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FOREWORD

LIEUTENANT-GENERAL M. J. HOOD (RETIRED)
COMMANDER, ROYAL CANADIAN AIR FORCE
2016-2018

In April 2017, the Royal Canadian Air Force (RCAF) held its third air power symposium at the Canadian Museum of Nature in Ottawa, Ontario. It was preceded by three round-table, academic-led discussions—at the School of Public Policy at the University of Calgary, at Massey College in Toronto and at l'Université de Laval in Québec. Attended by a number of academics, politicians and RCAF members, the round tables were a forum for discussing sovereignty from a variety of perspectives. This collaborative approach provided the opportunity for many great minds of our day to ponder what it means for Canada to be a sovereign nation in the 21st century and how to maintain that sovereignty into the future. The results of these discussions established the focus of the agenda for what was to become an extremely successful symposium. As our government strives to strike a balance between its three distinct policy objectives—STRONG at home, SECURE in North America and ENGAGED in the world—the timeliness and the value of these round-table discussions cannot be overstated.

The theme for the 2017 symposium was "Air Power and Sovereignty." This theme continued, from previous symposia, the discussion on the future of the RCAF but with a focus on the RCAF as the guarantor of Canadian sovereignty. This tenet is central to our role within the Canadian Armed Forces. Many of the discussions in this book will relate directly to the RCAF's missions and roles, but you will also note a wider range of contexts that will aid in realizing the essential roles that air and space power play within the sovereignty of this great nation. In today's uncertain world, it is important to review the threats to Canada and the RCAF's ability to respond appropriately.

Simply, sovereignty relates to a state's supreme authority domestically (i.e., a state is free from interference). This authority allows a state to decide what laws are developed and how they will be applied within that state's defined borders. With this authority comes the right to exercise power but also the obligation to protect. While Canada has the ability to make decisions on its own sovereignty, these decisions cannot be made in isolation. The international ramifications of such decisions must be considered. With the movement towards globalization, Canada must consider the impact on other states when making economic decisions or decisions regarding military power and its application.

Any consideration of domestic affairs, by definition, includes sovereign air and maritime spaces that extend well beyond our land mass. Our government requires the ability to surveil to the outer reaches of our territory so that it can maintain an awareness of activity at the extremities as well as at the heart of our country. When necessary, we need to be able to take action to prevent outside interference, to defend and secure our borders as well as to enforce law and order. For the Government of Canada, the RCAF possesses the means to surveil, reach and take action in every square metre of Canada. And we can do so with an agility and speed that is unmatched. This is why the North Warning System and our fighter force are so important. This is why we require long-range fuel tanks on our new F-model Chinooks. This is why we continue to expand the operational capability of our



air mobility fleets, particularly the CC177 Globemaster. This is why, of all the environments, the RCAF has the highest percentage of its force on high readiness. And this is why our operational integration and interoperability with the United States Air Force and the North American Aerospace Defence Command (NORAD) are so important to us.

The RCAF's contribution is not, of course, limited to defending our nation's borders. We have the responsibility for search and rescue throughout Canada and into the adjoining seas and oceans, which provides Canadian citizens with a level of assured security. As evidence of the contribution we make to the government's ability to provide domestic security, we support firefighting and flood-relief operations. At times, demonstrating a commitment to sovereignty is expressed simply by being present. The ability to project presence is of particular importance in areas where sovereignty is disputed or contested, as is the case in certain parts of the Arctic. Where permanent presence is not possible, air and space power have the agility to demonstrate presence at range quickly and without incurring the costs associated with an enduring land- or sea-based activity.

The defence of Canada includes those operations carried out as part of the binational NORAD agreement and the North Atlantic Treaty Organization (NATO) multinational partnership. Under NORAD, the defence of Canada and the defence of North America are ultimately linked. The success of NORAD is a testament to the key roles that air and space power play in deterring adversaries from attacking North America. As a NATO-partner nation, Canada often provides assets in support of operations. Through arrangements such as NORAD and NATO, Canada is able to enforce its independent authority. Furthermore, Canada occasionally employs military power internationally beyond the frameworks of NATO, the United Nations or established coalitions—such as in humanitarian operations and disaster relief. This may also relate to protecting Canadian citizens overseas, such as non-combatant evacuation operations. It would be difficult to imagine conducting any of these operations without employing air and space power.

Within the sovereignty framework that I have discussed, clearly air and space power are key enablers. Indeed, I believe they are THE key enablers. The RCAF provides the government with the necessary tools to execute its supreme authority domestically by defending and securing our borders as well as by protecting and securing Canadian citizens in case of accidents or disasters. We maintain the force posture and readiness to project air and space power globally, thus allowing Canada to act independently wherever our government requires. While not all actions require military involvement, the characteristics of air and space power make them attractive options where speed and precision are required. Furthermore, the range of response options that the RCAF enables (from non-combatant evacuation operations to humanitarian operations and disaster relief to combat operations) means that when a military response is required to protect Canada's vital national interests, air and space power will play a role. Make no mistake—the RCAF is the guarantor of Canadian sovereignty. It would be difficult to argue that Canadian sovereignty would not erode if there were no Air Force. The RCAF enables the government to exercise its supreme authority domestically, to fulfil its security obligations to its citizens and to defend its borders against external interference. And with speed, reach and agility, the RCAF does so more effectively than others can.

Our world is continuously changing and at a more accelerated rate than ever before. With advances in technology, cyber, space, industry, the economy and even changing national borders, Canada must be vigilant in analysing these changes and determining well in advance how they might impact our sovereignty. We will continue to face new and growing challenges: with the



environment; in defence of Canada's Arctic; on our coastal waters; and, indeed, in space. We must learn from our past, understand today's context and anticipate the effects of this changing idea of sovereignty—all while we consider the requirements for the Air Force of the future.

I invite you to explore the many avenues taken to analyse current and future impacts to Canadian sovereignty that are presented in this publication. There is much debate recently in academia about what sovereignty may come to mean. Many elements, whether political, economic, environmental or other will continue to evolve and will require us to adapt to every situation. We must continue to study and understand ourselves as well as our air and space power missions. Understanding the challenges to be faced with Canadian sovereignty will affect future capability-development decisions for the RCAF as well as force posture and readiness. The RCAF will continue to evolve with the changing environment, and it will continue to fulfil its role as the guarantor of sovereignty in Canada.

Lieutenant-General M. J. Hood (Retired)

Commander

Royal Canadian Air Force

2016-2018

INTRODUCTION



BY JEAN-CHRISTOPHE BOUCHER AND PIERRE-GERLIER FOREST

In 2016, Dr. Pierre-Gerlier Forest, director of the School of Public Policy at the University of Calgary, Tom Jenkins, chairman of the board of OpenText, and Lieutenant-General Michael J. Hood, then Commander of the Royal Canadian Air Force (RCAF), met informally in Calgary at the margins of an official event. As the conversation unfolded, they all expressed some disappointment with the state of the public debate on matters related to Canadian sovereignty. From their respective points of views—academia, private sector, and military—Canadians were, in general, indifferent to the evolving nature of state sovereignty and, as a corollary, to the mounting political, economic, social, and military difficulties faced by Canada in a transitioning world. From military procurement projects, such as the replacement of the CF18 aircraft or the renewal of the Royal Canadian Navy main assets, to increasing Russian military assertiveness in Eastern Europe and Canadian airspace, or current foreign intrusions in our political debate through cyberspace, indigenous relations with the Crown, or even the impact of climate change, especially in the Arctic, there is no shortage of challenges. Nevertheless, there has been a general unwillingness on the part of academics, political elites, civil servants, and journalists to revisit and question accepted notions of sovereignty as they apply to Canada in the 21st century. Convinced by the urgency of the matter, the three leaders agreed to join their efforts and to hold a series of events in the hope of initiating a national conversation on the issue of Canadian sovereignty. The present project emerged from this intersectoral concern.

The group organized three roundtables across Canada to culminate in Ottawa during the RCAF's annual meeting in the spring of 2017. First, on March 27, a conference was organized at the University of Calgary on the theme of economic sovereignty. This event brought together scholars, policymakers, and federal and provincial civil servants to examine the specific challenges and opportunities faced by Canada in the economic realm. A second event was organized on March 31 by Massey College at the University of Toronto, on the theme of technological sovereignty. Participants investigated how the rapidly evolving digitalization and automatization of our societies eroded states' capacity to control and promote policies. A third conference was organized on April 13 at Université Laval on the theme of territorial sovereignty, with a particular focus on the Arctic region. Finally, in May 2017, a select panel from these events was invited by the RCAF to their annual symposium on air power, where members of academia, military institutions, and the private sector discussed Canadian sovereignty from an interdisciplinary point of view, encompassing political, economic, social, legal, and military approaches in an effort to recognize the multidimensionality of the Canadian sovereignty debate.

This book is the final outcome emerging from the initial Forest-Jenkins-Hood impromptu conversation. It gave way to what has now been a two-year analysis on Canadian sovereignty. It speaks of the commitment of the initial organizers to use their institutions to promote a national conversation that would acknowledge the genuinely complex nature of the concept of sovereignty and the particular challenges that all sectors of the Canadian society face in this respect.



The book follows a logical arc where each successive chapter ties different aspects of the Canadian sovereignty debate. We begin with addressing the inherent civil-military dimensions of sovereignty with three chapters. In the first chapter, General Thomas J. Lawson (Retired) offers an insightful reflection on the challenges associated with protecting Canadian sovereignty. One major concern, from the author's perspective, is the potential for Canadians to become complacent in asserting and defending our sovereignty in the context of a global environment in transition. In this respect, the author considers the issue from the perspective of a senior military decision maker who has the responsibility to put into "practice" the establishment and actualization of Canadian sovereignty. The chapter thus explores particular challenges facing Canadian military leaders, such as the necessary intersection between political direction, which is often wide-ranging and elusive, and policy elaboration and implementation by DND: operating in Canada's difficult geography; coordinating with Canadian allies; asserting sovereignty in a multi-domain environment in flux, especially with respect to intelligence, cyber warfare, and space; and procurement.

In Chapter 2, Jean-Christophe Boucher focuses on Canadian political elites and examines how politicians have framed sovereignty issues during House of Commons debates since 2001. Using machine learning, the author effectively measures political narrative on Canadian sovereignty and identifies two competing "visions." On the one hand, some political elites frame Canadian sovereignty as the capacity of the government to control and defend territorial integrity. On the other hand, some policymakers understand sovereignty in broader terms as the capacity of Canada to act with autonomy and purpose in world affairs. The author finds partisanship and whether members of parliament are affiliated with the government or the opposition to be strong predictors of how elites view Canadian sovereignty. The third chapter, written by Heather Exner-Pirot, analyses the relationship between Indigenous people, with their innovative governance arrangements and political self-determination, and Canadian Arctic sovereignty. The chapter explores the role that Indigenous—and specifically Inuit—rights play in reinforcing or challenging Canadian Arctic sovereignty claims. The author argues for a pan-Arctic sovereignty conceptualization where devolution and Inuit consent are constitutive, and not obstructive, to Canadian sovereignty in the North, and a means to achieve well-being, prosperity, and self-determination.

The second arc of the book regroups chapters that address specifically the issue of asserting Canadian sovereignty in the Arctic. The fourth chapter, by Kristin Bartenstein, examines the legal dimension of territorial sovereignty. The author argues that a central difficulty of any debate on this topic is the absence of an overarching consensus on key conceptual understanding of issues of sovereignty, especially amongst legal scholars and political scientists. This equivocalness complicates significantly how Canadians discuss sovereignty in the Arctic. In her chapter, the author analyses the legal concept of state sovereignty before moving on to discuss some of the more contentious legal issues of Canadian sovereignty in the Arctic, including the uncertainties surrounding Arctic maritime borders, the legal status of the Northwest Passage, and the extent of Canada's authority over its Arctic waters. Chapter 5, a contribution by political scientist Elizabeth Riddell-Dixon, considers the matter of the Arctic seabed and, more specifically, the efforts by Canada to establish coastal state jurisdiction over its extended continental shelf (ECS). The paper makes two arguments. First, she maintains that a traditional concept of state sovereignty remains paramount. Second, contrary to popular perceptions that competition for Arctic resources is causing conflict among sovereign states, the delineation of Arctic ECSs has been marked by high levels of cooperation. The standpoints proposed in the three chapters by Exner-Pirot, Bartenstein, and Riddell-Dixon allow us to better understand the complexity of the political, legal, and economic ramifications of asserting Canadian sovereignty in the Arctic, and reveal the richness of the intellectual debate on the issue.



The third arc of the book examines emerging challenges to Canadian sovereignty. Chapter 6, by Frédéric Lasserre, Olga V. Alexeeva, and Lin Yan Huang, assesses the commercial and strategic implications of climate change and, more specifically, how melting sea ice in the Arctic has instigated Chinese interest in the region. Interestingly, China has now developed an Arctic strategy and has described itself as a "near Arctic" state. As such, China appears to have reached some international recognition that it should be involved in the governance of Arctic issues. Furthermore, China has expressed its interest in Arctic's natural resources and maritime transportation potential. Nevertheless, the authors argue that it does not, in itself, represent a threat to territorial claims by Arctic nations like Canada. The final chapter, written by Colonel Kevin Bryski (Retired), focuses on Canadian sovereignty interest in space. The author considers specifically how the Canadian Armed Forces has expended its responsibility to defend Canada's sovereignty with key space systems such as GPS, SATCOM, and surveillance from and of space. As the defence policy document Strong, Secure, Engaged, published by the Trudeau government in 2017, clearly stated, Canada needs to invest more resources in order to defend and protect space capabilities. As the author suggests, given the projected global increase in space activity and areas of growing risks, the mission to defend and protect space capabilities will require increased attention. In addition to enhancing capabilities, international efforts must continue to reinforce accepted norms in space to address emerging challenges in a congested, competitive and contested environment. In this respect, the RCAF will remain the key institution responsible for advancing space capabilities to further enhance sovereignty operations in the areas of improved SATCOM availability as well as coverage and enhanced surveillance of and from space.

