Crises and international cooperation: an Arctic case study

Michael Byers
University of British Columbia

Abstract
This article contributes the insight that during an international crisis, a pre-existing state of complex interdependence can help to preserve cooperation. It derives the insight from a case study on the International Relations of the Arctic before and after the 2014 Russian annexation of Crimea. The case study is examined through the lens of Robert Keohane and Joseph Nye’s concept of ‘complex interdependence’, as developed in their 1977 book *Power and Interdependence* – a concept which provides the analytical breadth necessary for a multifactorial situation of regional cooperation and conflict. It finds that Arctic international relations had achieved a state of complex interdependence by 2014, and that some important elements of interdependence then disappeared after the annexation of Crimea. But while most military and economic cooperation between Russia and Western states was suspended, many aspects of regional cooperation continued, including on search and rescue, fisheries, continental shelves, navigation and in the Arctic Council. The question is, why has Arctic cooperation continued in some issue areas while breaking down in others? Why have Russian–Western relations in that region been insulated, to some degree, from developments elsewhere? The concept of complex interdependence provides some answers.

Keywords
Arctic, complex interdependence, international cooperation, international crises, NATO, Russia, Ukraine

Introduction
At first glance, Russia’s annexation of Crimea in 2014 and the consequent breakdown in military and economic cooperation with Western states seem amendable to traditional
realist explanations of international relations. Realism holds that states are focused on the pursuit of military and economic power and their decision-making is unconstrained by international law, institutions or other cooperative mechanisms. However, traditional realist explanations may not be the best (or only) ways of accounting for all aspects of Russian–Western relations, such as the continued cooperation in non-military issue areas in the Arctic.

This article takes the Arctic as a case study, to provide insights into the impact of the Ukraine crisis – and other crises – on international cooperation in the twenty-first century. For the purpose of this analysis, it adopts Robert Keohane and Joseph Nye’s concept of ‘complex interdependence’, as developed in their 1977 book *Power and Interdependence* and supplemented in later editions – including the fourth edition in 2012. For reasons of space, this article leaves it to others to demonstrate the applicability of other theoretical approaches, including non-traditional realist approaches, and the insights they might provide. For the same reasons, it does not document every potentially relevant development within the Arctic; the goal, instead, is to provide a representative sampling of a complex and dynamic region of importance to Russian–Western relations today.

As Keohane and Nye emphasized, complex interdependence is not a theory but a concept, ‘an ideal type of international system, deliberately constructed to contrast with a “realist” ideal type’. Most systems will fit neither type perfectly, and instead fall on a spectrum somewhere between the two. Complex interdependence manifests three characteristics: an absence of hierarchy among issues, the presence of transgovernmental and transnational channels of contact, and the near irrelevance of military force. This article finds that these characteristics became increasingly present in the post-Cold War Arctic, and the international relations of the region had achieved a state of complex interdependence by 2014.

The situation became more complicated after the annexation of Crimea, as most military and economic cooperation between Russia and Western states was suspended. However, Arctic international relations shifted only slightly towards the realist ideal type. Many aspects of regional cooperation continued, including on search and rescue, fisheries, continental shelves, navigation and in the Arctic Council.

The question is, why the only partial breakdown? Why has Arctic cooperation continued in some issue areas while breaking down in others? Why have Russian–Western relations in that region been insulated, to some degree, from developments elsewhere?

In some issue areas, continued cooperation can be explained simply on the basis of state interests. In other issue areas, the situation may be more complicated. This article contributes to the literature of international relations with the insight that during an international crisis, a pre-existing state of complex interdependence may help to preserve cooperation.

The article has four sections, the first of which explains the concept of complex interdependence. The second section documents the emergence of complex interdependence in the post-Cold War Arctic. The third section examines Arctic international relations after the annexation of Crimea, and finds a great deal of continuing cooperation. The final section probes deeper into this continued cooperation by drawing on Keohane and Nye’s discussion of the ‘political processes of complex interdependence’. As they
explained, the characteristics of complex interdependence ‘give rise to distinctive political processes, which translate power resources into power as control over outcomes’. These political processes should be particularly relevant during crises, when control over outcomes becomes more important to states.

**Complex interdependence**

Keohane and Nye developed the concept of complex interdependence to explain aspects of International Relations for which traditional realist approaches could not account. According to them, ‘interdependence’ refers to activities with reciprocal effects among states or other actors, evolving out of communications, economic relations, and other forms of human interaction. ‘Complex interdependence’ involves a more complicated web of reciprocal interactions, either within a single ‘issue area’ or in a larger relationship between two or more countries.

Complex interdependence was developed in opposition to core realist assumptions, which are described by Keohane and Nye as ‘security is the dominant goal; states are the only significant actors; and force is the dominant instrument’. It consequently has three characteristics:

1. State policies are not arranged in stable hierarchies,
2. Multiple channels of contact exist among societies,
3. Military force is largely irrelevant.

In other words, as a situation moves along the spectrum from the realist ideal type towards the complex interdependence ideal type, military security no longer dominates the political agenda, states no longer monopolize contacts between societies and governments use military force less often.

Keohane and Nye presumed neither state equality nor equal dependence during complex interdependence. Powerful states still tend to dominate in relationships that remain asymmetrical. However, the characteristics of complex interdependence provide less-powerful states with opportunities to influence more-powerful ones. They do so, for instance, by creating a situation in which any state that wages war risks harming many of its own non-military interests. As Keohane and Nye explained, ‘in many contemporary situations, the use of force is so costly, and its threat so difficult to make credible, that a military strategy is an act of desperation’.

Moreover, the multiplicity of issues, actors, channels of contact and associated interdependencies ensures that a change in one dimension of a state-to-state relationship does not necessarily lead to changes in other dimensions. For example, a disruption of cooperation in the military sphere will not necessarily disrupt cooperation in the environmental or economic spheres. This separation of issue areas further limits the relevance of military power.

Keohane and Nye took the oceans issues area as a case study of sector-specific complex interdependence during the 1970s. They found that national governments played important roles in the definition of coastal state rights, but so too did international institutions, corporations and domestic political actors. The negotiating positions of
less-powerful countries were strengthened by these multiple contacts and by the diminished role of military force.

The concept of complex interdependence formed part of the foundation for the development of regime theory and institutionalism, with Keohane and others explaining how regimes and other institutions can protect against cheating and thus deliver absolute gains rather than the relative gains associated with realist approaches.8 Regime theory and institutionalism took the system-level insights of complex interdependence and developed them in more focused and nuanced ways. For instance, regime theorists and institutionalists studied mechanisms of cooperation specific to particular issue areas, such as trade, human rights and environmental protection, or specific to complex institutions such as the European Economic Community and later the European Commission (EC) and European Union (EU).9 In doing so, they advanced our understanding of how regimes and institutions operate and therefore, potentially, how the international system functions as a whole.

However, the concept of complex interdependence would seem to remain relevant to system-level analysis. It describes how multiple channels of contact exist between societies, giving rise to a complex web of interests and mechanisms for cooperation. Recently, Njord Wegge suggested that complex interdependence could be used for analysing Arctic international relations.10 The concept has also been applied in regional contexts such as Central Asia,11 and in specific issue areas such as global health.12 However, it has not been subject to efforts at theoretical development – until now.

In 2012, Keohane and Nye indicated that three events since 1977 had presented potential challenges to their concept of complex interdependence: the end of the Cold War, the terrorist attacks of 2001 and the global financial crisis of 2008. After a brief analysis of each event, they concluded that an appreciation of complex interdependence would have helped observers to understand the outcomes of each event. The 2014 annexation of Crimea poses another potential challenge to non-realist understandings of international relations.

Post-Cold War Arctic (1990–2014)

The Arctic would not have been a suitable case study for Keohane and Nye in 1977 because complex interdependence was not yet present in the region. As they later explained, ‘the Soviet-American relationship during the Cold War … fit the conditions of complex interdependence very little …’13 The Arctic was no exception. Although there was some cooperation – on scientific research, the protection of polar bears and migratory birds, and fisheries management in the Barents Sea – the region was essentially a military frontline.

The end of the Cold War brought fundamental changes to Russia’s relationship with the West. Russia was integrated into the global economic system and became a member of the G8, G20, International Monetary Fund (IMF), World Bank and World Trade Organization (WTO). The EU, made up mostly of North Atlantic Treaty Organization (NATO) states, became a major trading partner. At the same time, Russia’s military power declined sharply. The country spent just US$35b on its military in 2002, as compared to US$344b in 1988 (both figures in constant 2014 US dollars).14
In the Arctic, the Russian–Western relationship gradually turned in a more cooperative direction. The possibility of such a shift was foreseen by Keohane and Nye: ‘Since neither complex interdependence nor realist conditions are universal, understanding world politics requires that one understand the conditions applicable among particular countries at a particular time’. By 2014, it was possible to identify all three characteristics of complex interdependence – State policies are not arranged in stable hierarchies, multiple channels of contact exist among societies, military force is largely irrelevant – across a number of issue areas in the Arctic.

**Oceans**

*Transboundary fisheries.* Early hints of complex interdependence appeared as the result of developments in the oceans issue area beginning during the Cold War but expanding afterwards. The first was the response of Arctic states to overfishing in places where ‘straddling stocks’ move back-and-forth across boundaries. Multinational cooperation on fisheries management in the Barents Sea dates to 1959 and became bilateral when the Soviet Union and Norway claimed 200-nautical mile fishing zones in 1976. The two countries created the Norwegian–Russian Fisheries Commission, entered into a ‘Grey Zone Agreement’ on fisheries management in the area where their new maritime claims overlapped, and began using science-based quotas. After the Cold War ended, the bilateral regime was challenged, most notably by Iceland, whose fishers began catching cod in the high seas ‘loophole’ in the middle of the Barents Sea. Both Norway and Russia applied pressure on Iceland, including by banning its trawlers from landing catches in their ports. A trilateral agreement was achieved in 1999, with Iceland receiving its own quotas and all three countries gaining access to each other’s exclusive economic zones.

