technical organizations, bodies and programs, as well as indigenous and local knowledge.’ It is not at all clear how ‘indigenous and local knowledge’ will be taken into account and whether that actually misses the more fundamental point; namely, that indigenous peoples should be formal partners. Indigenous parties might be suspicious of the idea of ‘incorporation’ rather than say adopting a public commitment to co-design fisheries management, co-produce knowledge and co-monitor.

The CAO is and will continue to attract mapping initiatives from charting sea ice extent and edge, and patterns of open water to more covert assessments of ice and its relationship to possible submerged militarism (Steinberg and Kristoffersen 2018). Keeping track of future movements of fish stocks, the secretive trails of submarines, the diffuse degrees of oceanic acidification and other human and non-human activities remind us that there is plenty of ‘real interest’ in the CAO. All of which suggests that there is plenty of scope and opportunity for interested parties to invest further in knowledge acquisition, speculate over resource potential, and plot alternative futures for the Arctic Ocean (Biggar and Neimark 2017). Having ‘due regard’ for rights of others needs to co-exist with coastal states eager to protect their sovereign rights. Managing ‘due regard’ and ‘adjacency’ will be challenging in the CAO, present and future. As Elferink (2018: 437) reminds us, “One of the controversial issues is how the rights of coastal States over their maritime zones should be taken into consideration in this connection. Due to, among others, the transboundary effects of activities in the marine environment and the fact that areas requiring protection may straddle ABNJ and coastal State zones, there is an obvious need to address this

issue. As these considerations indicate, this may not only be a matter of giving consideration to the rights of coastal States”. But they are not alone.

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¹ Email exchange, 11 and 13 March 2019. My interviewee asked to remain anonymous.

² Although this paper is concerned with the Central Arctic Ocean, there are other areas of high seas including the so-called Banana Hole in the Norwegian Sea, the Donut Hole in the central Bering Sea and the Loophole in the Barents Sea.

³ The Convention on Biological Diversity has adopted 20 Aichi Biodiversity Targets and target 11 notes that at least 10% of marine and coastal areas should be protected by 2020. The Arctic Ocean is included in areas identified as Ecologically and Biologically Significant Areas.

⁴ 2019-2020 MOSAIC Expedition, further details available at: <https://www.mosaic-expedition.org>

⁵ The National Ice Center is run by the US agency NOAA, further details available here: <https://www.natice.noaa.gov>