This exercise reflects a willingness of participants from different sectors of Canadian society—academia, private sector, and military—to bridge the gap between theoretical and methodological rigour with policy relevance. It is only through cross-sectoral and interdisciplinary dialogue that we can hope to address such an elusive but pervasive phenomenon as state sovereignty. However, despite such efforts, it appears clear at the conclusion of this project that encouraging and elevating public conversation on Canadian sovereignty will require further collaboration. Readers should see this book as a first step in acknowledging the importance and challenges of sovereignty for Canadians and, hopefully, encourage future work and discussion on the issue.

CHAPTER 1

CANADIAN SOVEREIGNTY: A CDS'S PERSPECTIVE ON RELATED ISSUES





Among the many advantages that come with being a Canadian citizen is the protection provided by our favourable geography. With salt water guarding three of our cardinal borders, we have what one could call natural "tank traps," thousands of kilometres across, guarding our nation's western, northern and eastern shores. And even with that, one might argue that our most militarily secure border is the remaining one, that which we share with the United States (US).

The topic of sovereignty—including its establishment, exercise and defence—is certainly among the most important ones that a nation's people, and their governments, must address. Sovereignty relates to the very existence and survival as a nation, as a people and as an economy. At the same time, given a choice among the nearly 200 countries in the world, one could ask if there is even one where sovereignty is less under threat from external adversaries than Canada. If so, it can at least be agreed that Canada is on a very short list of relatively secure nations.

While this relative security is clearly a very good thing, providing breathing room for strategic thinkers, it has some downsides for the nation. By this, I mean that it has the effect of setting the trap for misperceiving one's sovereignty to be so unthreatened as to allow a complacence to set in, which threatens to blind us from the fact that exercising and protecting sovereignty has as much to do with being aware of what happens within one's territory and being able to react to it when necessary, than simply defending against foreign aggressors. Certainly, complacence goes some way to explaining why, perhaps since the end of the period of US expansionism and aggression toward Canada in the mid- to late-1800s, a number of Canadian governments since Confederation, except for those involved in World Wars, have taken moderate to deep discounts on defence investment. Even Canadians who support and admire their armed forces when they are in harm's way often tend to forget them the rest of the time. This is a natural thing, and it is a luxury few nations have.

Yet, even though I once commanded the very armed forces that have suffered this benign neglect, I wouldn't have traded my position with any of my North Atlantic Treaty Organization (NATO) colleagues, much less my colleagues in the Middle East, Asia, Africa or even South America. Why? Well, quite simply, the issues many of them faced in defending their nations' sovereignty made mine pale in comparison. While their challenges often involved existential threats along their very borders, Canadian challenges are reduced by comparison and are more distant, made so by the breadth of our geography. But, as mentioned above, the responsibilities associated with establishing and defending national sovereignty do not end with simple defence against physical attack by foreign enemies. In fact, some of the defining terms of sovereignty are *jurisdiction, awareness, control* and *influence* over one's territory, and each of these involves responsibilities that require the careful consideration of defence leaders.

This chapter will look at some of the challenges and issues associated with establishing and defending Canada's sovereignty.



How Government of Canada Transmits its Intent

It will surprise no reader that the Canadian Armed Forces (CAF) develops its force structure and posture in response to government direction. What may be less clear is that (barring national emergencies, ongoing operations and procurements) government intent is often anything but direct. Certainly, the prime minister provides prioritized "marching orders" to their ministers, including the Minister of National Defence, at regular intervals, but these orders often only relate to items of current national and political interest. The Chief of the Defence Staff (CDS) and Deputy Minister of Defence, in coordination with assistant deputy ministers and senior military commanders, are, therefore, left with determining appropriate Department of National Defence (DND) / CAF policies to guide force structure and posture in all the other areas. There are numerous forums and organizations within National Defence Headquarters where structure and posture are defined and refined, including the Policy Committee, Armed Forces Council, Chief of Force Development and the Strategic Joint Staff, and changes are normally introduced gradually and incrementally by the CDS as well as their general and flag officers.

Regarding Canadian sovereignty, some clarity regarding the North was provided in 2009, when the Government of Canada presented a document titled "Canada's Northern Strategy: Our North, Our Heritage, Our Future." It provided several objectives, the fourth of which directly involved CAF.

This objective was "to protect and patrol our [Arctic] territory through enhanced presence on land, in the sea and over the skies of the Arctic." The following year, Prime Minister Harper prioritized these objectives saying that Canada's number one and "non-negotiable priority" in Arctic policy was protecting our sovereignty *over* our northern regions. This clear direction, supported by frequent prime-minister, Arctic-summer excursions led, for example, to what is now a well-established series of annual Arctic strategic exercises that bring CAF elements together with other federal, provincial and municipal organizations. Furthermore, the North American Aerospace Defence Command (NORAD) long ago developed procedures—which are deeply established and well exercised—to protect North American aerospace into the high North; the Army regularly exercises its soldiers and equipment in tough northern conditions, and the Navy is soon to receive the first of its Arctic Offshore Patrol vessels.

While Canada's vast Arctic provides a key challenge to CAF's task of defending Canada's sovereignty from potential enemies, it is not the only challenge posed by the nation's geography. Jurisdiction, awareness, control and influence by federal authorities are all made much more difficult by the nation's vastness and ruggedness.

The Challenges of Canadian Geography

Most would agree that it is a wicked problem to equip and prepare armed forces to operate throughout and defend the sovereignty of an area of ten million square kilometres, much of which is isolated and austere, as well as its surrounding waters and aerospace. Protecting sovereignty also means protecting the lives of the people of the nation, and that requires at least some physical presence on behalf of CAF. This requirement speaks to the reason CAF will never be able to achieve the efficiencies that come with the centralization of assets available to other, often smaller, nations. CAF is quite effective, indeed, but widely spread out by the necessities of effecting sovereign defence. Let's consider this further.



The Canadian Army necessarily spreads its 50,000 or so Regular and Reserve soldiers across about a dozen army bases in Canada. Let's compare this to a single base of the US Army; take Fort Carson as an example. This one megabase alone, near Colorado Springs, houses 40,000 soldiers. What wonderful training and operational efficiencies they achieve there simply by scale. In Canada, we need to spread our soldiers much more thinly, as we seek to mount a timely response to threats, be they man-made or natural. Look back a couple of years to when the rivers of Alberta were spilling over their banks and threatening Calgarians and many others. The soldiers of 3rd Canadian Division, mostly based in Edmonton, were on scene relatively quickly, as a result of their proximity, filling sandbags and transporting civilians to safety, as were Royal Canadian Air Force (RCAF) helicopters and Hercules aircraft from nearby bases, rescuing people from their rooftops to save them from rising waters.

Similar to the dispersion of army assets, we have the RCAF with more than a dozen air bases; this inordinately large number is designed partly to achieve the same sort of geographical spread. The two fighter bases, alone, are spread thousands of kilometres apart, Cold Lake in the west and Bagotville in the east, partly in order to provide reasonable prepositioning in case of intercept missions against airborne threats arriving from the west, east or north. Search and rescue (SAR) aircraft are spread across five bases, biased toward the oceans and Great Lakes where our most threatened economic sector, fisheries, is found and also where most of our nation's adventurers can be expected to overturn their canoes and yachts. The SAR vision has long been to guarantee overhead response anywhere in Canada within a day, and within several hours for most locations near populated areas. Indeed, most threatened fishermen and adventurers can expect a response within an hour or two, but promising such a timely response to the imperiled Arctic explorer, or one trying to survive an upset in the mid-Atlantic, is much more difficult. The crews and equipment required to maintain alert posture to make such a pact with fishermen and adventurers is impressive. Certainly, this SAR goal involves great expense, but it is necessary because to give up on those who are in trouble anywhere in Canada is, in a way, to cede sovereignty for those parts of our nation.

And by similar reasoning, the Royal Canadian Navy (RCN) can never be truly efficient because of the number of relatively unconnected coastlines it must watch over. As a result, its ships and submarines are divided roughly in two and split by 6,000 kilometres. But the split is necessary if CAF hopes to demonstrate simultaneous sovereignty in the open waters off our coasts. And the RCN currently has no vessels that can operate in the Arctic for most of the year. The task of occasional Arctic Ocean presence is being carried out by the Canadian Coast Guard on largely unarmed vessels—sovereignty by presence but without the capability to enforce. This is a unique Canadian trade-off against cost, of course, and one that will be addressed in part with the arrival of the Arctic Offshore Patrol vessels.

Recognizing how expensive it is to have men and women in uniform as well as equipped and trained for any mission of such complexity, one of CAF's principal duties is to educate and convince Canadians and their government that investing for this purpose is necessary, even though threats are sometimes tough to perceive. So, as for any nation that contemplates questions of sovereignty in depth, one of the first questions to arrive after "who and what constitutes the threat" is "who can we ally ourselves with to help neutralize those threats and reduce costs in doing so?"



Alliances to Help Protect Sovereignty

Once the Treaty of Paris was signed in 1763, the only military threat to the sovereignty of British North America, and later Canada, came from the president and armed forces of the burgeoning US. This threat lasted about a century, arguably one of the biggest factors in the formation of the Dominion. But when it receded, no others really took its place until the passage of nearly another century. When Russian long-range aircraft were finally deemed capable of flying over the North Pole to attack North America, Canada was at last presented with another existential threat, and it proceeded to address this threat alongside its continental partner with the formation of NORAD.

It is at least a bit ironic that, in view of the sovereignty competition that had been a thorn in the relationship a century before, Canada and the US responded to the new shared 20th century threat by immediately putting aside the issue of aerospace sovereignty when they stood-up NORAD in 1957. It was deemed that more important issues than national sovereignty needed to be addressed, so the concept of ceding flight authorities to each other was seen as an acceptable risk. This solution speaks to the enormous threat perceived by the two nations at the time. Many would argue that if NORAD had not been stood-up in the dangerous 1950s, such a binational agreement would not have been proposed at any other time.

The NORAD agreement is, arguably, the only binational military agreement in the world. Certainly, there are many "bilateral" agreements: agreements where partners maintain their own sovereignty but pool assets to the shared greater good. But that is not the full extent of NORAD, where the Canada–US border effectively disappears for air-defence purposes. To this day, neither nation requires the permission of the other to fly military aircraft across the border on NORAD missions.

For Canada, this agreement really was a question of sovereignty, while for the US it was largely a question of resources. Canadians knew that the US would likely do whatever they deemed necessary in order to meet an approaching Russian threat, and the US knew that Canada was not resourced to set up a network of early-warning radars and fighter bases across the North. So Canada agreed to this binational concept, and the US agreed to fund the lion's share of the costs, which they do through to today.

It is a friendly anomaly that Canadian air force generals were in the command chair at NORAD during a couple of critical events in history. Air Vice-Marshal Roy Slemon was in charge at a key point during the Cuban Missile Crisis, and Lieutenant-General Rick Findley was in command during the 9/11 attacks, scenarios that the Americans had likely not anticipated when they signed the NORAD agreement.

It is interesting to note that both nations deemed the NORAD agreement to have been so successful that in the last decade this command was given the responsibility of maritime warning, in addition to its accountabilities for aerospace warning and response.

NATO

It is a similar concept that sees Canada and the US as 2 of the 28 partners of NATO. Although these two countries are far from Europe and have few forces on the continent, it is critically important to the other NATO partners that the US and Canada stand ready to protect the western flank of the North Atlantic area. Canada has long taken heat from NATO for being among the lowest gross domestic product (GDP) percentage investors, but not as much heat as one might have anticipated. This is because every NATO nation, save perhaps for the US, seeks to leverage their NATO



partnership in part to lower their defence costs. All the members of the alliance understand what Canada is doing when it invests less than 1 per cent of GDP in defence. If they could, most of them would attempt to do the same and then reinvest their gold elsewhere in their societies. While past US presidents simply saw this investment imbalance as the cost of being the "big dog" in NATO, President Trump went public in recognizing this disparity and declared it to be inherently unfair. This will likely change the equation that has long been in place.

Canada is, however, nearly always among the first to volunteer what forces we have, few but excellent, to any NATO operation—in Bosnia, over Serbia, in Iraq, in Afghanistan, in Libya and now in Latvia in response to the Russian intrigue in Ukraine and the Crimean grab. This willingness to deploy plays well with our NATO partners and is, of course, appreciated by the CAF members who wish to test their mettle in international arenas. The appreciation of NATO allies goes some way to buffering Canada from the most direct effects of NATO budgetary concerns.

Defence enthusiasts will be pleased with the clarity that *Strong, Secure, Engaged: Canada's Defence Policy* (SSE)³ brings to government expectations regarding CAF capabilities and numbers. SSE spells out that CAF must be prepared to respond to concurrent domestic emergencies while meeting its NORAD and NATO obligations and also be prepared to simultaneously contribute to international peace and stability through a range of sustained and limited deployments. This remarkable grocery list of expectations will certainly require enhanced defence investments and growth.