In 1988, as the Cold War began to wind down, the United States and the Union of Soviet Socialist Republics (USSR) signed their first fisheries agreement. Then, in 1994, the United States and Russia, along with China, Japan, Poland and South Korea, agreed to protect pollock stocks in the high seas ‘donut hole’ in the middle of the Bering Sea and established a science-based quota system. This cooperation grew through the post-Cold War period: in 2013, the United States and Russia issued a joint statement on combatting illegal, unreported and unregulated fishing.

*Extended continental shelves.* The second development hinting at complex interdependence was the ratification of the 1982 United Nations (UN) Convention on the Law of the Sea (UNCLOS) by four of the five Arctic Ocean states during the 1990s and 2000s. They thereby committed to a science-based process for determining the outer limit of their continental shelves where, as coastal states, they have exclusive rights over seabed resources. Although the United States has not acceded to UNCLOS, it accepts the relevant rules as customary international law and supports the process for determining rights over seabed resources.

Coastal state rights to ‘extended continental shelves’ did not exist prior to 1982 and are not the creation of powerful states. Instead, they are the result of multilateral negotiations that balanced the interests of all states, including through a revenue-sharing system administered by the International Seabed Authority which takes into account ‘the
interests and needs of developing States, particularly the least developed and the land-locked among them’.27

The application of the ‘extended continental shelf’ regime in the Arctic became salient in 2007, when a Russian explorer-politician planted a flag on the seabed at the North Pole and declared, ‘The Arctic is Russian’. These actions caused a global media frenzy, with predictions of a ‘Race for the Arctic’ and another ‘Cold War’.28 The Arctic Ocean coastal states responded to the misreporting by confirming their commitment to the ‘extensive international legal framework’ and the ‘orderly settlement of any possible overlapping claims’.29 By this point, the previous hierarchy of issue areas – dominated by military security – was breaking down.

The application of the extended continental shelf regime is also consistent with the second characteristic of complex interdependence, since it led to the development of transgovernmental channels of contact between departments and agencies other than foreign ministries, and between individuals with specialized expertise. The UNCLOS process involves technical issues of international law and geology, and for this reason, experts from the different Arctic Ocean states began sharing their knowledge and data in the 1990s.30 They developed into what Peter Haas famously termed ‘epistemic communities’: networks ‘of professionals with recognised expertise and competence in a particular domain and an authoritative claim to policy relevant knowledge within that domain or issue-area’.31 The development of epistemic communities is consistent with complex interdependence: in a chapter written for the third edition of Power and Interdependence, Keohane and Nye referred approvingly to Haas’ work.32 And as Mai’a K. Davis Cross explains, the fact that experts are employed to advance the interests of their own country does not preclude them forming transnational epistemic communities; even diplomats can constitute epistemic communities.33

Shipping safety. The second characteristic of complex interdependence also appeared in the negotiation of the Guidelines for Ships Operating in Arctic Ice-Covered Waters in 2002, followed by an expanded version in 2009.34 (The Guidelines were later transformed into a mandatory ‘Polar Code’, adopted after the annexation of Crimea – as discussed below.) Transgovernmental channels of contact played an important role in the negotiations, which were led by transportation ministries rather than foreign ministries.35 Transnational channels of contact also played a role, as shipping companies, non-governmental experts and environmental groups, many of them organized in formal associations or informal coalitions, sought to influence outcomes.36

Economics

An absence of issue-hierarchy and presence of multiple channels of contact can also be seen in the growth of economic ties in the post-Cold War Arctic.

Transpolar aviation. In 1998, Russia opened four transpolar air routes that provided significant time and fuel savings for foreign airlines, while over-flight fees began flowing to the Russian government.37 The routes crossed airspace that had previously been the domain of military aircraft, and they brought the International Civil Aviation
Organization and a mix of government departments, regulatory agencies and industry associations into the region.

**Oil and gas.** A liberalization of investment and trade drew Western capital into Russia, while resources, especially oil and gas, were exported in larger quantities – mostly to Europe.\(^{38}\) Energy relations between Russia and the EU soon involved a matrix of transgovernmental and transnational channels of contact, including multiple departments and agencies in dozens of national governments as well as hundreds of companies.\(^{39}\)

In the 2000s, the Russian government gave two state-controlled companies, Rosneft and Gazprom, privileged access to the continental shelf off its Arctic coast.\(^{40}\) The companies, realizing the need for Western capital and offshore technologies, found partners in Exxon, Shell, ENI and Statoil. The interests of the companies contributed to the conclusion of the 2010 Barents Sea boundary treaty between Norway and Russia.\(^{41}\)

**Northern Sea Route.** Transnational channels of contact between state and corporate interests can also be seen in the Northern Sea Route, which connects the Atlantic and Pacific oceans via Russia’s northern coast. After the Cold War ended, Russia sought to attract foreign shipping to the increasingly ice-free route. It also collected fees for mandatory icebreaker escorts, creating a reciprocal relationship between companies and government. Forty-six ships sailed through the waterway in 2012 and another 71 in 2013.\(^{42}\)

The best evidence of transgovernmental and transnational channels of contact on this issue is the Northern Sea Route Information Office, created in 2011 as a joint initiative of the Centre for High North Logistics and Rosatomflot, a Russian state-owned company.\(^{43}\) The Centre for High North Logistics is a Norwegian foundation supported by the Norwegian government, the Norwegian Shipowners’ Association and private companies.

Significantly, neither Norway nor Western shipping companies seemed concerned about a longstanding dispute between Russia and the United States over the legal status of the narrowest parts of the Northern Sea Route, which Moscow claims constitute ‘internal waters’ and Washington claims are ‘international straits’.\(^{44}\) The lack of concern is evidence of an absence of issue-hierarchy, since the dispute is rooted in military security concerns, with Russia seeking maximum control of shipping along its coast, and the United States seeking maximum freedom of navigation for its navy (and by extension, the navies of its NATO allies including Norway).

**Multilateral cooperation on non-military issues**

**Arctic Council.** In 1987, Mikhail Gorbachev gave a speech on Arctic cooperation, prompting a process of institution building that led to the Arctic Environmental Protection Strategy in 1991 and then the Arctic Council in 1996.\(^{45}\) Since its inception, the Council has exhibited all the characteristics of complex interdependence, including an absence of issue-hierarchy. According to its founding document, ‘The Arctic Council should not deal with matters related to military security’.\(^{46}\) The Council has instead focused on environmental protection and sustainable development.

The Arctic Council has fostered transgovernmental and transnational channels of contact by commissioning topic-specific ‘assessments’ and creating ‘working groups’ and
‘task forces’ made up of government and non-government experts. As occurred with the extended continental shelf regime, these groups quickly developed into epistemic communities with influence over political outcomes.47 As Keohane and Nye explained:

By framing issues where knowledge is important, epistemic communities become important actors in forming coalitions and in bargaining processes. By creating knowledge, they can provide the basis for effective cooperation. But to be effective, the procedures by which this information is produced have to appear unbiased … to be produced through a process that is dominated by professional norms and that appears transparent and procedurally fair.48

The 2004 Arctic Climate Impact Assessment provides one such example. Its peer-reviewed work involved 245 scientists from 18 countries as well as 29 indigenous persons valued for their ‘traditional knowledge’.49 Its conclusions prompted the governments of Arctic states to pay more attention to the region, and drew the attention of non-Arctic governments as well.50

Further evidence of transgovernmentalism and transnationalism can be found in the role played by observers in the Arctic Council. Observers include both states and non-state entities, and while observers are not allowed to speak at the Council’s ministerial meetings, they are able to contribute to working groups and task forces. Some observers, such as the International Arctic Science Committee – formed in 1990 by the national scientific organizations of the Arctic states51 – have influenced the recommendations, reports and draft agreements produced by working groups and task forces.

Another example of transgovernmentalism and transnationalism concerns the six indigenous groups who have been accorded the status of ‘permanent participants’ in the Arctic Council. Unlike observers, they sit alongside state representatives and participate fully in deliberations. All but one of the groups are transnational in character, representing populations in two or more countries. Two of the groups – the Inuit Circumpolar Council and the Saami Council – have a decades-long history of political collaboration with each other. All these features are consistent with Keohane and Nye’s recognition that the nearer a situation is to complex interdependence, ‘the more we expect the outcomes of political bargaining to be affected by transnational relations’.52

Military force

Strategic dimension of military relationship. Keohane and Nye separated the strategic dimension of the Soviet-US relationship out of their analysis of the oceans issue area as they were focusing on the ‘peacetime use and regulation of oceans space and resources’.53 In contrast, this article includes strategic nuclear forces in its analysis of complex interdependence in the post-Cold War Arctic, for two reasons. First, nuclear-armed bombers and submarines are deployed in the Arctic because of the geographic proximity of Russia and the United States as well as the presence of sea-ice, which helps to conceal submarines. Second, a significant amount of military cooperation developed in the Arctic between 1990 and 2014, accommodating – and perhaps responding to – the strategic standoff. In other words, elements of complex interdependence developed around the strategic nuclear relationship, as interdependence based on ‘mutually assured destruction’ was augmented
with other military relations involving improved communication, coordination and even joint exercises. This broadening of the military relationship created new transgovernmental contacts, which further reduced the risk of force, whether nuclear or conventional, being used between Arctic countries. This possibility, of complex interdependence developing around a strategic nuclear relationship and thereby decreasing the likelihood of armed conflict, was not foreseen by Keohane and Nye.

Even the strategic nuclear balance involved some cooperation, which began in 1969 with the Strategic Arms Limitation Talks and led to two 1972 treaties, the Anti-Ballistic Missile Treaty and the Interim Agreement between US and USSR on Limitation of Strategic Offensive Arms. More progress was made after the Cold War with the 1991 and 2010 Strategic Arms Reduction Treaties (START and START II).

Several arms control instruments were negotiated within the Organization for Security and Co-operation in Europe (OSCE). One treaty set limits on conventional military equipment positioned between the Atlantic Ocean and the Ural Mountains, thereby including the Arctic regions of Western Russia, Finland, Sweden and Norway. Another provided for unarmed surveillance flights, including Russian flights over Canada and the United States, and flights by Canada, the United States and other Western countries over Russia.

As the Cold War faded into history, meetings and joint exercises between Arctic militaries became almost commonplace. The annual Arctic Security Forces Roundtable was established in 2011, at the initiative of the US European Command and the Norwegian Defence Staff, as an informal venue for discussions among general officers from the eight Arctic countries plus France, Germany, the Netherlands and the United Kingdom. The Roundtable met again in 2012 and 2013.