It is interesting to note that Canada has long maintained a broad selection of military capabilities that are meant for just such a grocery list, and stretch far beyond direct utility in homeland defence. Tanks, heavy artillery, destroyers, submarines, these are all things that clearly have limited use at home, in and around Canada. But to use a sporting term, Canadians believe that sovereignty is best protected by playing the "away game" effectively, and to do this, the nation must maintain an array of finely tuned offensive capabilities. To forgo these capabilities and to forgo the ability to deploy them and maintain them in the field for extensive periods would likely result in a significant downsizing of Canada's military and then threaten CAF's ability to respond to the sovereignty threats and responsibilities discussed above.

In addition, any reduction in Canada's abilities to deploy internationally would likely also result in removing Canada from many of the world's most important strategic forums. *SSE* makes clear that the government has no intention of forgoing these capabilities.

Intelligence, Cyber Warfare and Space

Canada's enthusiasm for maintaining and deploying world-class capabilities has led, in part, to its inclusion in the very valuable Five Eyes intelligence forum that brings together the most important intelligence agencies of the world's primary English-speaking nations. This is something Canadian politicians and defence experts see as a requirement for national defence, especially with the rising importance of new arenas and battlefields, particularly the cyber arena. In recent years, it has become evident that a nation's sovereignty and much of its economy can be brought under attack, even if its borders are uncrossed by anyone or any physical weaponry. Defence in this arena requires shared friendly intelligence and leading-edge software capabilities.

SSE again brings welcome news here in its explicit recognition of the importance of these new arenas. For example, it heralds targeted investment in equipment and defence-intelligence experts who collect, analyse and disseminate information, exactly the kind of modern warrior required to support the work done in Five Eyes forums.



Certainly, cyber defence and the management of space assets will bring together an array of national capabilities, only some of which will be held within CAF. SSE implicitly recognizes this shared ownership when it says that:

Canada will modernize its space capabilities and will take steps to protect these critical assets against sophisticated threats, while continuing to promote the peaceful use of outer space. We will assume a more assertive posture in the cyber domain by hardening our defences, and by conducting active cyber operations against potential adversaries in the context of government-authorized military missions. Cyber operations will be subject to all applicable domestic law, international law, and proven checks and balances such as rules of engagement, targeting and collateral damage assessments.⁴

In my experience, it is this co-ownership of national-protection capabilities that will prove of greatest challenge in sorting out new CAF accountabilities. Whereas most military operations become autonomous once government orders are given, this is not as much the case with intelligence, cyber and space-supported operations. These will require the continuous balancing of the concerns and accountabilities of other organizations with key roles: the Communications Security Establishment, Public Safety, Canadian Security Intelligence Service and the Canadian Space Agency, to name a few.

Procurement

There is a common refrain in many Western nations, including Canada, that the defence procurement system is broken and unresponsive to the nation's defence requirements; however, there is another way of looking at this. While successive governments, industry partners and defence leaders all rail against a system that takes years to define national defence requirements, let alone respond to them with clear competition-based processes, we must ask how it is that we, and so many other countries, find ourselves so ensnarled.

The answer is largely related to the fact that defence procurement frequently involves contracts worth more than anything seen elsewhere in the economy. Shipbuilding contracts related to the National Shipbuilding Procurement Strategy (NSPS) and the fighter contract to replace Canada's CF188s come along only generationally and can mean the survival or disappearance of companies within the defence industry. Similarly, each large procurement project brings with it enormous political risks. Even when a government makes good, fact-based decisions on large projects, the time it takes for equipment to roll off the lines and into service means that that government must withstand years of attacks from the opposition, in concert with an alliance of defence-industry companies that were unsuccessful in their bids.

With this in mind, democratic nations put in place processes designed to run risks to ground. But as military commanders well know, risk mitigation efforts must, at some point, be ceased so that action can be taken. While I believe the government has always been sincere in its desire to outfit CAF with proper equipment and takes CAF's operational requirements to heart, current procurement processes share go-ahead authorities among many departments. Public Services and Procurement Canada; Innovation, Science and Economic Development Canada; the Finance Department; the Treasury Board; and Indigenous and Northern Affairs Canada, all these and others have a say. And each time a stakeholder asks a question, several processes are reset, often by several months. While inefficient, such a procurement system allows every major industry player the time to lobby for its product as well as every government official and Member of Parliament to lobby for their particular interest.



A prime example of the tortuous progress that results from such an inclusive system is the effort to replace the RCAF's fixed-wing SAR fleet of aircraft. Although the RCAF had laid out a well-defined set of mandatory requirements, when it became clear that only one aircraft would satisfy the need, departments such as Industry at Public Works and Government Services Canada jumped into the fray to have the requirements examined and refined until there was finally ground upon which a competition could be held. The project had commenced in 2002 and ended up taking nearly 15 years to identify a supplier, resulting in more than 20 years from project commencement to aircraft delivery.

Therefore, the question isn't so much why defence procurement takes so long, but how does any project ever reach successful completion. Nevertheless, some do, even if the operational requirements that drove the original project may have been overtaken by events. While this frustrating system is far from ideal, and it can be argued that its lack of responsiveness has been expensive and inefficient, it can also be argued that national failures have been rare. Indeed, the Sea King fleet has flown for decades longer than it should have, and the RCN is only now seeing a leased supply ship after years of doing without, but the RCAF will soon replace its SAR fleet, as mentioned above, and the Army is now taking possession of its fleet of new Tactical Armoured Patrol vehicles. I am not condoning the current system, simply explaining its lack of responsiveness. But a nation is not tied to such a system.

Should Canada wish to have a more responsive procurement system, the government must first change its stance on risk acceptance. To do so would require the stand-up of a singular defence procurement authority. This organization would still seek out, balance and integrate the interests of stakeholder departments but would have the ability to interrupt the process when it has decided fair hearings have occurred and that the time for a competition or sole-source contract has arrived. There will be winners and losers in such a system, just as there are with the current procurement process, but the time from start to finish can be cut by half or more. Other nations such as Australia have proven such systems can work.

To note, it is often remarked that there is a requirement to better equip our senior military and civilian staff to manage the complicated intragovernmental process now in place. To this observation, I would simply say that—while comprehensive knowledge of the key processes is always valuable and, similarly, familiarity with the people at key junctures of these processes—my experience has been that DND and CAF staff, by and large, do a creditable job in facilitating the process whenever they can. While it is, indeed, important that key defence officials communicate clearly with procurement decision makers throughout the procurement process, they can only do so much to accelerate such a monster. Marked improvement will, therefore, only arrive with a simplified procurement system that empowers fewer decision makers and allows them to accept more risk. Doing so would result from the recognition that there are more severe risks associated with severe delays in the acquisition of new military capabilities.

The Way Ahead

Going forward, the protection of Canada's sovereignty will involve knitting together political relationships, not only those that keep alliances like NORAD and NATO alive and breathing but also those that serve to check the sharp edges of competitors in the Arctic, in the cyber arena and in trade. Note that before Russia threatened the Ukraine and absconded with Crimean sovereignty, Canada was making real headway, spearheading advances in Arctic relations through the Arctic



Council. I had the privilege of leading a multidepartmental team in 2010 as the eight key Arctic nations hammered out an Arctic SAR treaty. The chiefs of defence of the Arctic nations were at the time meeting annually, including the Russian chief, to discuss methods of cooperation on the Arctic—exercises, equipment and doctrine. This is all on hiatus now, at least for a while.

Canada will likely need to increase defence investment, even if Canadians believe that current capabilities are sufficient for the nation's needs; this will be a growing Trumpian theme that will be tough for Canada's leaders to resist. And *SSE* recognizes this explicitly when it says that "the Government will grow annual defence spending over the next 10 years from \$17.1 billion in 2016–17 to \$24.6 billion in 2026–27" Similarly, the plan to grow the Regular Force by 3,500 military personnel and the Reserve Force by 1,500 provides a significant boost to plans to address new arenas such as intelligence, cyber and space. CAF human-resource personnel will need to determine what skills a cyber-warrior recruit should arrive with and whether CAF should be recruiting space specialists to meet the technical demands of such an arena.

These investments will come with dividends for defence professionals and those who think deeply about Canadian sovereignty. New money can be invested wisely in cyber capabilities, developing both defensive and offensive techniques; in long- and medium-range unmanned aircraft systems that would allow a more methodical approach to national reconnaissance; and in missile-defence capabilities, including early-warning radar for NORAD purposes and; perhaps, antiballistic missile batteries against rogue nuclear threats. NORAD's North Warning System needs modernization and technologies to cover the Arctic Archipelago. The right, new fighter should be purchased to replace the CF188, and an unfettered procurement process would certainly, eventually, result in the selection of the F-35 for this purpose. All of our key allies are selecting this aircraft; it would fit easily, most naturally into NORAD, and the costs are finally decreasing in such a way as to reflect predictions.

There are, indeed, positive signs for defence observers that a government that did not run for office on an overtly pro-defence campaign has seen fit to publish a defence policy that makes the case for significantly more defence investment. Further, *SSE's* penchant for spelling out government expectations for CAF distinguishes it from previous defence policies and provides CAF the rationale for making the case for many investment increases and refinements. That said, while the government is likely committed to the defence outcomes listed in the new policy, years must pass before the bulk of the promised investments arrive. In those years, it will be partly the duty of DND/CAF to ensure the government and the people of our nation continue to recognize both the importance of CAF capabilities in defending Canada's sovereignty and the fact that those capabilities require significant investment.

General Tom Lawson (Retired) grew up in Etobicoke, Ontario, and graduated from the Royal Military College of Canada (RMCC) with a degree in electrical engineering. In a career spanning 40 years, he flew the CF 104 Starfighter and the CF188 Hornet and commanded 412 Transport Squadron and 8 Wing Trenton. As a general officer, he was Commandant of RMCC, Assistant Chief of the Air Staff and, later, Deputy Commander NORAD in Colorado Springs. His final appointment as CDS spanned 2012–15. He has a Master of Electrical Engineering from RMCC and a Master of Public Administration from Auburn University. General Lawson (Retired) is now a director on several boards and provides strategic advice to various Canadian and American companies.



Abbreviations

CAF Canadian Armed Forces
CDS Chief of the Defence Staff

DND Department of National Defence

GDP gross domestic product

NATO North Atlantic Treaty Organization

NORAD North American Aerospace Defence Command

RCAF Royal Canadian Air Force
RCN Royal Canadian Navy

RMCC Royal Military College of Canada

SAR search and rescue

SSE Strong, Secure, Engaged: Canada's Defence Policy

US United States

Endnotes

1. Canada, Indian Affairs and Northern Development, "Canada's Northern Strategy: Our North, Our Heritage, Our Future" (Ottawa: Indian Affairs and Northern Development, 2009), accessed February 15, 2018, http://www.northernstrategy.gc.ca/cns/cns-eng.asp.

- 2. Canada, Indian Affairs and Northern Development, "Canada's Northern Strategy," 2.
- 3. Canada, DND, Strong, Secure, Engaged: Canada's Defence Policy (Ottawa: DND, 2017), accessed February 15, 2018, http://dgpaapp.forces.gc.ca/en/canada-defence-policy/index.asp.
 - 4. Canada, DND, Strong, Secure, Engaged, 15.
 - 5. Canada, DND, Strong, Secure, Engaged, 43.

CHAPTER 2

THE POLITICS OF SOVEREIGNTY: CANADA-UNITED STATES DEFENCE RELATIONS

BY JEAN-CHRISTOPHE BOUCHER

Abstract

Canada-United States (US) defence relations are often structured by an apprehension, at least from the Canadian side, for state sovereignty. Indeed, from a possible participation in ballistic missile defence (BMD), to a contribution to military intervention or extending provisions in North American Aerospace Command (NORAD), no discussion pertaining to our most important bilateral relationship can escape such a concern. However, these debates are shaped by Canadian political elites' diverse and often conflicting understanding of the role of the state in world affairs. Indeed, governments will frame Canadian sovereignty differently, thus proposing policies that will conform to these worldviews. Such ambivalence is a significant challenge for public servants and military leaders who advise the government of the day on key policies or procurement priorities. Likewise, it is extremely difficult for allies, such as the US, to calibrate their relationship when faced with these policy variations. In this paper, we attempt to measure how Canadian political elites think about sovereignty and determine its impact on Canadian defence policy. We use machine learning algorithms to understand further the different narratives that permeate policy debates over sovereignty in Canada since 2001, and we examine the implications for Canada-US relations.

Introduction

Canada-US defence relations are structured by an apprehension, at least from the Canadian perspective, for state sovereignty. From a participation in BMD to military expenditure, contributing to military interventions or extending provisions in NORAD, no discussion pertaining to Canada's most important bilateral relationship can escape such a concern. Interestingly, the actual meaning of "Canadian sovereignty," and the compulsory policy prescriptions that derive from different conceptualizations, is an element of contention among Canadian scholars and political elites. Indeed, public debates appear to be shaped by different, often contradictory, understandings of what Canadian sovereignty entails. How can we understand and explain such fundamental disagreement on what sovereignty means for Canadians?

Governments frame Canadian sovereignty differently, thus proposing policies that will conform to these worldviews. In this respect, Canadian sovereignty is shaped by political elites' distinct and often conflicting understandings of the role of the state in world affairs. As Adam Chapnick rightly notes, "the idea of freedom from external pressures or influence has been one of the history of Canadian foreign policy's dominant themes, one that has existed since well before the time of Confederation and continues to resonate today." As seminal works by John Zaller² and Adam Berinsky³ have demonstrated, elite consensus is a significant determinant of public support for government policy. How elites understand sovereignty is essential to the broader policy debate on Canadian defence policy. Such conceptual inconsistency is a significant challenge for public servants and military leaders who advise the government of the day on key policies or procurement priorities.



Likewise, it is extremely difficult for allies such as the US to calibrate their relationship when faced with these policy variations.

In this paper, we propose to measure how Canadian political elites debate sovereignty and determine its impact on Canadian defence policy. In the first section, we explore the theoretical foundation of "sovereignty" by exposing its multifaceted conceptualization. In the second section, we assess how Canadian political elites use the term by analysing policy debates in the House of Commons over sovereignty between 2001 and 2017. We use machine learning algorithms, more specifically the latent Dirichlet allocation (LDA) topic model, to process the content analysis and measure the different narratives that permeate discussions on Canadian sovereignty. Our data analysis indicates that political elites use two different conceptions of sovereignty while debating policy issues in the House of Commons. For some, Canadian sovereignty centres on the capacity of the government to control and defend our territorial integrity. For others, Canadian sovereignty is asserted when our country acts with autonomy and purpose in world affairs. Additionally, we study what factors influence how elites frame "sovereignty." Generally, we find that partisanship and whether members of Parliament are affiliated with the government or the opposition to be strong predictors of how elites view Canadian sovereignty. These results suggest that sovereignty frames are determined mostly by domestic factors and add to our theoretical understanding of what defines foreign policy debates in Canada.

Conceptualizing Sovereignty?

According to Stephen Krasner, sovereignty can be conceptualized in three distinctive ways: international legal sovereignty, Westphalian sovereignty, and domestic sovereignty.⁴ International legal sovereignty refers to the notion of legal recognition by the international community. As Krasner suggests, international legal sovereignty is "concerned with establishing the status of a political entity in the international system. Is a state recognized by other states? Is it accepted as a juridical equal?"5 Although international legal sovereignty is a de jure proposition and is seldom actively promoted by states, it is nonetheless a focal preoccupation for secessionist or irredentist groups who are seeking international recognition. For example, both the Kurds dedicated to the creation of a united Kurdistan and the Catalans in Spain have recently pursued international legal sovereignty. Westphalian sovereignty, for its part, is the ability of states to be autonomous and develop their policies, especially on foreign affairs, without being subjected to external authority. "The fundamental norm of Westphalian sovereignty is that states exist in specific territories, within which domestic political authorities are the sole arbiters of legitimate behaviour." Finally, domestic sovereignty is the capacity of states to regulate and police behaviours within their own territory. This concept embraces the idea that nations are sovereign if they can exclude and defend their territory from outside intervention. In sum, according to Krasner, sovereignty is defined by three necessary but insufficient conditions: non-interference by outside states, territorial integrity, and a supreme legitimate authority.7 To be sure, these different conceptualizations of the term "sovereignty" are not necessarily concomitant, and some states possess international legal sovereignty without effectively controlling their territory. For example, Somalia is a recognized member of the international system, but the central government in Mogadishu has difficulties assuming full control over its territory and thus does not enjoy domestic sovereignty. The Westphalian-domestic sovereignty dichotomy finds significant support in the theoretical literature on international relations.8

As Krasner rightly noted, much of the theoretical debate surrounding state sovereignty stems from the fact that the term "sovereignty" is used in different ways. This consideration highlights



the social dimension of sovereignty framing. International rules and norms, although necessary to delineate the logic of appropriateness of states' actions, remain circumscribed by the preferences of actors and their ability for agency. In this regard, "sovereignty is a dynamic, socially constructed force" that gets enacted through states' practices and conforms to political elites' understanding of state interests and its role in world affairs. As Schmidt remarks: "Built on mutual recognition, sovereignty is fundamentally relational and is defined by how the representatives of recognized state actors interact with the world and draw on shared conceptual frameworks for developing strategies to achieve commonly understood ends." Nevertheless, these preferences are never unproblematic. Indeed, as new research in Role Theory suggests, political elites—politicians, senior public servants, public intellectuals—have a diverse and often conflicting understanding of the role of the state in world affairs. 12

Sovereignty and defence policy debate in Canada

Although scholars have recognized the impact of ideologies on foreign policy debate on Canada's role in the world, ¹³ we still have some difficulty explaining what determines these views beyond anecdotal empirical evidence. A survey of the existing literature highlights three broad hypotheses clarifying how Canadian political elites frame foreign policy issues.

The first group of hypotheses examines the impact of the Canadian political system on elites' framing of foreign policy issues. First, some authors have argued that partisanship influences Canadian elites' foreign policy preferences. ¹⁴ This is consistent with studies demonstrating that ideological differences among political parties are substantive and consistent. ¹⁵ In this regard, we would expect political elites' partisan affiliation to have a significant influence on how they frame Canadian sovereignty. According to Brian Rathbun, leftist parties generally adhere to policies that promote multilateral cooperation and broader internationalist values. Rightist political parties, conversely, believe in the usefulness of force and the primacy of the national interest.

Translated to Canada's political climate, we would infer that progressive political parties, such as the New Democratic Party (NDP) or the Liberal Party of Canada (LPC), would stress the need for Canada to move beyond its bilateral relationship and promote a foreign policy agenda associated with internationalism that stresses an active contribution to international peace and security through multilateral organizations. Conversely, more rightist political parties, such as the Conservative Party of Canada (CPC), would support a continentalist view of Canada's role in the world with a strong emphasis on strengthening its relations with the US and, of course, prioritize the defence of North America. Two complementary hypotheses derive from these considerations: H1a: political elites affiliated with leftist political parties (NDP and LPC) will be positively related to and highly predictive of Westphalian sovereignty framing; H1b: political elites affiliated with rightist political parties (CPC) will be positively related to and highly predictive of domestic sovereignty framing.

Second, some authors have suggested, instead, that the nature of the parliamentary system forces political elites to adopt singular policy preferences and defend those in an adversarial climate.¹⁷ Accordingly, the parliamentary system imposes institutional constraints that influences elites' policy preferences. Denis Stairs, for example, argues that the legislative branch serves an education function that is fundamental to the Canadian political landscape.¹⁸ Members of Parliament (MPs), through the adversarial institutional constraint designed in the operating procedure of the House of Commons, can and should debate matters of public interest, if only for exposing the public to the complexities of global politics and highlight the policy options available to Canada. Thus, we



should expect MPs forming the government and the opposition to hold different views with respect to sovereignty. However, some authors are sceptical of the influence of the legislative assembly in shaping political elites' preferences. Bow and Black, for example, note that the impact of partisanship on foreign policy in Canada stems from the fact that "governing parties in Canada generally feel tightly hemmed in by international and domestic circumstances, closing off opportunities for party, specific personalities or priorities to shape the foreign policy agenda." In this context, we should expect political elites from the government and the opposition to hold similar views with respect to Canadian sovereignty. Arguably, we would assume that when in government, political elites would defend a pragmatist foreign policy centred on defending Canadian territorial sovereignty; whereas, when in opposition, political elites would focus instead on defining a principled foreign policy that would emphasize Canadian independence. These considerations underline two competing hypotheses: H2a: political elites forming the opposition will be positively associated with and highly predictive of Westphalian sovereignty framing; H2b: political elites forming the government will be positively associated with and highly predictive of domestic sovereignty framing.

Finally, some authors have suggested that foreign policy preferences in Canada are determined by cultural/identity factors.²⁰ Influenced by constructivist theoretical approaches, they argue that norms—that is, standards of correct behaviour—are entrenched in identity and embodied by institutions.21 Hence, these authors have maintained that ideational dynamics affect how agents (either the public or political elites) structure their identities and interests. In a country as diverse as Canada, where agents identify with different communal groups, it is presumed that individuals from different communities might hold distinctive policy preferences. As McDonough rightly noted, if one takes the cultural factors seriously, the Canadian attitude toward defence policy is defined by "two competing strategic subcultures ... continentalism, which posits that Canada should maintain a close identification with the country's role as an American ally in North America, and the independence subculture that recommends greater distancing from the United States."22 Accordingly, identity markers should explain how policy-makers perceive the issue of Canadian sovereignty. Hence, we presume that provinces—who have developed into socially distinct political communities—adhere to either continentalism (which adheres to domestic sovereignty) or independence (such as defined by Westphalian sovereignty). There is still much to be learned about how regional differences influence Canadian attitudes toward foreign policy issues, but existing studies have generally shown two things: Quebec has adhered to internationalism more than other Canadians, while Albertans have been mostly more supportive of a stronger association with the US.²³ This leads us to propose two hypotheses: H3a: political elites from Quebec will be positively associated with and highly predictive of Westphalian sovereignty framing; H3b: political elites from Alberta will be positively associated with and highly predictive of domestic sovereignty framing.

Measuring Sovereignty

One of the challenges of measuring "sovereignty" is to identify an empirically rich substrate that would highlight how elites conceptualize sovereignty "in the real world," free of the artifices and prevarication which is often associated with official political communication. Thus, we have collected all speeches made by MPs in the House of Commons between 2001 and 2017 in which the word "sovereignty" was pronounced. The House of Commons is an ideal space for political elites to discuss issues related to public policy. Although questions and answers are often scripted in advance, the act of debating serious policy matters in a public forum creates a moment of spontaneity where political elites promote preferences. We have limited our analysis to post-2001 to avoid com-



paring historical periods with significantly different logics, such as the post–Cold War era between 1989 and 2001. Additionally, we sidestep the debate of the mid-1990s when the question of sover-eignty in the House of Commons centred mostly on a possible secession of Quebec. Interestingly, much of that debate centred on the notion of international legal sovereignty identified by Krasner. Nevertheless, this period encompasses four different governments—those of Jean Chrétien, Paul Martin, Stephen Harper, and Justin Trudeau—and we can thus examine whether the meaning of "sovereignty" has evolved since 2001 and how particular governments conceptualized Canada's role in the world differently. Furthermore, the democratic transition happening during this period allows us to consider how political elites from different political parties articulated their views on Canadian sovereignty. Overall, 1,818 interventions were collected through the Hansard archive, which records and transcribes debates in the House of Commons.²⁴

Analysing how the concept of sovereignty is used in public debates in the House of Commons with such a large number of articles (n=1,818) is a methodological challenge beyond the scope of traditional content analysis methods. We rely on machine learning methods to implement automatic content analysis of a large corpus of written texts. The use of machine learning in political science is growing exponentially and allows scholars to expand the size of their analysis. ²⁵ As Grimmer and Stewart argued, "automated content methods can make possible the previously impossible in political science: the systematic analysis of large-scale text collections without massive funding support." Machine learning algorithms available to social scientists fall into two broad categories. First, supervised machine learning models require researchers to identify a training set from which algorithms can "learn" to reproduce tasks such as performing coding through content analysis. These models are used extensively in sentiment analysis (identifying the general tone of written texts) or classification problems. Second, unsupervised learning algorithms aim to find plausible clusters in the data without prior knowledge. As Hastie et al., noted: "The goal is to directly infer the properties of this probability density without the help of a supervisor or teacher providing corrects answers or degree-of-error for each observation."

For this paper, we use a LDA algorithm to analyse our data. LDA is an unsupervised topic identification method that uses a hierarchical Bayesian model to distribute texts into specific groups based on word usage.²⁸ The fundamental idea behind the LDA algorithm is that "documents are represented as random mixtures over latent topics, where each topic is characterized by a distribution over words."²⁹ In other words, word usage should be statistically associated with specific topics. Thus, the LDA model reveals the inter- or intra-document statistical structure within a specific corpus of texts and highlights the inherent logic that underlies the text.³⁰ LDA assumes that each data point (words) may belong to more than a single topic. We included a Gibbs sampling sequence to approximate a multivariate probable distribution of clusters.³¹ The implementation of the LDA model on all speeches made in the House of Commons on sovereignty distinguishes two alternative clusters associated with theoretical operationalization of sovereignty: Westphalian and domestic sovereignty.

Figure 1 below shows the evolution of Canadian sovereignty debates in the House of Commons between 2001 and 2017. Overall, MPs mentioned Canadian sovereignty on average 9.6 times per month when the House of Commons was sitting between 2001 and 2017. This interest is, however, quite uneven. Indeed, the standard deviation of 11.32, which suggests that debates in the House of Commons tend either to focus on sovereignty issues a great deal or to ignore the subject completely. Five episodes were particularly important for policy debates on Canadian sovereignty. The first episode, between February 2003 and May 2003, centred on the ramifications of a possible Canadian participation in a US-led war in Iraq. Much of that debate highlighted the tension between a desire



to uphold international law and refrain from contributing to a war that had not received the United Nations Security Council's authorization and a need for Canada to preserve its relations with the US and avoid embarrassing its closest ally. The second episode, between February 2004 and June 2004, was during the prime ministership of Paul Martin and focused on the BMD. Again, those advocating against the BMD argued that Canada's participation to the project would essentially surrender the country's sovereignty to US policy-makers' control. Finally, on both occasions, faced with significant domestic pressure (which seems to have percolated into political elites' debates in the House of Commons), Ottawa decided not to follow the Americans and to focus instead on defining Canadian interests along the line of Westphalian sovereignty promoting an independent foreign policy.

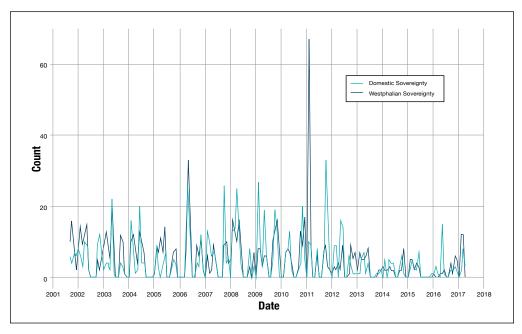


Figure 1. Evolution of Sovereignty themes in House of Commons debate (2001–17).