Russia and the United States conducted the ‘Northern Eagle’ naval exercise in the Barents Sea on a biennial basis, beginning in 2004 and including Norway from 2008. The ‘Vigilant Eagle’ air exercises began in 2008 with a computer-simulation involving representatives from Russia, the United States and Canada. ‘Live-fly’ exercises followed in 2010, 2011 and 2013. All involved scenarios where commercial aircraft had been hijacked in international airspace between Alaska and Russia.

Conventional military force. Consistent with the third characteristic of complex interdependence, conventional force was never used nor threatened in the post-Cold War Arctic. Instead, Arctic states decreased military spending, Russia neglected the Northern Fleet, Canada lost its capability to deploy troops into the Arctic and the United States allowed its icebreaker fleet to atrophy. Arctic states found more efficient, non-forceful ways to advance their interests, for as Keohane and Nye explained, ‘relative to cost, there is no guarantee that military means will be more effective than economic ones to achieve a given purpose’.

There was, in fact, little to be gained by using force in the post-Cold War Arctic, where the only disputed land is a 1.3 km² islet claimed by Canada and Denmark. As for maritime areas, the Arctic states chose to negotiate boundaries during this period, with force playing no apparent role in the process. The United States and the USSR concluded a treaty in the Bering Sea while Russia and Norway did likewise in the Barents Sea. In the latter case, 50,000 square nautical miles of disputed water column and seabed were
divided almost exactly in half, despite the disparity in military power between the two countries.67

As mentioned, four of the five Arctic Ocean states ratified UNCLOS during the post-
Cold War period, while the United States accepted the relevant rules as customary inter-
national law. All states thus accepted the rules on maritime zones, including a 12 nautical
mile territorial sea and a 200 nautical mile exclusive economic zone. They also sup-
ported the science-based process for allocating continental shelves more than 200 nauti-
cal miles from shore, a process that will eventually leave just one or two small areas of
deep seabed in the middle of the Arctic Ocean open to exploitation by non-Arctic
countries.

Taken together, the reduction in military capabilities and the general acceptance of the
‘Law of the Sea’ rendered conventional force irrelevant with regard to the acquisition of
land and maritime areas in the post-Cold War Arctic. For this reason, conventional forces
were increasingly redirected to ‘constabulary’ duties. Nuclear arms remained relevant, but
only because they preserved a situation of mutual risk – one that provided an incentive for
cooperation, and thus confidence building, in other issue areas such as search and rescue.

Search and rescue. The development of complex interdependence was apparent with
regard to search and rescue, where the Arctic’s vast distances and extreme weather pro-
vided incentives for cooperation. A number of bilateral agreements were concluded at
the end of the Cold War, including one between the United States and the USSR, signed
just 1 year after Gorbachev’s speech on Arctic cooperation.68 In 2011, the Arctic states
concluded an agreement establishing clear geographic zones of responsibility.69 Numer-
ous exercises have taken place under these agreements: Russia began participating in
NATO search and rescue exercises in 200570 and hosted its own exercise in 2009 with
participation from Finland, Norway and Sweden.71

The search and rescue treaties promoted cooperation between Arctic militaries on a
non-forceful mission, consistent with the first characteristic of complex interdepend-
ence: a breakdown of the hierarchy of issues. They also created further transgovernmen-
tal channels of contact between Arctic militaries, consistent with the second characteristic.
The 2011 agreement, for instance, encourages states to share information, techniques,
equipment and facilities, and to engage in joint exercises, reciprocal visits and research
initiatives.

On search and rescue and elsewhere, the development of complex interdependence in
the Post-Cold War Arctic is apparent. However, the focus of this article is on what hap-
pened next – after Russia’s annexation of Crimea.

Post-Crimea Arctic (2014–)

Arctic cooperation has survived significant disputes between Russia and other Arctic
countries. The US-funded Arctic Climate Impact Assessment was adopted at the Arctic
Council shortly after the 2003 US-led invasion of Iraq,72 which was strongly opposed by
Russia. The Arctic Marine Shipping Assessment73 was adopted at the Arctic Council
shortly after the 2008 Russian invasion of Georgia, which was strongly opposed by the
United States and other Arctic countries.
Arctic cooperation was challenged again when Russia annexed Crimea in March 2014. The annexation, and Russia’s support for rebels in the Ukrainian provinces of Donetsk and Luhansk, raised tensions between Russia and other Arctic states to their highest level since the Cold War. As traditional realist assumptions would predict, most military and economic cooperation was suspended as a result of the crisis. But as this section shows, cooperation in other issue areas mostly continued – with the result that the Arctic now seems to be located partway along the spectrum between the complex interdependence and realist ideal types.

**Military relations**

Most military cooperation in the Arctic was suspended immediately after the annexation of Crimea. In March 2014, the biennial US-Russia-Norway naval exercise ‘Northern Eagle’ was cancelled, and cooperation between NATO and Russia was curtailed just 1 month later. No Russians participated in the Arctic Security Forces Roundtables in 2014 and 2015. One notable exception concerned naval activity along the boundary between Russia and Norway, as commanders continued to talk on a weekly basis. The size and frequency of exercises increased on both the Russian and non-Russian sides of the Arctic. For example, the ‘Arctic Challenge’ exercise took place in May 2015 with fighter jets from nine countries operating out of bases in Norway, Sweden and Finland. In response, the Russian defence minister announced a snap inspection of the Russian Air Force, including the ‘Arctic Brigade’ located on the Kola Peninsula.

Both NATO and Russia increased the frequency of military flights in the Arctic. In December 2014, the head of the Russian Air Force said that NATO was flying 8–12 surveillance flights over the Baltic and Barents Seas each week and that the number of fighter jet flights had doubled. In February 2015, the head of US Northern Command remarked that ‘[the Russians have] been very aggressive … in the Arctic …. Aggressive in the amount of flights, not aggressive in how they fly’. The last point, about the lack of aggression in the conduct of the flights, was likely a reference to the fact that Russian planes never entered US or Canadian airspace.

To some degree, military capabilities have been strengthened. For example, two camps composed of 34 prefabricated modules each were installed in Russia’s eastern Arctic in 2014. A spokesperson for Russia’s defence ministry said that six such compounds were planned ‘to further develop the stationing of ground forces in the Arctic’. In 2015, Canada began construction of an Arctic naval refuelling facility and five to six Arctic/Offshore Patrol Ships. That same year, Norway, Denmark, Iceland, Sweden and Finland agreed to further ‘develop defence capabilities’, in an agreement on military cooperation explicitly prompted by Russia’s annexation of Crimea.

However, the Arctic military build-up must be kept in perspective, for three reasons. First, Russia’s armed forces were degraded by deep spending cuts during the 1990s and 2000s. The recent increase in spending could be aimed at rebuilding rather than strengthening capabilities. Second, much of Russia’s nuclear deterrence is based on the Kola Peninsula because of the access to the world’s oceans provided by the year-round ice-free conditions of the Barents Sea. These forces, prominently including nuclear-missile submarines, are not Arctic-specific; they just happen to be deployed from north of the
Arctic Circle. In this respect, they are similar to US missile defence interceptors based in Alaska but directed against threats from North Korea. Third, climate change is leading to an increase in non-State activity in the Arctic and, with this, an increased need for search and rescue and ‘constabulary’ capabilities. This is not to say that an armed conflict could never break out in the Arctic or, more likely, spread to the region from elsewhere. However, consistent with the continued existence of elements of complex interdependence, military force remains of limited relevance to Arctic international relations.

Economic relations

The United States, EU, Canada and Norway responded to the annexation of Crimea with travel bans on some Russian government officials and major shareholders of Russian banks, restrictions on access to Western capital and technologies, and arms embargos. They also prohibited Western companies from providing goods, services or technologies for Arctic offshore oil projects in Russia, forcing Exxon to suspend a joint venture with Rosneft. In retaliation, Russia, previously the EU’s second largest export market for food, adopted sanctions against food imports. However, some trade continued, most notably in Russian gas.

Search and rescue

In contrast to the issue areas above, search and rescue cooperation continued unabated. In December 2014, Russian officials requested assistance from the US Coast Guard after a South Korean fishing trawler sank inside the Russian search and rescue zone in the Bering Sea. The annual Norway–Russia ‘Exercise Barents’ took place in June 2015 and 2016, while the Norway–Sweden–Finland–Russia ‘Barents Rescue Exercise’ took place in September and October 2015. Exercises under the Arctic Search and Rescue Agreement have proceeded as planned. In October 2015, the eight Arctic states created the Arctic Coast Guard Forum, which will meet on an annual basis ‘to focus on and advance operational issues of common interest in the Arctic, such as search and rescue, emergency response, and icebreaking …’ The head of the Russian Federal Border Service attended the Forum’s launch at the US Coast Guard Academy. A framework was signed in June 2016, establishing working groups, objectives and plans for an exercise in 2017.

Fisheries

In October 2014, Norway and Russia agreed on fishing quotas for 2015 in the Barents Sea; 1 year later, they did the same for 2016. In July 2015, the Arctic Ocean coastal states adopted a declaration on the Central Arctic Ocean, promising to prevent commercial fishing in that area of high seas by ships flying their flags, and to seek similar commitments from non-Arctic states. An ‘exploratory’ meeting then took place in December 2015 between the Arctic Ocean coastal states and China, the EU, Iceland, Japan and South Korea, with the US delegation proposing a regional fisheries management organization. The 10 countries met again in April and July 2016.
Continental shelves

In 2014, Denmark filed a submission with the Commission on the Limits of the Continental Shelf that was expansive in geographic scope, including the entire Lomonosov Ridge up to Russia’s 200 nautical mile exclusive economic zone. Instead of reacting negatively, the Russian Foreign Ministry issued a press release that stated, ‘Russia was well aware of the Danish side’s plans. Our countries have cooperated actively on this issue … and they will continue to cooperate on this issue’. It noted that both countries were following an established process, and confirmed that after the Commission finished its work, ‘[p]ossible adjoining sections of our countries’ continental shelf in the high Arctic latitudes will be demarcated on a bilateral basis, through negotiations and in line with international law’. Then, in August 2015, Russia filed a submission that was more restrained in scope than it might have been, in that it did not include all of the Lomonosov Ridge. Russia’s position is that the Ridge is a ‘submarine elevation’ that is a ‘natural prolongation’ of the Eurasian landmass, and under UNCLOS, there is no requirement to limit the coastal state’s rights to such a submarine elevation – unless it physically terminates at some point, or reaches the 200 nautical mile exclusive economic zone of another state.