The three last debates on Canadian sovereignty were held during the stewardship of Stephen Harper. First, political elites debated the renewal of NORAD between April 2006 and June 2006. The second period, between February 2008 and May 2008, was a combination of highly contentious issues such as the negotiation of the Security and Prosperity Partnership with the US, the sale of the space division of Canadian company MacDonald, Dettwiler and Associates (who produced the RADARSAT2) to US military industry giant Alliant Techsystems, and the unveiling of the Conservative defence policy *Canada First* Defence Strategy, which, among other things, emphasized Arctic sovereignty. Finally, between November 2010 and February 2011, a debate centred on bill C42, an amendment to the Aeronautics Act, which now required airlines who transited in the US airspace to provide its passengers' information to US authorities. As we can see in Figure 1, this issue engendered a spirited deliberation where political elites forcefully criticized the Harper government for submitting to US pressure and violating the right of Canadian citizens to privacy, thereby defending a Westphalian interpretation of Canadian sovereignty.



This paper attempts to understand how debating Canadian sovereignty remains, fundamentally, a phenomenon informed and influenced by politics. Role theory posits that elites' attitude toward foreign policy issues produces a highly contested marketplace of ideas where conceptions on the role of the state in the world is deliberated.³² In this context, the question of Canadian sovereignty and its implication for Canada-US relations on matters of defence policy is less a question of who defends Canada's sovereignty or not, but more so how elites conceptualize sovereignty and endorse distinctive policy prescriptions. As we can see from Figure 1, roughly 52% (n=939) of speeches made in the House of Commons pertaining to sovereignty defended a Westphalian approach. By contrast, 48% (n=879) of speeches emphasized domestic sovereignty. This seems to suggest that despite the assumption that Canadian politicians hold deep internationalist predispositions, there is some debate among elites on how to promote Canada's sovereignty and its role in the world.

The Politics of Canadian Sovereignty

We identified three sets of hypotheses that might explain why political elites adhere to either Westphalian or domestic interpretations of Canadian sovereignty. The first hypothesis examines whether partisanship influenced elites' attitude toward Canadian foreign policy in general, and the issue of Canadian sovereignty in particular. Arguably, we would expect that elites' conceptualization of Canadian sovereignty to mirror members' political parties, with Conservative MPs expressing support for domestic sovereignty and progressive MPs from the Liberal party or the NDP defending Westphalian sovereignty. Figure 2 below examines the distribution of sovereignty framing by MPs by political parties.

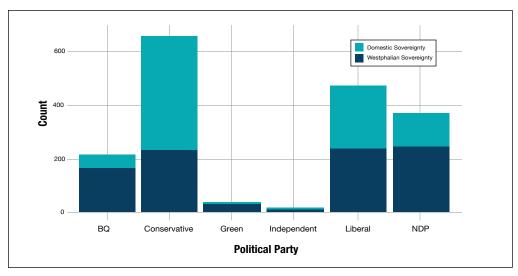


Figure 2. Framing sovereignty by political party.

Three broad preliminary observations can be derived from the data presented in Figure 2. First, MPs affiliated with the Bloc Québécois and the NDP appear to support Westphalian sovereignty and thus promote an internationalist foreign policy. As such, there seems to be some empirical support for our first partisan hypothesis (H1a). Interestingly, when we consider the proportion of Bloc Québécois and NDP MPs elected between 2001 and 2017, we find that both make references to Canadian sovereignty more often than their relative influence in the House of Commons would warrant. Between



2001 and 2017, Bloc Québécois MPs, representing 11% of elected officials—206 Bloc Québécois MPs for 1,872 seats in the House of Commons (representing 12.15% of our population)—talked about Canadian sovereignty 221 times. The case of the NDP is even more noteworthy. Although members affiliated with this political party represented 13.01% of MPs in the House of Commons during this period, their interventions on Canadian sovereignty accounted for more than 20.7% of our dataset. Second, Conservative MPs have been most vocal on the issue of sovereignty with a stronger emphasis than other parties on domestic sovereignty, which seems to validate our second partisan hypothesis (H1b). Overall, 37.3% (n=679) of interventions mentioning Canadian sovereignty were attributed to MPs affiliated with the CPC. Between 2001 and 2017, the CPC MPs represented 37.87% of possible seats in the House of Commons. This suggests that although Conservative political elites mentioned sovereignty more often, this would be expected given their relative standing in the House of Commons. Finally, MPs associated with the Liberal party have roughly argued both interpretations of sovereignty proportionately. With respect to their relative importance, Liberal MPs mentioned Canadian sovereignty 26.8% within our dataset while forming 32.16% of the House of Commons since 2001. In this sense, Liberal MPs were less interested in debating Canadian sovereignty than one would assume given their proportional representation in the House of Commons.

The second set of hypotheses examined the relationship between opposition and government MPs. The assumption is that MPs deliberate differently whether they are part of a political party forming the government of the day or part of the opposition. Figure 3 represents the distribution of speeches between opposition and government MPs pertaining to Canadian sovereignty. As we can readily observe, parliamentarians who form the opposition are more inclined—by almost a third—to discuss sovereignty than are members of Government. These results suggest that framing questions around Canadian sovereignty appears to be a greater concern, or more useful, for political elites when they are part of the opposition, allowing them to hold the current government to account and challenge its policies. When we examine the differences between Westphalian and domestic approaches to sovereignty, opposition and Government interventions are inversely proportional. As we can see from Figure 3, opposition MPs will generally base their argument on Westphalian sovereignty 61% of the time (n=677). Contrariwise, members of Government emphasize domestic sovereignty 63.4% (n=454). We might argue, therefore, that how often and in what way one frames issues around sovereignty depends on which side of the House of Commons one sits. Opposition MPs are preoccupied with Canada's independence and capacity to act with autonomy in world affairs. Government MPs, for their part, invested with the responsibility of governing, frame Canadian sovereignty through its domestic dimension.

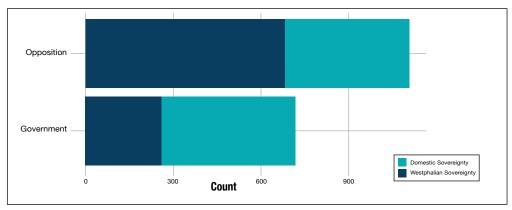


Figure 3. Framing sovereignty by Government vs. opposition.



Finally, Figure 4 shows the distribution of sovereignty framing by provincial membership of political elites. Three general observations are worth our attention. First, the bulk of speeches—78.6% in fact—addressing the issue of sovereignty were made by MPs from four provinces: Ontario, Quebec, British Columbia, and Alberta. This roughly correlates with the number of seats, 81%, held by these provinces in the House of Commons. In fact, when we consider the respective weight of each province in the House of Commons, only members from British Columbia talk about sovereignty proportionally more than other MPs. This suggests that the salience of topics related to Canadian sovereignty is not driven by specific provincial idiosyncrasies. Second, we can observe that MPs from both Quebec and British Columbia have, on average, preferred a Westphalian interpretation of sovereignty over the domestic alternative. Conversely, as we proposed in our hypothesis, political elites from Alberta have emphasized domestic sovereignty. Finally, Ontario elites have balanced their interventions between Westphalian and domestic sovereignty evenly with approximately 53.5% focusing on domestic sovereignty.

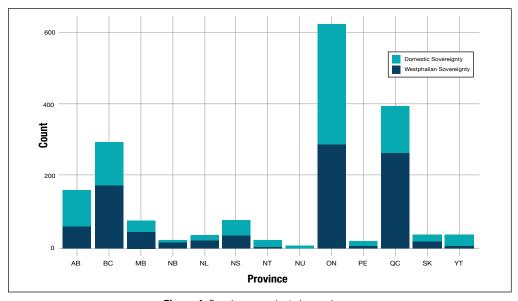


Figure 4. Framing sovereignty by provinces.

The results presented in figures 2, 3, and 4 remain tentative, but suggest that our hypotheses are, at the very least, plausible. Nevertheless, they do not measure the association between partisanship, parliamentary membership, and regional attachment with how elites frame Canadian sovereignty. In Table 2, we propose two models testing empirically our hypotheses through a series of binomial generalized linear models evaluating the statistical relationship between our independent variables—partisanship, parliamentary membership, and regional affiliation—and sovereignty. We have separated our analysis in two different models: the first testing a multivariate logit with partisanship and parliamentary membership; the second analysing the influence of provincial attachment. Although we had hoped to control for regional affiliation with other variables, the initial multicollinearity test revealed that partisanship and regional representation were highly correlated. Such relationship should not surprise scholars of Canadian politics. Indeed, some Canadian political parties, most notably the Bloc Québécois and the Conservative party, have strong regional connections respectively in Québec and the Prairies.



First, as we can see in Table 1, partisanship is broadly associated with how MPs frame Canadian sovereignty. As we had anticipated originally in our first series of hypotheses, leftist political parties—such as the NDP and the BQ—display a preference for Westphalian sovereignty. Conversely, as expected, members of the Conservative party focus on domestic sovereignty. Largely, political elites affiliated with leftist parties defend a cooperative internationalist approach to Canadian defence policy priorities, while those from rightist parties remain dedicated to a continentalist vision. Importantly, we can find no such association with members of the LPC. Although scholars and pundits often associate the LPC to a strong promotion of liberal, internationalist ideals, these results point toward two alternative possibilities. On the one hand, this might suggest that political elites from this party are much more circumspect in their approach to Canadian sovereignty. On the other hand, one might argue that the LPC attracts members who endorse both Westphalian and domestic sovereignty. Notwithstanding, when considering how political elites from the LPC frame Canadian sovereignty, partisanship is less an ideological indicator than one of political opportunity.

	Dependent variable:			
	Sovereignty			
	(Model 1)	(Model 2)		
BQ	0.86*** (0.20)			
Liberal	-0.16 (0.11)			
NDP	0.39* (0.17)			
Conservative	-0.71*** (0.08)			
Governemnt	0.86*** (0.2)			
Opposition	1.18*** (0.16)			
AB		-0.5306** (0.1627)		
BC		0.3633** (0.1184)		
MB		0.3947 (0.2324)		
NB		0.6931 (0.4330)		
NF		0.2719 (0.3318)		
NS		-0.2059 (0.2277)		
NWT		-1.5581** (0.5501)		
ON		-0.1392 (0.0806)		
PEI		-0.7621 (0.4577)		
QC		0.6970*** (0.1069)		
SK		-0.0513 (0.3204)		
YT		-1.7047*** (0.4438)		
Observation	1.809	1.809		
Log Likelihood	-1,154.58	-1,198.8840		
Akaike Information Criterion	2,323.17	2,421.7680		
Note: *: .0.05: **: .0.04: ***:	0.004	· · · · · · · · · · · · · · · · · · ·		

Note: *p<0.05; **p<0.01; ***p<0.001

Table 1. Determinants of Canadian sovereignty framing.



Second, when considering the impact of parliamentary membership on sovereignty framing, both being part of the government and being part of the opposition seem to be associated with adherence to Westphalian sovereignty. In this context, our first hypothesis, proposing that while in opposition MPs tend to promote Westphalian sovereignty, is confirmed. We had anticipated, however, that members of Government would, for their part, emphasize the need to defend Canadian territorial integrity. As we can see, our data suggest otherwise. Even in Government, MPs will still conceptualize sovereignty in terms associated with encouraging Canadian independence in world affairs. Although confusing at first glance, these peculiar results might be attributed to the particularities of Canadian politics. Indeed, while in government, political elites are always sensitive, especially if they are a member of the Conservative party, to accusations of catering to US interests and, ultimately, betraying Canadian distinctiveness. Consequently, asserting Canadian sovereignty through the lens of Westphalian conceptualization takes the form of virtue signaling a de facto necessary step to frame foreign policy. Nevertheless, these results confirm more broadly that foreign policy preferences of political elites that underlie debates are influenced, at least in part, by the structure of our political institutions.

Odds ratios allow us to qualify further how much influence we can attribute to our independent variables on Canadian political elites' frame of sovereignty. Figure 5 presents the relative impact of our variables on Canadian sovereignty framing. As we can readily observe, members of the opposition are 3.25 times more likely to use a Westphalian characterization of Canadian sovereignty, while members of government are 2.36. This seems to suggest that Westphalian sovereignty is perceived as an effective criticism by members of the opposition who seek to challenge governmental decisions. When considering partisanship, members of the Bloc Québécois and the NDP are respectively 2.3 and 2.1 times more likely than other MPs to structure their intervention with Westphalian sovereignty. Conservative MPs, for their part, are 0.4 times less likely to use Westphalian sovereignty, preferring instead to articulate a continentalist alternative to Canadian foreign policy.

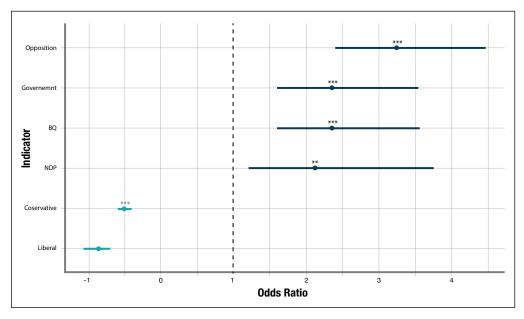


Figure 5. Odds ratio of Canadian sovereignty framing using Westphalian characterization.



As we can see, partisanship is broadly associated with how MPs frame Canadian sovereignty. The relations between four political parties (Bloc Québécois, Conservative, Green Party, and NDP) and framing sovereignty are statistically significant (p<0.001), while we cannot uncover such relation for the Liberal or Independent MPs. The Bloc Québécois, Green Party, and NDP present a positive relationship indicating that MPs from these parties are more often associated with a defence of Westphalian sovereignty than domestic sovereignty. If we look at the odds ratios—corresponding confidence margins are in parenthesis—our results suggest that Bloc Québécois, Green Party, and NDP MPs are respectively 3.25, 6.2, and 2.02 times more likely than other MPs to endorse a Westphalian approach to sovereignty. Conservative members, for their part, are 0.46 times more likely to adhere to a domestic interpretation of sovereignty.

Finally, our third set of hypotheses suggested that regional differences influence how elites frame Canadian sovereignty. Model 2 (in Table 1) examines the statistical relationship between how MPs frame sovereignty and their regional affiliation. Only five provinces show some statistically significant results and present two interesting conclusions. Political elites from Alberta, Northwest Territory and Yukon advocate for domestic sovereignty and highlight the need for the Canadian government to focus on defending our territory. Elites from Québec and British Columbia, for their part, are associated with Westphalian sovereignty. There is clearly a difference between MPs based on their riding's province. This seems to suggest that political elites from different provinces will use different approaches when debating sovereignty and indicates a "regional" influence. These results are interesting in two ways. First, they replicate the same divide we see in Canadian public opinion on matters related to foreign policy. Indeed, several researches have demonstrated clearly that Canadian attitude toward foreign policy is distributed along a continuum ranging from a fierce internationalist Québec to a hawkish Alberta.³³ Hence, there is a link between political elites and their home province, adding weight to the argument of a regional strategic culture in Canada.³⁴ Second, these results contradict the "two solitudes" hypothesis often maintained by pundits both in French and English. As we can clearly see here, the divide is situated regionally with MPs from Québec and British Columbia, on the one hand, advocating for a more independent foreign policy, and Alberta's political elites, on the other, underscoring the need for Canada to defend its territory.

Overall, it seems that all our hypotheses confirm, to some extent, how political elites define sovereignty and argue for distinct policy prescriptions with respect to Canada-US relations. To be sure, any of these hypotheses are not sufficient in themselves to explain all of the variations we see in how elites debate Canadian sovereignty. As we examine the Akaike information criteria for each model, we find that party affiliation is a stronger predictor of elites' attitude toward defence policy issues. More generally, our results converge toward a central conclusion. Elites who represent more progressive elements of Canadian society, either from specific political parties such as the Bloc Québécois, Green Party, and NDP, or from the provinces of Québec and British Columbia, promote Westphalian sovereignty. Conversely, elites embodying more traditional preferences, such as members of the Conservative party or from the province of Alberta, will favour domestic sovereignty.

Conclusion

The deliberation over Canadian sovereignty stresses a fundamental dichotomy between promoting Canada's independence and encouraging stronger ties with the US. Our contention here is that much of the discussion and disagreement between political elites reside in the ambivalence of the concept of sovereignty. Indeed, "sovereignty" can be conceptualized differently, either as an ability



of states to act with autonomy on the international scene or as the capacity to defend one's territorial integrity and population from external threat. Our study of parliamentary debates pertaining to sovereignty has revealed that Canadian political elites essentially identify with one understanding or the other and interpret Canadian priorities through the policy prescription associated with either argument. Canadian sovereignty is not a question of fact, it is matter of perception with real policy implications. Elites who frame this notion along the line of Westphalian sovereignty will advocate for an independent foreign policy that will argue to limit further Canada-US defence relations. On the contrary, elites who consider sovereignty as a matter of defending Canada and North America will advocate for reinforcing Canada-US defence relations.

The argument offered here is that our national debate on the defence of North America is essentially determined by how political elites frame Canadian sovereignty. It seems clear, however, that a strong proportion of Canadian political elites do feel that Canada's interest should emphasize an independent path—that is, without the US—in defence policy. For them, upholding Canadian sovereignty is defined by standing firm when faced with the insurmountable influence of our southern neighbor. In this context, all issues related to defence policy take a highly emotive dimension and sometimes overshadow other preoccupations such as defending North America. As McLauchlin notes, "Canada's role in the world may not just have to do with what kind of actions it takes, but with whom it takes them." Nevertheless, US-led interventions, such as the Iraq war of 2003, for example, met the lowermost support. "Canadians as a whole actually may be *more* skeptical of a military mission if the United States leads it." Because this position lies on a fundamental understanding of what Canadian sovereignty entails, any argument or fact attempting to highlight the importance of stronger ties with the US for defending our territory fails to convince elites and the Canadian public.

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Abbreviations

BMD ballistic missile defence
CPC Conservative Party of Canada
LDA latent Dirichlet allocation
LPC Liberal Party of Canada
MPs members of Parliament
NDP New Democratic Party

UBC University of British Columbia



Notes

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CHAPTER 3

INDIGENOUS DIMENSIONS IN THE ARCTIC SOVEREIGNTY DISCOURSE





Introduction

Arctic sovereignty has long been of broad political interest in Canada. This interest stems from a public perception that our sovereignty is somehow at risk, and is reinforced by the central role of the Arctic in Canadian national and international identity. The Canadian Arctic is home to a number of Indigenous peoples, including Dene, Gwich'in, Inuit and Métis, with historic ties and inherent rights to the region. In the past five decades, Indigenous peoples have reasserted these rights by establishing new and innovative governance arrangements and by settling land claims.

It was perhaps inevitable that these dominant policy trends—Arctic territorial sovereignty and political self-determination—would start to overlap in Northern public discourse. And so, in the past ten years, questions and claims, including the following, have arisen: (1) that Canada's Arctic sovereignty claims are supported by historic Inuit use and occupancy;¹ (2) because of this, states must accept the presence and role of Inuit as partners in the conduct of international relations in the Arctic;² (3) the devolution of governing responsibilities to the territory of Nunavut would bolster Canada's Arctic sovereignty claims and geostrategic position;³ (4) Inuit could hold full historic title to areas in the Arctic beyond the limits of Canadian sovereignty;⁴ and (5) the legitimacy behind and approval of Canada's UNCLOS (United Nations Convention on the Law of the Sea) claim on the extended continental shelf is dependent on consent via meaningful consultation with Inuit peoples.⁵

This paper examines what role, if any, Indigenous, and specifically, Inuit rights play in reinforcing or challenging Canadian Arctic sovereignty. It concludes that because of the particular nature of challenges to Canadian sovereignty in the Arctic, devolution and Inuit consent are not significant legal factors. More to the point, this paper argues that whereas sovereignty, including Arctic sovereignty, should be considered a means for a polity to achieve well-being, prosperity and self-determination for its people, and not an end in and of itself, lines of argument that conflate these two policy issues are distracting and unproductive.

The Concept of Sovereignty

For the purposes of this paper, sovereignty is defined as "supreme legitimate authority within a territory ... Supreme authority within a territory implies both undisputed supremacy over the land's inhabitants and independence from unwanted intervention by an outside authority." Additionally, recognition by other states is understood as a significant element of sovereignty. In the current international system, states are generally recognized as the only political unit that can enjoy sovereignty over territory. This does not mean that other individuals, groups and organizations cannot maintain and exercise rights; however, sovereignty cannot be shared with non-state



actors per se. For Indigenous peoples, the 2007 *United Nations Declaration on the Rights of Indigenous Peoples* (UNDRIP) is one of, if not the most, important articulation of the inherent rights of Indigenous peoples. It emphasizes "the rights of Indigenous peoples to live in dignity, to maintain and strengthen their own institutions, cultures and traditions, and to pursue their self-determined development, in keeping with their own needs and aspirations." Notably, UNDRIP stresses self-determination but does not mention the word "sovereignty" (no doubt correlated with the fact it was adopted by states in an intergovernmental forum.)

The 2009 Circumpolar Inuit Declaration on Sovereignty in the Arctic, by contrast, addresses the term comprehensively, contending that "sovereignty is a contested concept ... issues of sovereignty and sovereign rights must be examined and assessed in the context of our long history of struggle to gain recognition and respect as an Arctic Indigenous people having the right to exercise self-determination over our lives, territories, cultures and languages." At the same time, it acknowledges that "Inuit are citizens of Arctic states." As Michael Byers notes, the Inuit Circumpolar Council (ICC) Declaration is "on" sovereignty, rather than "of" sovereignty and does not claim statehood.⁹

Conventional sovereignty is a path that is legally open to Indigenous nations. A number of South Pacific islands, including Fiji, Tonga, and Samoa, are former colonies that have gained independence and statehood in recent decades. Greenland has publicly declared as a long-term goal of independence from Denmark¹⁰ and has achieved increasing levels of autonomy, with the establishment of Home Rule in 1979 and Self Rule in 2009. However, no Canadian Arctic Indigenous nation has declared an intention for independence.

There are many models of governance arrangements that provide for power-sharing between national and regional governments, including federalism, where there is parity between those levels of government: confederalism, where the national government is subordinate to the regional government; and, devolution, where the regional government is subordinate to the national government. In Canada, a number of political arrangements have devolved governance powers to First Nation and Inuit peoples, including in the form of the Nunavut territory. However, the Canadian constitution only ascribes governing responsibilities to the federal and provincial governments. Still, in the past four decades, modern treaties have been reached across the Canadian Arctic to articulate the self-government, cultural and land rights of Indigenous peoples (see Figure 1).

The Politicization of Arctic Sovereignty

Arctic sovereignty has been a politically charged and emotional subject for southern Canadians for over a century, linked to an anxiety over the national ability to exert control and stewardship over what are perceived as vast and exotic lands. But a number of factors conspired to make it a particularly salient issue in the late 2000s, rooted in the "opening" of the region due to climate-change induced melting sea ice. The Conservative election campaign of 2005–06, led by Stephen Harper, chose a military spending plan focused to a large extent on the Arctic,

as a way to fight back against Liberal charges that Mr. Harper would be an obsequious suck-up to the Americans. With the Arctic plan, Mr. Harper could turn the tables and attack Paul Martin for not defending Canadian sovereignty in the North as U.S. submarines were allowed to pass under Canadian ice ... Like all campaigning, it was mostly political theatre, more stagecraft than statecraft.¹¹



When the Conservatives subsequently gained power, Arctic sovereignty became a trademark of their Northern and defense policies. Famously, Harper asserted in the second of ten annual trips he would make to the Canadian Arctic as Prime Minister that "Canada has a choice when it comes to defending our sovereignty over the Arctic: either we use it or we lose it. And make no mistake, this government intends to use it." Canada's 2009 Northern Strategy¹³ subsequently had "sovereignty" listed as its first priority, as did the 2010 Statement on Canada's Arctic Foreign Policy. ¹⁴ Many public investments in the Harper era, including military assets, scientific research centres, oceanographic missions, and search and rescue capabilities, were framed as supporting and advancing Canadian Arctic sovereignty.

It is of little surprise then that Northern and Indigenous leaders started to mimic the federal government's language and priorities to their own ends. Nearly any kind of investment in the Canadian North could be interpreted as supporting Canada's Arctic sovereignty claims, and that was a winning formula for obtaining funding in the Harper era. Lobbying efforts for the following projects, for example, used sovereignty as a rationale for funding: a port in Churchill, Manitoba; ¹⁵ an all-season road connecting Inuvik with Tuktoyaktuk; ¹⁶ a research centre in Cambridge Bay; ¹⁷ and addressing housing shortages, low educational attainment rates, and drug and alcohol abuse. ¹⁸ The understanding of Canada's legal sovereignty became muddied with a concept of stewardship for Northern Canada.

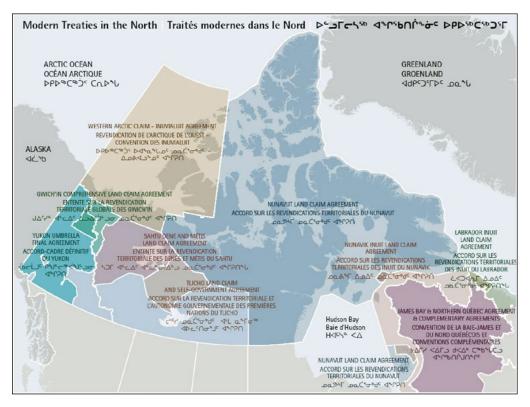


Figure 1. Modern Treaties in the North. 19



The Arctic Sovereignty Context

From a legal perspective, the understanding of Canadian sovereignty in the Arctic is quite clear and has been comprehensively studied. While there is sometimes a sense in the general public that the sovereignty of the whole of the Canadian Arctic, or at least the Arctic Archipelago, is contested; in fact, there are only a handful of outstanding sovereignty disputes. These include the legal status of the Northwest Passage, maritime boundaries in the Beaufort and Lincoln Seas, respectively, and Hans Island. Canada's Law of the Sea claim to extended continental shelf in the Arctic Ocean is likely to conflict with Denmark and Russia's claims but has not yet been submitted.