Navigation

The annexation of Crimea did not interrupt a decade-old practice of Western cruise companies chartering Russian government-owned ice-strengthened vessels for Arctic voyages. For instance, a Russian Academy of Sciences ship was used in the summer of 2014 by a Canadian company involved in that country’s government-led search for the lost ships of the nineteenth-century Franklin expedition. Commercial vessels from Western states continued to use the Northern Sea Route, though the number of sailings dropped in 2014 and 2015 (due in part to difficult ice conditions and the low cost of bunker fuel) before recovering somewhat in 2016. And the ‘Polar Code’, which provides new safety and pollution rules, was adopted (in two parts) by the International Maritime Organization in November 2014 and May 2015.

Arctic Council

Initially, it seemed the annexation of Crimea might affect the Arctic Council. In April 2014, Canada boycotted a meeting of an Arctic Council task force on black carbon as a response to ‘Russia’s illegal occupation of Ukraine and its continued provocative actions in Crimea and elsewhere’. Yet Canada never suggested that Arctic Council operations be suspended. When announcing the boycott, Canada made clear that it would ‘continue to support the important work of the Arctic Council’. The biannual meetings of the Senior Arctic Officials in 2014 and 2015 all included the Russian delegate. In April 2015, the Arctic Council established a new task force on Arctic marine cooperation, a decision that – like every decision taken by the Arctic Council – required Russian support, since the Council is a consensus-based institution.

The Arctic Council’s Scientific Cooperation Task Force, created in 2013, has continued to meet regularly throughout the Ukraine Crisis – under the joint chairmanship of
Russia and the United States. The resulting Agreement on Enhancing International Arctic Scientific Cooperation was adopted by the Council at the 2017 ministerial summit. Most importantly, Russia’s Minister of Natural Resources and Environment joined in the Iqaluit Declaration at the 2015 ministerial summit, agreeing to the US programme for its 2-year chairmanship. Two years later, Russia’s Foreign Minister joined in the Fairbanks Declaration, agreeing to Finland’s programme for its 2-year chairmanship.

Analysis: political processes of complex interdependence

As the previous section shows, a great deal of Arctic cooperation has continued after Russia’s annexation of Crimea. This section probes the dynamics behind the situation by drawing on Keohane and Nye’s thoughts on the ‘political processes of complex interdependence’. As they wrote, the characteristics of complex interdependence ‘give rise to distinctive political processes, which translate power resources into power as control over outcomes’. Keohane and Nye identified three political processes: (1) linkage strategies, (2) agenda setting and (3) international institutions.

Keohane and Nye did not consider the role of the political processes of complex interdependence during crises. However, political processes should be particularly relevant during crises, when control over outcomes becomes more important to states, and when well-developed behaviour – including mutually beneficial cooperation – can become difficult to sustain. By examining Keohane and Nye’s political processes in the context of the post-Crimea Arctic, we can gain insight into how crises unfold – and how they might be contained – in twenty-first-century international relations.

For instance, issue areas are often separated from each other in situations of complex interdependence. This makes it more difficult for states to engage in linkage strategies when a crisis erupts – strategies that might otherwise cause the crisis to spread. The separation of issue areas also creates space for the continued operation of agenda setting, which in situations of complex interdependence is determined not by threats to security, but by collective action problems, international institutions, transgovernmental and transnational channels of contact, and domestic politics. Finally, international institutions can play significant roles during complex interdependence, both as agenda setters and as venues for coalition formation – sometimes as a result of rules or processes that provide access and influence to less-powerful states or non-state actors. International institutions, consequently, may act as stabilizing features during a crisis.

Linkage strategies

Separation of issue areas. As issue areas grow separate from each other, they are less affected by tensions or breakdowns in other issue areas. For example, the allocation of Arctic resources such as fish and oil has been separated from other issue areas – including military security – by rules on maritime boundary delimitation and joint management.

The separation of issue areas may help to explain Russia’s conciliatory response to Denmark’s expansive continental shelf submission in 2014, as discussed above. The rules concerning continental shelves are technical, applied on the basis of scientific data, and dealt with by scientists and legal experts. Consequently, this issue area is easy to
differentiate from other issue areas. Of course, this is not the only factor at work here: another is Russia and Denmark’s shared interest in having UNCLOS applied in the Arctic – as discussed below.

Search and rescue provides another example, being differentiated from other military activities by its humanitarian dimension. The goal of saving lives can transcend politics and geographic boundaries, making cooperation on search and rescue resilient to tensions and breakdowns in other issue areas. The separation that exists domestically between different government departments might sometimes facilitate this separation of issues at the international level. In 2016, the head of the US Coast Guard explained that Russia’s Federal Border Service compartmentalizes issues and does not get ‘bogged down by tensions’ elsewhere in the government; as a result, its relationship with the US Coast Guard is ‘strictly focused on the Arctic, but at the end of the day it’s productive’. The separation of issue areas also makes it easier to focus on any joint gains available through cooperation. As Keohane and Nye explained, most economic and environmental interdependence involves the possibility of joint gains, or joint losses, rather than the zero-sum outcomes associated with realist approaches. For example, the cod fishery in the Barents Sea is worth billions of dollars annually to both Norway and Russia – revenue that would be lost if joint management broke down and competitive overfishing began. The two countries therefore have a strong incentive to differentiate their fisheries regime from other, potentially unstable aspects of their relationship.

The separation of issue areas may also help to account for the continuation of cooperative efforts to address ‘climate forcers’ such as black carbon originating in the Arctic. As mentioned, Canada boycotted a meeting of the Arctic Council’s task force on black carbon in April 2014. But just 1 year later, Canada joined Russia and the other Arctic states in adopting a ‘Framework for Action on Enhanced Black Carbon and Methane Emissions Reductions’. Seen through the lens of complex interdependence, this is not a surprise – given the science-based, easily differentiated character of the issue area and the mutual benefits involved.

Failed attempts at linkage. In situations of complex interdependence, powerful states find it more difficult to link issue areas in order to influence outcomes. As Keohane and Nye explained:

As military force is devalued, militarily strong states will find it more difficult to use their overall dominance to control outcomes on issues in which they are weak. And since the distribution of power resources in trade, shipping, or oil, for example, may be quite different, patterns of outcomes and distinctive political processes are likely to vary from one set of issues to another.

The United States, EU, Canada and Norway attempted linkage when they adopted sanctions against Russia in response to actions in Ukraine. But while Russia has suffered economically as a result of the sanctions, it has not withdrawn from Crimea. The fact that the sanctions are far from comprehensive may have contributed to the failure of this attempted linkage. For example, Russian natural gas exports to Europe have not been sanctioned, and Germany alone imported 25 billion cubic metres from Russia in 2014,
constituting 38 per cent of its supply. Those import levels climbed even higher in 2015 and 2016, according to Russia’s Gazprom.

Linkage can be made more difficult by differences between countries, including between Western countries in terms of their relationship with Russia. The EU has a high degree of economic interdependency with Russia and, as a result, its sanctions are more selective than those of the US. Norway, which also has a close economic relationship with Russia, went so far as to allow a joint venture between Statoil and Rosneft to commence drilling on the Norwegian side of the Barents Sea in August 2014, on the basis that its sanctions only barred cooperation with Russian companies on the other side of the boundary.

The seven ‘Western’ (i.e. not Russia) Arctic states do not constitute a cohesive bloc. Only five belong to NATO, and only three to the EU. These differences make it more difficult for disputes, and actions related to disputes, to become part of a two-way East–West struggle. Even when the Western Arctic states act in a coordinated manner, the absence of a bloc makes it more likely that the coordination will be imperfect, or break down over time.

Geographic differences also play a role in the lack of cohesion vis-a-vis Russia, and therefore the difficulty of linkage, since cooperation is more likely to continue between geographically proximate countries. As Keohane and Nye identified, such countries have more issues requiring cooperation. One such issue is the avoidance of misunderstandings and accidents between neighbouring militaries, as the Norwegian Ministry of Defence explained in April 2014:

Collaboration will continue in Coast Guard, Border Guard and search-and-rescue activities as well as the workings of the Incidents at Sea Agreement. Contact between the Norwegian Joint Headquarters and the Northern Fleet will continue as well. This is to ensure the safety of all parties in northern marine areas and to maintain stability and predictability in our immediate region.

Multilateral cooperation is also more likely to continue among geographically proximate countries, for example, on environmental matters in the Barents-Euro Arctic Region. However, the same observation can be made of the Arctic as a whole. As we have seen throughout this article, the breakdowns in cooperation between Russia and Western countries have mostly concerned issue areas not specific to the Arctic, while cooperation on most Arctic-specific issues continues. One explanation for this may be that the United States, Norway, Canada and Denmark are neighbours with Russia in the Arctic but not elsewhere.

**Deliberate avoidance of linkage.** States will sometimes deliberately avoid linkage, as the Arctic states did by specifying that the Arctic Council ‘should not deal with matters related to military security’.

**Agenda setting**

As Keohane and Nye explained, traditional approaches to International Relations paid little attention to the politics of agenda setting because, under realist conditions, agendas
are formed by changes in the balance of power, and threats to security. In situations of complex interdependence, the politics of agenda setting are more subtle, affected by changes in the distribution of resources within issue areas as well as international institutions, transgovernmental and transnational channels of contact, and domestic politics.

As demonstrated above, most agenda setting in the post-Cold War Arctic has not been driven by threats to security, but rather by mutual problems and opportunities. Within that context, some Arctic states have become quite sophisticated about agenda setting. For example, Norway, Denmark and Sweden agreed to work on ‘common objectives’ for their successive chairmanships of the Arctic Council, which stretched from 2006 to 2013. And because the Arctic Council has been separated from the issue area of military security, agenda setting at the Council continues to take place on a non-coercive basis, as demonstrated by Russia’s acceptance of the programmes for the US chairmanship in April 2015 and the Finnish chairmanship in May 2017.

**Forum shopping.** The differentiated politics of agenda setting are also visible as Arctic states ‘shop among forums’. Choice of forum matters because one forum may be more conducive to a certain initiative or interest than another. Russia signed UNCLOS in 1982 and ratified it in 1997, thus accepting its process for allocating continental shelves, and continued to adhere to that process after 2014, rather than relying – as it had in earlier decades – on an argument called the ‘sector theory’. The five Arctic Ocean coastal states chose to negotiate a fisheries agreement among themselves rather than under the umbrella of the eight member Arctic Council, in order to focus on achieving an agreement involving Russia, and because Sweden and Finland are members of the EU and do not control their own fisheries policies. Only once an interim agreement was achieved were the negotiations expanded to include the EU, China, South Korea, Japan and Iceland, whose fishers could be expected to show interest in the high seas area in the middle of the Arctic Ocean.

Importantly, choices about forums can create coalitions among states in certain issue areas that transcend the different sides in a subsequent crisis, and thus provide incentives to contain it. In the case of Russia, breaking out of UNCLOS would have involved leaving a globally accepted regime that, by privileging coastal states through its exclusive economic zone and extended continental shelf regimes, helps keep non-Arctic states away from the region.

**Transgovernmental and transnational connections**

Crisis containment might also be facilitated by the fact that transgovernmental channels of contact often play a role in agenda setting, since contacts between bureaucracies can alter their perspectives and lead to transgovernmental coalitions on particular policy questions. For example, the Senior Arctic Officials meet twice a year as a group and less regularly in working groups and task forces as well as other, non-Arctic Council initiatives. These diplomats constitute an ‘epistemic community’; they know each other well, are immersed in the structure and functions of the Arctic Council, and share an understanding and commitment to the mutual benefits of cooperation within that
institution. One of the tasks of the Senior Arctic Officials is to negotiate the Arctic Council declarations, adopted by foreign ministers, that set the agenda for the Council’s work. The continued participation of the Russian Senior Arctic Official in these meetings, and Russia’s support for the programmes for the US chairmanship in April 2015 and the Finnish chairmanship in May 2017 speaks to the role and resilience of these transgovernmental channels of contact.

Technical issue areas also provide fertile ground for the growth of transgovernmental channels of contact. As explained above, the rules concerning extended continental shelves are technical, applied on the basis of scientific data, and dealt with by experts. This makes it easier to differentiate this issue area from other issue areas. It also likely empowers the experts, with their ability to understand and apply the data and rules, vis-a-vis their colleagues in other parts of the government. As a result, the Russian experts’ understanding of Denmark’s 2014 submission – that it fell within the rules and did not threaten Russia’s long-term interests – would seem to have carried weight within the Russian government, thus facilitating a conciliatory response.

Transnational channels of contact can also be influential. Corporations and indigenous groups encouraged Canada to focus its chairmanship of the Arctic Council on northern economic development, while environmental groups such as the World Wildlife Fund (WWF) encouraged the United States to focus on climate change and oceans governance. These transnational channels of contact have remained open since the annexation of Crimea. For example, when the Arctic Economic Council met for the first time, in Canada in September 2014, the vice-president of the Russian state-controlled oil company Rosneft was present.

**International institutions**

Keohane and Nye, who used the terms ‘international organization’ and ‘international institution’ interchangeably in *Power and Interdependence*, identified these bodies as the third political process of complex interdependence. Under complex interdependence, institutions will be ‘significant as agenda setters, areas for coalition formation, and as arenas for action by weak states’. Often these weak states are afforded this additional influence through favourable rules or procedures within the institution.

Keohane and Nye also identified – in an insight developed further by Keohane in *After Hegemony* – that institutions are sometimes able to operate even after the power relationships giving rise to them change because they acquire a degree of independence and inertia through their rules and procedures, on-going operations and recognition on the world stage. Moreover, institutions will often continue to provide some benefits to the powerful states behind their creation, even if their design and those states’ interests no longer perfectly align.

*Maintaining an international institution can privilege and protect the interests of involved states.* International organizations are generally distinguished from other international institutions by virtue of being created by treaty, and the Arctic Council was created by a declaration. However, as an increasingly institutionalized forum for diplomacy and international cooperation, with its own permanent secretariat, the Council clearly falls
within the scope of what Keohane and Nye identified as ‘international institutions’ playing a role as a political process of complex interdependence.

As explained above, the Arctic Council continued to operate normally after March 2014 because its member states chose to avoid linking the institution to the Ukraine crisis – a crisis that will, to some degree, have altered the general power relationship between the two sides. This choice can be explained on the basis of two factors. First, the Council benefits all the member states by providing a forum for addressing collective problems such as search and rescue and black carbon. Second, the Council benefits the member states because its existence, along with its acceptance by non-Arctic states applying to become observers, confirms and protects their position as the leading actors in Arctic international relations. It is this second factor that is of interest here, since it reflects how an international institution, as a political process, can create a new shared interest in its continued existence that goes beyond the subject-specific interests promoted by its day-to-day operations, a shared interest that might, then, contribute to the containment of a crisis.

The design of an international institution can help to separate it from external crises. Non-Arctic states had relatively little interest in the region in the 1990s when the Arctic Environmental Protection Strategy and then the Arctic Council were created. This disinterest gave the Arctic states the freedom to design the new institutions as they wished. They decided to limit membership to the eight states with territory in the region, and to allow Arctic indigenous peoples to be ‘permanent participants’ and non-Arctic states and non-governmental organizations to be ‘observers’ in the Arctic Council. The Council then operated quietly for a decade before non-Arctic states developed an interest in the region due to melting sea-ice and improved access to resources and shipping routes – a decade of quiet operation in which the Council solidified its position as the leading institution dealing with Arctic affairs.

The decade of quiet operation also solidified the position that membership in the Arctic Council should be limited to those states having territory in the region. This was not the only possible approach but, a decade later, the opportunity for other arguments has passed. The membership limitation was, along with the leading position of the eight Arctic states, further legitimized when the EU, China and other non-Arctic states applied for observer status. Today, the Council’s position as the leading institution on many Arctic matters goes unquestioned, as does the eight Arctic states’ position as the leading actors.

Two further aspects of the Arctic Council’s design have made it easier for the Arctic states to distance that institution from the Ukraine crisis and any changes in the general power relationships between Russia and Western states. First, there is the exclusion of matters of military security. Second, there is the requirement of consensus, which protects each Arctic Council state from having decisions imposed upon it by the others. The consensus requirement is effectively a veto, and serves the same function as the vetoes held by the permanent members of the UN Security Council: protecting both the state using the veto and the institution itself, by acting as a safety valve that suspends decision-making in circumstances where the institution might otherwise implode from the pressure of irreconcilable interests.
Like the Security Council, the design of the Arctic Council also preserves the influence of members whose power has declined since its inception. For example, while Russia has seen its power decrease vis-a-vis the United States and some non-Arctic countries currently showing interest in the region, it retains the equivalent of a veto over Arctic Council decision-making and thus a determining influence over an important sphere of international relations in the region. The carefully negotiated design of the Arctic Council – a step in the development of complex interdependence in the post-Cold War Arctic – created a political process that today offers Russia the possibility of quietly blocking outcomes to which it is opposed. It thus keeps Russia supportive of the Council even during a crisis, since an Arctic without the Council would offer Russia less control.

Russia and the other Arctic Ocean coastal states derive similar benefits from UNCLOS, which excludes non-Arctic states from the continental shelf resources of the Arctic Ocean by assigning all of the continental shelf to one or another of the coastal states. Non-Arctic states are not in a position to contest these rules, as many benefit from the same provisions off their own coastlines. Moreover, all parties to UNCLOS have accepted its rules as a ‘package deal’ and rely on other parts of the Convention. China, for instance, was the first country to make use of an UNCLOS mechanism to receive a permit for the deep-sea mining of sulphides, and is therefore unlikely to undermine the Convention in the Arctic. Again, UNCLOS, with its privileging of coastal states, provides all five Arctic Ocean states with an incentive to insulate the Convention from the crisis in Ukraine.

**Conclusion: the effects of complex interdependence on a crisis**

Keohane and Nye developed the concept of complex interdependence to explain the mix of conflict and cooperation that characterized the late Cold War period. With the end of the Cold War, new theoretical approaches emerged, including institutionalism and constructivism. As a result of the Ukraine crisis, however, relations between Russia and the West have reverted to a late Cold War-like mix of conflict and cooperation. It is in this context that a review of complex interdependence, and its application to the international relations of the Arctic region, has been conducted here. The Arctic is of interest because Russian–Western relations in that region have been insulated, to some degree, from developments elsewhere.

Complex interdependence is characterized by an absence of hierarchy among issues, the presence of transgovernmental and transnational channels of contact, and the near irrelevance of military force. This article finds that these characteristics were increasingly present in the post-Cold War Arctic, and that the international relations of the region had achieved a state of complex interdependence by 2014. It also finds that the annexation of Crimea did not cause Arctic international relations to move far across the spectrum towards the realist ideal type. Instead, Arctic international relations shifted to the middle of the spectrum, demonstrating characteristics of both ideal types. Most military and economic cooperation between Russia and Western states was suspended, but other aspects of cooperation continued.
This article shows that the pre-existence of complex interdependence can help preserve cooperation in some issue areas, and thus reduce the impact of a crisis, even if complex interdependence itself does not survive. It also shows how three political processes identified by Keohane and Nye – linkage strategies, agenda setting and international institutions – can help to contain a crisis, for example, by helping to protect the shared interests of states within a region vis-a-vis states outside that region. Although these findings are based on a single regional case study, they suggest that the concept of complex interdependence has renewed analytical relevance today.

The Arctic is unique but not entirely dissimilar from other regions where complex interdependence could be preserving cooperation and thus preventing, or containing, a crisis. Throughout the Ukraine crisis, Russian–Western cooperation in Outer Space has continued unabated – most notably on the International Space Station, and in the Soyuz spacecraft that carries Western astronauts there. However, it may be that the Arctic and Space are easy case studies, with a combination of remoteness, great technological challenges and huge expenses pushing in the direction of cooperation and burden-sharing.