To reiterate: Canadian sovereignty over its Arctic lands and islands is undisputed, with the single exception of Hans Island.²⁰ Canada's sovereignty is based on a combination of discovery, legislative and administrative control, and peaceful possession by national inhabitants, in particular the Inuit, over a long period of time.²¹ As Byers notes, Canada has fused, rather than marginalized, Inuit claims to the Arctic.²²

Perhaps most significantly, Canada's claim to its Arctic lands is accepted by the international community. In that respect, there is no need to "strengthen" it because it is uncontested. As the Library of Parliament notes, "any concerns that Canada is not sufficiently present and active to fulfil the principle of occupation are unlikely to weaken its claim. Its claim would be undermined only if Canada were to abandon the territory completely, or if it were to tolerate the effective presence of another state in the Arctic islands as a competing sovereign."²³

Indigenous Relations and Implications for Canada's Arctic Sovereignty Claims

Despite the lack of serious threats to Canadian Arctic sovereignty, the idea that Canada's relationship with Canadian Arctic Indigenous peoples has implications for its sovereignty claim has gained traction in the past ten years. This section summarizes the arguments made to this effect by various Northern leaders and other stakeholders.

Social and Economic Conditions

The first assertion is that the gaps in social and economic well-being in parts of the Canadian Arctic undermine Canadian Arctic sovereignty. Michael Mifflin contends that the territory of Nunavut's poor social development affects Canada's historic title: "In failing to provide Nunavut all the means to ensure its economic, social and cultural development, Canada weakens the most compelling legal argument to support its claim: that of historic title based on Inuit occupation." Among Simon, former Canadian Circumpolar Ambassador and Minister's Special Representative to the Arctic, similarly stated in the Inuit Tapiriit Kanatami's 2017 publication on the Northwest Passage, that "during my time as ITK [Inuit Tapirrit Kanatami] President from 2006 to 2012, we determined Canada's sovereignty is weakened and compromised internationally because of the unacceptable social and economic imbalance that exists between southern Canada and Inuit communities and regions."

Nunavut Devolution

A second assertion is that the failure to complete devolution to Nunavut jeopardizes Canadian Arctic sovereignty. Kirk Cameron and Alastair Campbell argue that devolution of hydrocarbon and mineral resources to Nunavut in offshore areas would strengthen "Canada's jurisdiction over internal waters," referring to the "American and European positions that the Northwest Passage is an international strait accessible to all nations' sea carriers."



Former Yukon Premier Tony Penikett and his co-author Adam Goldenberg go one step further, and argue that Nunavummiut's "citizenship gap," arising from a lack of devolution (of provincial-like powers) to the territory of Nunavut, "weaken['s] Canada's geostrategic position in the world." They describe Inuit as:

Canadian citizens whose occupancy is the human foundation of Canada's claims to sovereignty across the Far North. Fully implementing the NLCA [Nunavut Land Claim Agreement] and completing a devolution agreement with Nunavut could bolster Canadian security and sovereignty in the region ... the watered-down citizenship of Nunavut's inhabitants can be seen to weaken Canada's claim to sovereignty based on occupancy.²⁷

Mifflin similarly argues that "the delays in implementing the [Nunavut Land Claims] Agreement and the persistent gaps and problems Nunavut faces in terms of fiscal autonomy and governance considerably weakens Canada's claim to the Arctic lands and water." He further states that the Nunavut government's best "bargaining chip" in devolution negotiations is its ability "to assert or deny Canada's claim to Arctic sovereignty." The same authors do not comment on the situation in the Inuvialuit, Nunavik or Nunatsiavut land claim areas.

Extended Continental Shelf

Former Senator Charlie Watt of Nunavik has evaluated Indigenous roles and rights in Canada's efforts to establish the boundaries of its extended continental shelf. (As of writing, no claim has been submitted). On behalf of the Liberal Senate caucus, he commissioned a report which argued that:

- "There are areas of the Arctic beyond Canada's sovereign jurisdiction where Inuit have rights and are, in a sense, free agents. Canada can only claim sovereignty over these areas of the Arctic in collaboration with the Inuit;"29
- "The [increasing international] recognition of Inuit rights as indigenous people strengthens the argument that Inuit can sovereign rights [over portions of the Arctic continental shelves by virtue of] historic title ... [and] 'functional jurisdiction;'"30
- "Inuit could claim rights to the portion of the Arctic waters that are beyond State sovereignty, known as 'the Area." 31

Senator Watt (who resigned from the Senate after his election as President of the Makivik Corporation in January 2018) furthermore asserted the need for Canada to negotiate its extended continental shelf claim with Inuit participation in his formal motion to establish a special committee in the Senate to look at Arctic issues in May 2017. He contended that Canada's extended continental shelf claim would "set out the terms for creating marine protected areas and the rules for environmental assessment of projects with the potential to harm biodiversity, as well as for the sharing of marine genetic resources." Senator Art Eggleton, in a commentary published by the *Liberal Senate Forum*, further suggested that "Canada's claim to its extended Arctic continental shelf can only be legitimized through an inclusive and collaborative engagement with circumpolar Inuit peoples" because "Canada is obligated to present UNCLOS with evidence of a historical presence in, rights to, and current use of, the claimed regions."



Challenges to the Above Claims

The above claims are not credible for the following reasons.

Historic Use and Occupancy

With regards to historic use and occupancy, it is not debated nor challenged that the centuries of Inuit occupation support Canada's claim of sovereignty over the Arctic Archipelago; indeed, it has been instrumentalized by the Canadian government. However, this is not a comprehensive or even the primary basis of Canadian Arctic sovereignty claims in international law, due in part to the fact that large portions of the Arctic Archipelago have not been historically occupied or used by Inuit (see figure 2). Additionally, Canada applied straight baselines around its Arctic Archipelago in 1985, claiming that all of the waters within those baselines are internal waters. In internal waters, states have the right to exclude any foreigner or foreign ship. However, when the establishment of straight baselines has the effect of enclosing waters areas not previously considered as such, a right of innocent passage shall still exist.³⁴

The question of whether the Northwest Passage is a strait used for international navigation is not driven by Canadian and Inuit use and occupation of Arctic waters. Under international law, to be characterized as an international strait, it must meet a geographical requirement—a water corridor between adjacent land masses that links two bodies of the high seas or other waters—and a functional requirement—that it is used as a route for international maritime traffic.³⁵ Local use does not prevent classification as an international strait. Canada's claim that the Northwest Passage is internal waters rests more solidly on the argument that it falls within its straight baselines than by virtue of historic use.³⁶

Devolution and Socio-Economic Status

With regards to Nunavut devolution and socio-economic status, assertions as described in the previous section apply conditions on Canada that cannot and have not been applied to other states as a prerequisite for asserting sovereignty. No states' territorial integrity is conditional on the living conditions of its people, or the presence or absence of particular citizenship rights; if it were, the majority of states across the globe would lose their statehood.

Extended Continental Shelf

With regards to the extended continental shelf, there is no basis on which to claim Inuit use or occupancy, or indeed any human occupancy, on the sea bed beyond 200 nautical miles of a territory. The Commission on the Limits of the Continental Shelf has not made Indigenous consent and participation, nor occupancy, a condition for "legitimization" of extended continental shelf claims, on which it has made recommendations in 29 cases at time of writing. Rather, UNCLOS articulates that "the rights of the coastal State over the continental shelf do not depend on occupation, effective or notional, or on any express proclamation."³⁷



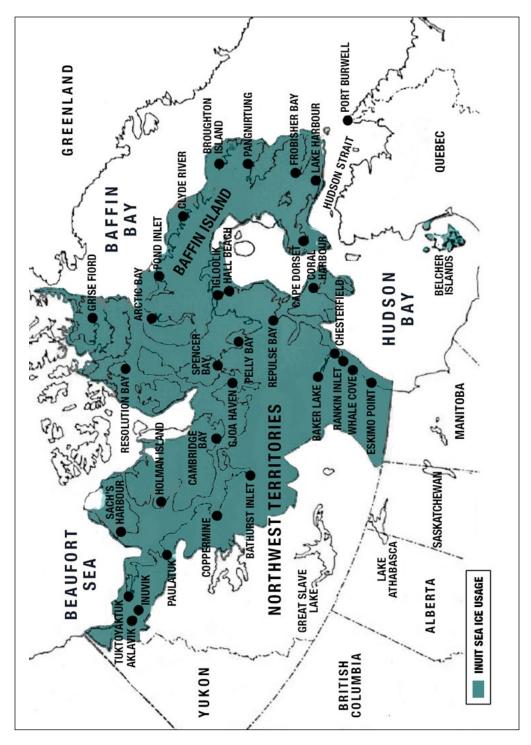


Figure 2. Historic Inuit sea-ice use based on maps produced by the *Inuit Land Use* and *Occupancy Project*.³⁸



Indigenous Peoples as "Free Agents"

As to whether Indigenous peoples can act as "free agents" in areas beyond Canadian sovereignty, as Vanderzwaag and Pharand explain, international law has not treated Indigenous peoples as persons capable of transferring international title. In the precedent-setting American and British Claims Arbitration Tribunal of 1926, assessing the legal status of Cayuga Indians, it was found that "the obligee was the 'Cayuga Nation,' an Indian tribe. Such a tribe is not a legal unit of international law. The American Indians have never been so regarded ... so far as an Indian tribe exists as a legal unit, it is by virtue of the domestic law of the sovereign nation within whose territory the tribe occupies the land."³⁹

Furthermore, in the Legal Status of Eastern Greenland case of 1931, the Permanent Court of International Justice reiterated the inability of native people to transfer a sovereign title: "Conquest only operates as a cause of loss of sovereignty when there is war between two states and by reason of the defeat of one of them sovereignty over territory passes from the loser to the victorious State. The principle does not apply where a settlement has been established in a distant country and its inhabitants are massacred by the aboriginal population." As to whether Inuit or other Indigenous nations can assume sovereignty in the "Area" beyond Canadian limits of state sovereignty, under international law, those areas are high seas or "common heritage of mankind" with no sovereign. Prior economic or cultural use of the high seas is not a legal rationale for territorial sovereignty over those areas.

Sovereignty: What's in a Name?

There is no basis to argue that Canadian Inuit social, economic and political status could impact Canada's legal claims to its Arctic waters under the Law of the Sea regime. More significantly, it is not clear how Canadian Arctic Indigenous groups' position, in particular, the Inuit's position on, for example, the status of the Northwest Passage or the extent of Canada's continental shelf, would differ from Canada's. Inasmuch as Canadian Inuit have rights which Canada is obligated to protect, and devolved governing powers over large swathes of Canadian Arctic lands and waters through the settling of the Inuvialuit, Nunavut, Nunavik and Labrador Inuit agreements, it is in the Inuit interest for the Northwest Passage to be internal Canadian waters, and for Canada to obtain sovereign rights over the fullest extent of its continental shelf. Their interests are better protected, and their influence more effective, under Canadian than international laws. Furthermore, the contested status of the Northwest Passage and the extent of Canada's extended continental shelf have had an insignificant effect on Indigenous Northerners' social and economic well-being and political clout to date, and it is unlikely to be a significant factor in the future. While there may be some small political gains to be made by instrumentalizing sovereignty in Northern policy advocacy, it is not a consequential policy area for Northerners.

Post-Westphalian Directions

Inuit and other Indigenous peoples are unable under current international law to assume sovereignty over territory and are limited in their ability to influence states' claims to coastal waters or seabed rights. For these reasons, advocating or asserting a role in strengthening or threatening Canadian Arctic sovereignty is an unproductive activity.

While the international legal regime is still extremely statist, with only states recognized as having sovereignty over territory, there are emerging opportunities for Indigenous groups to exert themselves in international governance that do not rely on exclusive definitions of sovereignty. Since the



end of the Cold War, influence in the international system has increasingly been allocated to or taken up by non-governmental actors. Indigenous nations are viewed by many as credible and legitimate actors with the right to inform and participate in international decision-making forums.⁴¹

The Arctic in particular has been a region of innovative domestic governance arrangements, devolving power and responsibilities to Indigenous governments. It has also been a region of innovative international arrangements, where space has been created for Indigenous groups in the form of Permanent Participants at the pre-eminent intergovernmental forum, the Arctic Council. Increasingly, Arctic states such as Denmark and Canada have also included Indigenous representatives as part of national delegations on Arctic issues directly affecting Indigenous rights, such as the negotiations on the Agreement to Prevent Unregulated High Seas Fisheries in the Central Arctic Ocean. Within the current international legal regime, Arctic Indigenous peoples have been able to moderate the pre-eminence of state sovereignty.

The best example of this may be the recent work of the Pikialasorsuaq Commission, which created a strategy between Inuit in Nunavut and Greenland to jointly safeguard, monitor and manage the Pikialasorsuaq, or North Water Polynya.⁴² The Commission calls for the Pikialasorsuaq to be Inuit managed across borders, as well as for free movement for Inuit between the historically connected communities in both countries. As of the time of writing, the governments of Canada and Denmark had not yet adopted these recommendations, but were actively considering the proposals. They represent the kind of Westphalia-bending arrangements that can be done to support Indigenous aspirations despite the framework of traditional sovereignty.

Conclusion

Hyperbole around and misunderstanding of Canadian Arctic sovereignty—the legalities, disputes and practical impacts—has led to its invocation by Northern and Indigenous leaders in inapplicable scenarios. This paper has described the ways some Northern and Indigenous leaders have erroneously interpreted or applied Arctic sovereignty. It has contended that it is neither helpful nor accurate to frame the value of Arctic Indigenous rights and well-being in terms of their contribution to Arctic sovereignty.

More practical and immediate strategies to improve Northern and Indigenous self-determination, agency, and socio-economic outcomes can be found by working around, rather than competing with, state-centred concepts such as sovereignty. Savvy Arctic Indigenous leaders will continue to identify post-Westphalian spaces in which to exert and enjoy their inherent rights, regardless of territorial sovereignty.