It also bears asking whether the effects of complex interdependence in containing a crisis may be observed in individual issue areas and not just on the regional level. Russian–Western cooperation on anti-terrorism has continued throughout the Ukraine crisis; whether – and to what degree – this is due to complex interdependence rather than realist calculations of self-interest is worthy of further study.

This is not a celebratory article: The Ukraine crisis and related tensions between Russia and the West are matters of serious concern, and continued Arctic cooperation should not be taken for granted. Donald Trump’s election as US president will lead to other changes that could, potentially, affect the international relations of the Arctic. But rather than invalidating this case study of complex interdependence and crisis, these changes will provide new opportunities to study the dynamics behind cooperation and conflict in this, our post-post-Cold War world.

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**Notes**
1. Robert Keohane and Joseph Nye, *Power and Interdependence*, 4th ed. (Boston: Longman, 2012), p. 265.
2. Keohane and Nye, *Power and Interdependence*, p. 24.
3. Keohane and Nye, *Power and Interdependence*, pp. 7–9.
4. Keohane and Nye, *Power and Interdependence*, p. xxvii.
5. Keohane and Nye, *Power and Interdependence*, p. 270.
6. Keohane and Nye, *Power and Interdependence*, pp. 14–15.
7. Keohane and Nye, *Power and Interdependence*, pp. 75–84.
8. Robert Keohane and Lisa Martin, ‘The Promise of Institutionalist Theory’, *International Security*, 20(1), 1995, pp. 39–51; Stephen D. Krasner (ed.), *International Regimes* (Ithaca, NY: Cornell University Press, 1983).

9. Helmut Breitmeier, Oran R. Young and Michael Zürn, *Analyzing International Environmental Regimes* (Cambridge, MA: MIT Press, 2007); Paul James and Ronen Palan (eds), *Global Economic Regimes and Institutions*, Vol. 3 of Globalization and Economy (London: SAGE, 2007).

10. Njord Wegge, ‘The EU and the Arctic: European Foreign Policy in the Making’, *Arctic Review on Law and Politics*, 3(1), 2012, pp. 26–7.

11. Jean A. Garrison and Ahad Abdurahmonov, ‘Explaining the Central Asian Energy Game: Complex Interdependence and How Small States Influence Their Big Neighbors’, *Asian Perspectives*, 35(3), 2011, pp. 381–405.

12. Julio Frenk, Octavio Gómez-Dantés and Suerie Moon, ‘From Sovereignty to Solidarity: A Renewed Concept of Global Health for an Era of Complex Interdependence’, *Lancet*, 383(9911), 2014, pp. 94–7.

13. Keohane and Nye, *Power and Interdependence*, pp. 185–6.

14. Stockholm International Peace Research Institute, ‘SIPRI Military Expenditure Database’, 2015, available at: http://www.sipri.org/research/armaments/milex/milex_database (accessed 17 July 2017).

15. Keohane and Nye, *Power and Interdependence*, p. xxiii.

16. United Kingdom Foreign and Commonwealth Office, *North-East Atlantic Fisheries Convention* (London: The Stationary Office, 1959).

17. Agreement between Norway and the Union of Soviet Socialist Republics (USSR) on the Fishing Industry, United Nations Treaty Series, vol. 983, (1975), pp. 8–9.

18. Agreement on an Interim Practical Arrangement for Fishing in an Adjoining Area in the Barents Sea, original Norwegian text at 1978 Overenskomster med fremmede stater, p. 436.

19. Olav Schram Stokke, ‘Managing Fisheries in the Barents Sea Loophole’, *Ocean Development & International Law*, 32(3), 2001, pp. 241–62.

20. *Agreement between Iceland, Norway and Russia concerning Fisheries*, United Nations Treaty Series, vol. 2070, no. 35869 (1999), available at: http://extwprlegs1.fao.org/docs/html/mul44143.htm.

21. *Agreement between the USSR and the United States on Mutual Fisheries Relations*, 1988, available at: http://www.nmfs.noaa.gov/ia/slider_stories/2013/04/agreement.pdf

22. *Convention on Pollock Resources in the Central Bering Sea*, 1994, available at: http://www.afsc.noaa.gov/REFM/CBS/Docs/Convention%20on%20Conservation%20of%20Pollock%20in%20the%20Central%20Bering%20Sea.pdf

23. United States National Oceanic and Atmospheric Administration and Russian Federation Federal Agency for Fisheries, *Joint Statement on Enhanced Fisheries Cooperation*, 2013, available at: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/269717/NE_Atlantic_Fisheries_Conv.pdf

24. UN Division for Ocean Affairs and the Law of the Sea, ‘Chronological Lists of Ratifications of, Accessions and Successions to the Convention and the Related Agreements’, n.d., available at: http://www.un.org/depts/los/reference_files/chronological_lists_of_ratifications.htm (accessed 17 July 2017).

25. Michael Byers, *International Law and the Arctic* (Cambridge: Cambridge University Press, 2013), pp. 92–127; Klaus Dodds, ‘Flag Planting and Finger Pointing: The Law of the Sea, the Arctic and the Political Geographies of the Outer Continental Shelf’, *Political Geography*, 29(2), 2010, pp. 63–73.
26. Sian Griffiths, ‘US-Canada Arctic Border Dispute Key to Maritime Riches’, *BBC News*, 2 August 2010, available at: http://www.bbc.com/news/world-us-canada-10834006.

27. *United Nations Convention on the Law of the Sea*, 1982, Article 82, available at: http://www.un.org/depts/los/convention_agreements/texts/unclos/UNCLOS-TOC.htm

28. Eric Posner, ‘The New Race for the Arctic’, *Wall Street Journal*, 3 August 2007, available at: https://www.wsj.com/articles/SB1186109158866687045; Andrew Chung, ‘The Arctic Cold War’, *Toronto Star*, 7 August 2007, available at: https://www.thestar.com/news/insight/2007/08/12/the_arctic_cold_war.html.

29. *Ilulissat Declaration*, 2008, available at: http://www.oceanlaw.org/downloads/arctic/Ilulissat_Declaration.pdf

30. Rob Macnab, Paul Neto and Rob van de Poll, ‘Cooperative Preparations for Determining the Outer Limit of the Juridical Continental Shelf in the Arctic Ocean’, *IBRU Boundary and Security Bulletin*, 9(1), 2001, pp. 86–96.

31. Peter M. Haas, ‘Introduction: Epistemic Communities and International Policy Coordination’, *International Organization*, 46(1), 1992, p. 3.

32. Keohane and Nye, *Power and Interdependence*, p. 221.

33. Mai’a K. Davis Cross, ‘Rethinking Epistemic Communities Twenty Years Later’, *Review of International Studies*, 39(1), 2013, pp. 155–7.

34. International Maritime Organization, *Guidelines for Ships Operating in Arctic Ice-Covered Waters*, 2002, available at: http://www.gc.noaa.gov/documents/gcil_1056-MEPCCirc399.pdf; International Maritime Organization, *Guidelines for Ships Operating in Polar Waters*, 2009, available at: http://www.imo.org/blast/blastDataHelper.asp?data_id=29985&filename=A1024(26).pdf

35. Peter Kikkert, ‘Promoting National Interests and Fostering Cooperation: Canada and the Development of a Polar Code’, *Journal of Maritime Law and Commerce*, 43(3), 2012, pp. 322–4.

36. Kikkert, ‘Promoting National Interest and Fostering Cooperation’, p. 324.

37. Sergei Blagov, ‘Moscow Dreams of Big Bucks in Transcontinental Route’, *Inter Press Service*, 31 January 2001, available at: http://www.ipsnews.net/2001/01/economy-russia-moscow-dreams-of-big-bucks-in-transcontinental-routes/.

38. Johnathan Stern et al., ‘Reducing European Dependence on Russian Gas’, *Oxford Institute for Energy Studies*, 2014, p. 6, available at: http://www.oxfordenergy.org/wp-content/uploads/2014/10/NG-92.pdf (accessed 17 July 2017).

39. Nikolay Kaveshnikov, ‘The Issue of Energy Security in Relations between Russia and the European Union’, *European Security*, 19(4), 2010, pp. 585–605.

40. Charles Emmerson, *The Future History of the Arctic* (New York: Public Affairs, 2010), pp. 195–221.

41. Arild Moe, Daniel Fjærtøft and Indra Øverland, ‘Space and Timing: Why Was the Barents Sea Delimitation Dispute Resolved in 2010?’ *Polar Geography*, 34(3), 2011, pp. 145–62.

42. Trude Pettersen, ‘46 Vessels through Northern Sea Route’, *Barents Observer*, 23 November 2012, available at: https://web.archive.org/web/20150108222944/http://barentsobserver.com/en/arctic/2012/11/46-vessels-through-northern-sea-route-23-11; Trude Pettersen, ‘Fifty Percent Increase on Northern Sea Route’, *Barents Observer*, 3 December 2013, available at: http://barentsobserver.com/en/arctic/2013/12/fifty-percent-increase-northern-sea-route-03-12.

43. Northern Sea Route Information Office available at: available at: http://www.arctic-lio.com/ (accessed 17 July 2017).

44. Byers, *International Law and the Arctic*, pp. 143–8.

45. Arctic Council, *Ottawa Declaration*, 19 September 1996, available at: https://oaarchive.arctic-council.org/handle/11374/85; Timo Koivurova and David VanderZwaag, ‘The Arctic Council at 10 Years’, *University of British Columbia Law Review*, 40(1), 2007, pp. 121–94.
46. Arctic Council, *Ottawa Declaration*.
47. Timo Koivurova, Paula Kankaanpää, Adam Stepień, ‘Innovative Environmental Protection: Lessons from the Arctic’, *Journal of Environmental Law*, 27(2), 2015, pp. 285–311.
48. Keohane and Nye, *Power and Interdependence*, p. 221.
49. Arctic Monitoring and Assessment Program, *Arctic Climate Impact Assessment* (Cambridge: Cambridge University Press, 2005).
50. Timo Koivurova and Md. Waliul Hasanat, ‘The Climate Policy of the Arctic Council’, in Timo Koivurova, E. Carina, H. Keskitalo and Nigel Bankes (eds), *Climate Governance in the Arctic* (New York: Springer, 2009), pp. 51–75.
51. Małgorzata Smieszek, ‘25 Years of the International Arctic Science Committee (IASC)’, 2015 *Arctic Yearbook*, 2015, pp. 437–44.
52. Keohane and Nye, *Power and Interdependence*, p. 28.
53. Keohane and Nye, *Power and Interdependence*, p. 86.
54. *Treaty between US and USSR on Limitation of Anti-Ballistic Missile Systems*, 1972, available at: http://www.state.gov/t/isn/trty/16332.htm; *Interim Agreement between US and USSR on Certain Measures with Respect to the Limitation of Strategic Offensive Arms*, 1972, available at: http://www.state.gov/t/isn/4795.htm
55. *Treaty between US and USSR on Strategic Offensive Reductions*, 1991, available at http://www.nti.org/media/pdfs/START_I_1.pdf; *Treaty between US and Russia on Measures for Reduction and Limitation of Strategic Offensive Arms*, 2010, available at: http://www.nti.org/media/pdfs/aptnewstart.pdf
56. *Treaty on Conventional Armed Forces in Europe*, Organization for Security and Co-operation in Europe, 1990, available at: http://www.osce.org/library/14087
57. *Treaty on Open Skies*, Organization for Security and Co-operation in Europe, 1992, available at: http://www.osce.org/library/14127
58. US European Command, ‘US, Norway Co-Host 4th Annual Arctic Security Forces Roundtable’, 28 August 2014, available at: http://www.eucom.mil/media-library/article/26802/us-norway-co-host-4th-annual-arctic-security-forces-roundtable (accessed 17 July 2017).
59. North American Aerospace Defense Command, ‘NORAD and Russian Federation Air Force to Participate in Joint Military Exercise Vigilant Eagle 13’, 23 August 2013, available at: http://www.norad.mil/Newsroom/PressReleases/tabid/3993/Article/578701/norad-and-russian-federation-air-force-to-participate-in-joint-military-exercis.aspx (accessed 17 July 2017).
60. Stephen Mulvey, ‘Russia’s Rusting Navy’, *BBC News*, 23 March 2004, available at: http://news.bbc.co.uk/2/hi/europe/880220.stm.
61. Senate of Canada, *Proceedings of the Senate Standing Committee on National Security and Defence*, 12 April 2010, 2:65, available at: http://www.parl.gc.ca/Content/SEN/Committee/403/defe/02evb-e.htm?comm_id=76&Language=E&Parl=40&Ses=3
62. Jen Judson, ‘The Icebreaker Gap’, *Politico*, 1 September 2015.
63. Keohane and Nye, *Power and Interdependence*, p. 265.
64. Byers, *International Law and the Arctic*, pp. 10–16.
65. *Agreement between the United States and the USSR on the Maritime Boundary* (1990), available at: http://www.un.org/Depts/los/LEGISLATIONANDTREATIES/PDFFILES/TREATIES/USA-RUS1990MB.PDF
66. *Treaty between Norway and Russia Concerning Maritime Delimitation in the Barents Sea*, 2010, available at: http://www.regjeringen.no/upload/ud/vedlegg/folkerett/avtale_engelsk.pdf
67. Olav Schram Stokke, ‘Environmental Security in the Arctic’, *International Journal*, 66(4), 2011, p. 841.
68. Agreement between US and USSR on Maritime Search and Rescue, United Nations Treaty Series, vol. 2191, I-38690 (31 May 1988), available at: https://treaties.un.org/doc/Publication/UNTS/Volume%202191/v2191.pdf

69. Agreement on Search and Rescue in the Arctic (2011); Shih-Ming Kao, Nathaniel S. Pearre and Jeremy Firestone, ‘Adoption of the Arctic Search and Rescue Agreement’, Marine Policy, 36(3), 2012, pp. 832–8.

70. NATO-Russia Council, NATO-Russia Council Practical Cooperation Fact Sheet, 2008, available at: http://www.nato.int/docu/comm/2008/0804-bucharest/080403-nrc-factsheet-e.pdf (accessed 17 July 2017).

71. Trude Pettersen, ‘Barents Rescue-2009’, Barents Observer, 26 August 2009.

72. Arctic Monitoring and Assessment Program, Arctic Climate Impact Assessment.

73. Arctic Council, Arctic Marine Shipping Assessment, 2009, available at: http://www.pame.is/images/03_Projects/AMSA/AMSA_2009_report/AMSA_2009_Report_2nd_print.pdf

74. Trude Pettersen, ‘USA Cancels Joint Exercises with Russia’, Barents Observer, 5 March 2014, available at: http://barentsobserver.com/en/security/2014/03/usa-cancels-joint-exercises-russia-05-03.

75. NATO, ‘NATO’s Relations with Russia’, 16 June 2017, available at: http://www.nato.int/cps/en/natohq/topics_50090.htm (accessed 17 July 2017).

76. Christian Le Miere, ‘Ukraine Brings Cool Wind to the Arctic, International Institute for Strategic Studies Voices, 20 September 2014, available at: https://www.iiss.org/en/iiss%20voices/blogssections/iiss-voices-2014-b4d9/sepember-2f2a/ukraine-arctic-9239; Andreas Østhagen, ‘Arctic Security: Hype, Nuances and Dilemmas’, The Arctic Institute, 27 May 2015, available at: http://www.thearcticinstitute.org/arctic-security-hype-nuances-dilemmas-russia/.

77. Andreas Østhagen, ‘High North, Low Politics: Maritime Cooperation with Russia in the Arctic’, Arctic Review on Law and Politics, 7(1), 2016, p. 90.

78. Gerard O’Dwyer, ‘Tensions High as Russia Responds to Exercise’, Defence News, 31 May 2015, available at: https://www.defensenews.com/global/europe/2015/05/31/tensions-high-as-russia-responds-to-exercise/.

79. O’Dwyer, ‘Tensions High’.

80. Sam LaGrone, ‘Russian Air Force Chief: U.S. Surveillance Flights Monitor Russia Daily’, USNI News, 17 December 2014, available at: https://news.usni.org/2014/12/17/russian-air-force-chief-u-s-surveillance-flights-monitor-russia-daily.

81. Sam LaGrone, ‘WEST: NORAD Head Says Russia Increasing Arctic Long Range Air Patrols’, USNI News, 10 February 2015, available at: https://news.usni.org/2015/02/10/west-norad-head-says-russia-increasing-arctic-long-range-air-patrols.

82. Matthew Bodner, ‘Russia Starts Building Military Bases in the Arctic’, Moscow Times, 8 September 2014, available at: https://themoscowtimes.com/articles/russia-starts-building-military-bases-in-the-arctic-39173.

83. Bodner, ‘Russia Starts Building Military Bases’.

84. ‘Better Late than Never: Fantino Breaks Bround at Nunavut Naval Station’, Nunatsiaq Online, 17 July 2015, available at: http://www.nunatsiaqonline.ca/stories/article/65674better_late_than_never_fantino_breaks_ground_at_nunavut_naval_station/.

85. ‘Construction Starts at Halifax Shipyard on First Arctic Patrol Ship’ CTV News, 1 September 2015, available at: http://www.ctvnews.ca/business/construction-starts-at-halifax-shipyard-on-first-arctic-patrol-ship-1.2543465.

86. Sveinung Berg Bentzrød, ‘Russian Aggression: Nordic States extend their Military Cooperation’, Aftenposten, 9 April 2015, available at: https://www.aftenposten.no/verden/i/KmE7/Russian-aggression-Nordic-states-extend-their-military-cooperation/.

87. Adam MacDonald, ‘The Militarization of the Arctic’, Canadian Military Journal, 15(3), 2015, p. 23.
88. Steven Lee Myers and Peter Baker, ‘Putin Recognizes Crimea Secession, Defying the West’, *New York Times*, 17 March 2014, available at: https://www.nytimes.com/2014/03/18/world/europe/us-imposes-new-sanctions-on-russian-officials.html.

89. Arshad Mohammed and Bill Trott, ‘U.S. Intensifies Sanctions on Russia over Ukraine’, *Reuters*, 12 September 2014, available at: https://www.reuters.com/article/us-ukraine-crisis-usa-sanctions/u-s-intensifies-sanctions-on-russia-over-ukraine-idUSKBN0H71N320140912.

90. Mikael Holter, ‘Exxon, Rosneft Scrap Arctic Deals as Russia Sanctions Bite’, *Bloomberg*, 1 December 2014, available at: https://www.bloomberg.com/news/articles/2014-12-01/exxon-rosneft-scap-arctic-contracts-as-russia-sanctions-bite.

91. BBC News, ‘Russia Hits West with Food Import Ban in Sanctions Row’, *BBC News*, 7 August 2014, available at: http://www.bbc.com/news/world/europe-28687172.

92. Tom Parfitt, ‘More than 50 fishermen feared dead in Bering Sea trawler tragedy’, *The Telegraph*, 2 December 2014, available at: http://www.telegraph.co.uk/news/worldnews/europe/russia/11267813/More-than-50-fishermen-feared-dead-in-Bering-Sea-trawler-tragedy.html.

93. *Barents Observer*, ‘Exercise Barents 2015’, *Barents Observer*, available at: http://barentsobserver.com/en/media/galleries/exercise-barents-2015; Atle Staalesen, “Mission completed”. Exercise Barents 2016’, *Independent Barents Observer*, 6 June 2016, available at: https:// thebarentsobserver.com/en/security/2016/06/mission-completed-barents-rescue-2016.

94. Barents Euro-Arctic Region, *Evaluation Report: Barents Rescue 2015 Exercise*, April 2016, available at: http://www.pelastustoimi.fi/download/68586_BR_15_Evaluation.pdf

95. Canadian Armed Forces, ‘RCAF Participates in Search and Rescue Exercise in Alaska’, *The Royal Canadian Air Force*, 25 August 2016, available at: http://www.rcaf-arc.forces.gc.ca/en/article-template-standard.page?doc=rcaf-participates-in-search-and-rescue-exercise-in-alaska/is4uad6f.

96. Levon Sevunts, ‘Arctic Nations Sign Agreement on Coast Guard Cooperation’, *Radio Canada International*, 30 October 2015, available at: http://www.rcinet.ca/en/2015/10/30/arctic-nations-sign-agreement-on-coast-guard-cooperation/.

97. Østhagen, ‘High North, Low Politics’, p. 90.

98. Megan Eckstein, ‘Zukunft: Arctic Coast Guard Forum Supports Positive Relationship with Russian Counterpart’, *USNI News*, 13 June 2016, available at: https://news.usni.org/2016/06/13/zukunft-arctic-coast-guard-forum-created-positive-relationship-russian-counterpart.

99. Trude Pettersen, ‘Norway and Russia Agree on Barents Sea Quotas for 2015’, *Barents Observer*, 10 October 2014, available at: http://barentsobserver.com/en/nature/2014/10/norway-and-russia-agree-barents-sea-quotas-2015-10-10.

100. *Barents Observer*, ‘No Capelin Fishing in the Barents Sea’, *Barents Observer*, 12 October 2015, available at: http://barentsobserver.com/en/nature/2015/10/no-capelin-fishing-barents-sea-12-10.

101. *Declaration Concerning the Prevention of Unregulated High Seas Fishing in the Central Arctic Ocean*, 16 July 2015, available at: https://www.regjeringen.no/globalassets/deparrtemtene/ud/vedlegg/folkerett/declaration-on-arctic-fisheries-16-july-2015.pdf; Erik J. Molenaar, ‘Oslo Declaration on High Seas Fishing in the Central Arctic Ocean’, 2015 *Arctic Yearbook*, pp. 427–31, available at: http://www.arcticyearbook.com/

102. National Oceanic and Atmospheric Administration, ‘Fourth Meeting of Scientific Experts on Fish Stocks in the Central Arctic Ocean, 4th FiSCAO’, 2015, available at: https://www.afsc.noaa.gov/Arctic_fish_stocks_fourth_meeting/pdfs/Chairman’s%20Statement%20from%20Washington%20Meeting%20December%202015.pdf (accessed 17 July 2017).

103. Hannah Hoag, ‘Nations Negotiate Fishing in Arctic High Seas’, *Arctic Deeply*, 28 April 2016, available at: https://www.newsdeeply.com/arctic/articles/2016/04/28/nations-negotiate-fishing-in-arctic-high-seas.
104. Geological Survey of Denmark and Greenland, *Partial Submission to the Commission on the Limits of the Continental Shelf*, November 2014, available at: http://www.un.org/Depts/los/clcs_new/submissions_files/dnk76_14/dnk2014_es.pdf (accessed 17 July 2017).

105. Ministry of Foreign Affairs of the Russian Federation, *Comment on the Filing of Denmark's Claim to the Arctic Continental Shelf*, 16 December 2014, available at: http://archive.mid.ru/brp_4.nsf/0/0F1A381933F7FCDDD3257DB1004B45CE

106. Ministry of Foreign Affairs of the Russian Federation, ‘Comment on the Filing of Denmark’s Claim’.

107. UN Division for Ocean Affairs and the Law of the Sea, ‘Partial Revised Submission of the Russian Federation’, 1 December 2015, available at: http://www.un.org/Depts/los/clcs_new/submissions_files/submission_rus_rev1.htm (accessed 17 July 2017).

108. ‘Russian Ship Akademik Sergey Vavilov Had Role in Recent Franklin Ship Discovery’, *CBC News*, 28 September 2014, available at: http://www.cbc.ca/news/canada/russian-ship-akademik-sergey-vavilov-had-role-in-recent-franklin-ship-discovery-1.2780519.

109. Northern Sea Route Administration, ‘Permissions for Navigation’, 2017, available at: http://www.nsra.ru/en/rassmotrenie_zayavleniy/razresheniya.html (accessed 17 July 2017).

110. International Maritime Organization, *International Code for Ships Operating in Polar Waters*, RES MSC.385(94), 21 November 2014.

111. Kim Mackrael, ‘Ottawa Upbraids Russian Envoy, Skips Arctic Council Meeting over Ukraine’, *The Globe and Mail*, 15 April 2014, available at: https://beta.theglobeandmail.com/news/politics/ottawa-upbraids-russian-envoy-will-skip-arctic-council-moscow-meeting-over-ukraine/article18032205/?ref=http://www.theglobeandmail.com&.

112. Mackrael, ‘Ottawa Upbraids Russian Envoy’.

113. Arctic Council, *Iqaluit Declaration* (24 April 2015), available at: https://oaarchive.arctic-council.org/bitstream/handle/11374/662/EDOCS-3431-v1-ACMMCA09_Iqaluit_2015_Iqaluit_Declaration_original_scanned_signed_version.PDF?sequence=7&isAllowed=y

114. Arctic Council, *Ottawa Declaration*, Section 7.

115. Arctic Council, ‘SCTF Meets in Reykjavik’, 20 January 2016, available at: http://www.arctic-council.org/index.php/en/our-work2/8-news-and-events/379-scientific-cooperation-task-force-sctf-meets-in-reykjavik (accessed 17 July 2017).

116. Agreement on Enhancing International Arctic Scientific Cooperation, 11 May 2017, available at: https://oaarchive.arctic-council.org/handle/11374/1916 (accessed 17 July 2017).

117. Arctic Council, *Iqaluit Declaration*.

118. Arctic Council, *Fairbanks Declaration* (11 May 2017), available at: https://oaarchive.arctic-council.org/handle/11374/1910

119. Keohane and Nye, *Power and Interdependence*, p. 24.

120. Østhagen, ‘High North, Low Politics’, p. 84.

121. Eckstein, ‘Zukunft: Arctic Coast Guard Forum Supports Positive Relationship with Russian Counterpart’.

122. Keohane and Nye, *Power and Interdependence*, p. 26.

123. Arctic Council, *Enhanced Black Carbon and Methane Emissions Reductions*, 2015, available at: https://oaarchive.arctic-council.org/handle/11374/610

124. Keohane and Nye, *Power and Interdependence*, p. 25.

125. Andrew Topf, ‘Impotent Western Sanctions Fail to Disrupt Russian Energy Exports’, *OilPrice.com*, 3 March 2015, available at: http://oilprice.com/Energy/Energy-General/Impotent-Western-Sanctions-Fail-To-Disrupt-Russian-Energy-Exports.html.

126. Charles Kennedy, ‘Germany Ups Gazprom Imports by 19 percent in Q1’, *OilPrice.com*, 11 May 2016, available at: http://oilprice.com/Latest-Energy-News/World-News/Germany-Ups-Gazprom-Imports-by-19-percent-in-Q1.html.
127. Rosneft, ‘Rosneft and Statoil Start Exploration Operations on the Norwegian Continental Shelf in the Barents Sea’, 18 August 2014, available at: http://www.rosneft.com/news/news_in_press/18082014.html (accessed 17 July 2017).
128. Keohane and Nye, Power and Interdependence, p. 144.
129. Norwegian Ministry of Defence, ‘Bilateral Military Activities with Russia Suspended for the Year’, 10 April 2014, available at: https://www.regjeringen.no/en/aktuelt/Bilateral-military-activities-with-Russia-suspended-for-the-year/id761039/ (accessed 17 July 2017).
130. Evan T. Bloom, ‘Establishment of the Arctic Council’, American Journal of International Law, 93(3), 1999, pp. 712–22.
131. Keohane and Nye, Power and Interdependence, p. 27.
132. Keohane and Nye, Power and Interdependence, p. 27.
133. Keohane and Nye, Power and Interdependence, p. 103.
134. Swedish Ministry for Foreign Affairs, Sweden’s Chairmanship Programme for the Arctic Council 2011–2013 (Stockholm: Arctic Secretariat, 2011), available at: http://www.government.se/contentassets/931ff6706f594a82a181840ce544adde/swedens-chairmanship-programme-for-the-arctic-council-2011-2013–ud11.023
135. Keohane and Nye, Power and Interdependence, p. 28.
136. Donald Rothwell, The Polar Regions and the Development of International Law (Cambridge: Cambridge University Press, 1996), pp. 168–9.
137. Meeting On High Seas Fisheries In The Central Arctic Ocean, Chairman’s Statement, (Washington, DC, 1–3 December 2015), available at: http://naalakkersuisut.gl/~media/Nanoq/Files/Attached%20Files/Udenrigsdirektoratet/Chairmans%20Statement%20from%20Washington%20Meeting%20December%202015.pdf
138. Moe et al., ‘Space and Timing’, pp. 145–62.
139. Keohane and Nye, Power and Interdependence, p. 28.
140. Davis Cross, ‘Rethinking Epistemic Communities Twenty Years Later’, pp. 155–7.
141. WWF Global, ‘The Top Issues for Arctic Council Action’, 21 April 2015, available at: http://wwf.panda.org/wwf_news/?241221/The-Top-Issues-for-Arctic-Council-Action (accessed 17 July 2017).
142. ‘Aglukkaq’s Arctic Vision’ (editorial), Frontier Energy, Autumn 2014.
143. Keohane and Nye, Power and Interdependence, p. 29.
144. Keohane and Nye, Power and Interdependence, p. 108, Table 5.4.
145. Robert Keohane, After Hegemony: Cooperation and Discord in the World Political Economy (Princeton, NJ: Princeton University Press, 1984).
146. Arctic Council, Ottawa Declaration; Phillippe Sands and Pierre Klein, Bowett’s Law of International Institutions (London: Sweet & Maxwell, 2001, 5th edn.), p. 16.
147. ECH Keskitalo, Negotiating the Arctic: The Construction of an International Region (Abingdon: Routledge, 2005), p. 45.
148. Philip E. Steinberg and Klaus Dodds, ‘The Arctic Council after Kiruna’, Polar Record, 51(1), 2013, pp. 108–10; Olav Schram Stokke, ‘The Promise of Involvement: Asia in the Arctic’, Strategic Analysis, 37(4), 2013, pp. 474–9.
149. Thomas G. Weiss, ‘The Illusion of UN Security Council Reform’, The Washington Quarterly, 26(4), 2003, pp. 147–61.

Author biography

Michael Byers holds the Canada Research Chair in Global Politics and International Law at the University of British Columbia. He has been a Fellow of Jesus College, Oxford University, a professor of Law at Duke University, and a visiting professor at the universities of Cape Town, Tel Aviv, Nord (Norway) and Novosibirsk (Russia). His most recent book is International Law and the Arctic (Cambridge University Press, 2013).