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Abbreviations

UNCLOS United Nations Convention on the Law of the Sea

UNDRIP United Nations Declaration on the Rights of Indigenous Peoples

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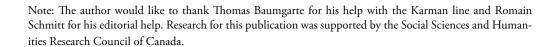


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CHAPTER 4

CANADA'S SOVEREIGNTY IN THE ARCTIC: A LEGAL PERSPECTIVE

BY KRISTIN BARTENSTEIN



Abstract

The discussion on the meaning of sovereignty is a difficult one, and the discussion on sovereignty in the Canadian Arctic is no exception. The polysemous nature of the term "sovereignty" is not foreign to these difficulties. This chapter intends to give an overview of the issue of Canada's sovereignty in the Arctic from a legal perspective by addressing distinct but interrelated aspects. It introduces the discussion by reflecting on the reasons that make it so difficult for legal scholars and political scientists to have a fruitful dialogue on issues of sovereignty. It then examines the legal concept of state sovereignty before moving on to discuss some of the more contentious legal issues of Canadian sovereignty in the Arctic, including the uncertainties surrounding Arctic maritime boundaries, the legal status of the Northwest Passage, and the extent of Canada's authority over its Arctic waters. On this basis, it will conclude with some remarks on the role that the Royal Canadian Air Force (RCAF) may play in this context.

Introduction

The discussion on the meaning of sovereignty is a difficult one and the discussion on sovereignty in the Canadian Arctic is no exception. If exchanges in the discussion extend beyond disciplinary boundaries, as in the dialogue between legal scholars and political scientists that this chapter is particularly focused on, difficulties compound and become much more fundamental. Views then diverge not only on the proper perspective to have on a given matter but also on the weight to attach to its various aspects and the conclusions to draw. Unnoticed, identical terminology may refer to different things, masking the fact that it is not the views on a given matter that differ, but the very matters that are discussed. Even the awareness that there is a risk of misunderstandings is no guarantee that they can be avoided. Intellectual and disciplinary backgrounds can be so different and the scholars so strongly marked by their training and experience that they may struggle to sufficiently grasp the other discipline. Even scholars plowing through the same field of investigation may fail to discern the other discipline's subtleties, lacking knowledge and comprehension of the wider disciplinary context. Developing literacy in another discipline requires time and effort, as well as some measure of humility and a willingness to accept that different disciplines may have forged different kinds of erudition. Though difficult to achieve, such literacy appears worth the effort, enabling potentially rich and meaningful dialogues across disciplines. Consequently, the benefit of initiatives like the 2017 RCAF symposium on Canadian sovereignty,1 which prompted this chapter, is undisputed.



What makes legal reasoning at times unsettling (in particular for scholars from the social sciences, including political science), is that it seems incompatible with empirical observations. The legal concept of sovereignty and its corollary, sovereign equality, are a good case in point. Even "failing states" or "failed states," i.e., states with extremely weak governments, such as South-Sudan or Somalia, are considered sovereign states. States as diverse as the United States (US), China, Canada and Haiti, whose economic or (geo-) political situations have nothing in common, are considered equal before the law. It is trite and clearly unsatisfactory to refer to legal fiction as an explanation.

The ease with which jurists seem to dispense with empirical observations indeed calls into question their take on reality. To understand why legal reasoning does not perfectly correspond to real-world experience, one has to understand that it operates within a particular tension, whose poles, as M. Koskenniemi explains, are the law's normativity, on the one hand, and its concreteness, on the other.² If international law lacked distance from state behaviour, will or interest, forfeiting its normative dimension, it would mostly avoid clashes with real-world experience, but it would also be reduced to "a non-normative apology [for politics], a mere sociological description." This is not to say, however, that the law must be unconnected from the socio-political reality. If international law lacked concreteness and had no tangible relation with state behaviour, will and interest, it could exist as a philosophical idea, a Utopia. However, removed as it were from state interests, it would be very difficult to determine where it comes from and how it can guide international relations.⁴

Part of the difficulties that regularly plague the dialogue between legal scholars and political scientists arguably lie in the fact that while they appear to investigate the same field (i.e., international relations), their research interests and objects diverge. Most legal scholars look indirectly at international relations, through the lenses of legal norms, with the aim of discerning their meaning. They have internalized the tension between concreteness and normativity as well as the required oscillation between concrete cases, real or imagined, and abstract norms. Most political scientists, by contrast, predominantly investigate the concrete facets of international relations, the facts and issues of power and politics. While they are often cognizant, and even extremely knowledgeable, of the relevant legal norms and frameworks, their research interests appear to make them biased against the value of the law's (overly utopian) normative dimension. In an intellectual confrontation with a legal scholar, the criticism addressed at the law's normative dimension by the political scientist might push the legal scholar to overstate this facet, driving the political and the legal perspectives further apart.

Yet another divisive element arises from different methodological approaches. The legal discipline is strongly and inevitably tied to legal practice. Unsurprisingly, the focus on interpretation is a distinctive trait of legal research. In law, the practitioner and the scholar are both engaged in interpreting the legal rules that govern international relations with the aim of telling apart lawful and unlawful acts. As Koskenniemi puts it pointedly, due to the law's indeterminacy, "the legal argument [allows] the defence of whatever position, while simultaneously being constrained by a rigorously formal language." The perfect command of this language, including the capacity to adapt the arguments' style to the audience is the "key to legal competence." A closer look at the aforementioned oscillation further reveals that facticity and normativity are thoroughly entangled in legal reasoning. According to hermeneutical theory, legal work consists of working towards convergence of the abstract norm and the factual situation by making sense of generally determined, intangible legal categories for the specific, concrete case, a linguistically circumscribed but inevitably creative process. This type of academic research may be puzzling to political scientists trained to seek scientific distance to their research object. Without underestimating the variety of research



methods applied in both disciplines, it seems indeed possible to portray the average legal scholar and the average political scientist as adhering to two quite different scientific paradigms. While the first is generally engaged in hermeneutical work that gathers and then mobilizes knowledge with the purpose of persuasion, the second is more often engaged in empirical work with the purpose of developing knowledge through objectivity-seeking demonstration.⁹

There seems to be a strong reflex to put emphasis on these differences. Although an understandable impulse when faced with new, unsettling perspectives, it should ultimately give rise to an open-minded, cross-disciplinary dialogue so as to better inform public policies and policy implementation. Mutual understanding requires scholars to lay bare their assumptions and to explain the concepts at stake. This makes a thorough re-examination of the discipline's basics often inevitable. For the dialogue between legal scholars and political scientist, the legal concept of state sovereignty, foundational of both the international legal order and international law, is a good starting point.

Accordingly, the ensuing discussion proceeds in four steps. It first looks into the legal meaning of state sovereignty with the aim of clarifying the conceptual bases of the following legal analysis of Canadian sovereignty in the Arctic. The latter steps address the more contentious legal issues, i.e., Arctic maritime boundaries, the legal status of the Northwest Passage, and the extent of Canadian authority over its Arctic waters. Based on these discussions, it concludes with some remarks on the role that the RCAF may play in this context.

The Legal Meaning of State Sovereignty

In cross-disciplinary discussions on sovereignty, in particular between legal scholars and political scientists, two very different approaches to the concept often collide: one based on the idea of capacity, the other on the idea of authority. As Robert Jackson rightly states, "sovereign statehood is a multifaceted and wide-ranging idea which calls for an interdisciplinary inquiry." These collisions, therefore, provide the opportunity to scrutinize the issue of state sovereignty, from complementary—rather than antagonistic and mutually exclusive—perspectives. The legal concept may be outlined through the aspects of capacity and authority, as well as the new consideration of responsibility, and their respective roles.

Sovereignty viewed as a synonym for capacity might intuitively be associated with political science, but capacity is also a legal consideration, namely in the acquisition of statehood. When a new state forms, its effective emancipation from another state's rule is essential. Statehood, and thus sovereignty, can only be acquired if the aspiring state's government is effective enough—or has the capacity—to impose its rule on a given territory and a given population, to enter into relations with other states; and thus, to establish its independence. Even so, state building is a complex process, and acquisition of statehood undeniably escapes legal analysis to some degree. In problematic cases, in particular where the requirement of effective government is doubtful, while the process towards statehood is legitimate and otherwise lawful, the socio-political reality of acquisition of statehood is not entirely captured by the legal criteria. The outcome of a march towards statehood may indeed be influenced by economic, (geo-)political, strategic and other extralegal elements. This notwith-standing and for better or worse, the effectiveness of a nascent state remains a key criterion and will be scrutinized during the state-building process. 13

However, once a new state has come into existence, capacity ceases to be a legally relevant consideration, yielding to the principle of the continuity of states. ¹⁴ Accordingly, even "failing states" or "failed states" are sovereign states. Legally speaking, these terms are misleading, as they really refer



to an ineffective government, not a collapsing or collapsed state.¹⁵ Statehood is upheld, even in the face of prolonged problems of capacity, mainly to protect the state against heteronomy. From a political-science perspective, this may be difficult to accept,¹⁶ and the root of one of the most persistent misunderstandings between legal scholars and political scientists may well be the conflicting meanings attached to the word "sovereignty."¹⁷

This is not to say that within states, capacity is absent from public debate. For any policy goal a government sets itself, it needs to ask whether it has the means—the human, financial and material resources—to achieve it. It is certainly alarming to see how atypical actors (in particular non-state actors, such as multinational corporations or internationally operating terrorist groups) wield such power that states, weak and powerful, must fear for their autonomy or stability. However, while these issues of capacity loom large in modern states, they are not contemplated as matters of sovereignty by international law.

Implementation of state policies, by contrast, undisputedly raises issues of (legal) sovereignty. State action is evaluated with respect to its lawfulness, that is, the state's right to adopt the required laws, regulations and executive measures. Sovereignty in this regard is conceived of as a matter of authority or a "warrant or licence—an authorization—to exercise power." By definition, a state is sovereign and bears the related internal and external powers. As Judge Huber stated in the famous Island of Palmas case with respect to the external, or international, facet of sovereignty: "Sovereignty in the relations between States signifies **independence**. Independence in regard to a portion of the globe is the **right to exercise** therein, **to the exclusion of any other State**, the functions of a State." [emphasis added]

According to James Crawford, citing Vattel, a state's sovereignty or independence manifests itself in the fact that the state is not "subject to the authority of any other State or group of States" and therefore that "it has over it 'no other authority than that of international law." Sovereignty, therefore, is the "authority of the last word," granting the state supreme and exclusive authority over its territory and population, irrespective of considerations of power, size and wealth. This principle of sovereign equality is indeed so important that it figures most prominently as the founding principle in Article 2.1 of the United Nations (UN) Charter. Equally important are the prohibition of the use of force and the principle of non-intervention, reflected in Articles 2.4 and 2.7. It is, therefore, not surprising and even a necessary consequence of the rule of law guiding Canadian state action that to the Canadian Armed Forces the meaning of sovereignty is rooted in this legal definition.

Sovereignty or independence do not imply, however, that a state must be free of all constraints upon the exercise of its power to be considered a sovereign state. Supreme and exclusive authority does not equate to absolute authority in modern international law. Restrictions stemming from constitutional and other domestic law do not cast doubt on a state's independence if they are of the state's own choosing. Likewise, restrictions resulting from international law, such as treaty obligations or customary law, generally do not call into question the state's sovereignty. Modern statehood is indeed characterized by considerable restrictions to states' authority, making it at times very difficult to determine whether a state has the authority to act the way it does or intends to in a given situation. The Arctic is certainly a good example of the absence of an easy, straightforward description of a state's authority. Yet, conflicting views on legal rules and principles are the essence of legal practice, and international controversy often centres precisely on the question of whether a state's actions are covered by its legal authority. The answer is to be found by carving out the meaning of the relevant legal sources and the factual situation, challenging legal scholars and practitioners to put forth compelling interpretations.



It should be recalled that the modern concept of sovereignty was developed in the context of the European wars of religion in the 16th to 17th centuries as a means to protect what became the modern state. Its legal formalization is traced back to the 1648 Peace of Westphalia, 26 structuring international relations ever since despite its shortcomings and intermittent ineffectiveness.²⁷ The focus on protecting the state had prompted legal practitioners and scholars for a long time to turn a blind eye to the fate of the individuals within states. This has changed significantly, however. The atrocities of Nazi Germany, World War II, the South African Apartheid regime, the Rwandan genocide, and the creation of the UN (United Nations)—an overarching international organisation with a broad mandate to foster international peace and security—have all helped to induce and deepen a shift in states' understanding of sovereignty. Besides protecting the state against heteronomy, sovereignty also entails for the state the responsibility to respect and protect human dignity within its borders. This acknowledgement has led to envision a "responsibility to protect," which advocates for the international community to substitute for the state that is lacking the will or capacity to exercise its authority for the good of its population.²⁸ The cause is noble, but a reinterpretation of sovereignty that would endorse even substitution that is not limited to UN-approved measures would lead to the end of sovereignty as we have known it since 1648—a rather frightening prospect.²⁹ For good reason, the responsibility to protect applies within the existing legal framework, as set forth in the UN Charter.

There is no denying, however, the paramount importance to ensure the respect of human rights, humanitarian law, democracy and principles of good governance on a global scale. The principle of sovereignty is admittedly far from yielding automatically satisfying results. Yet, the best way to address the principle's flaws is to strengthen the constraints devised to contain the flaws, not to weaken the principle. Many constraints currently imposed upon state sovereignty were indeed devised with this purpose in mind. A contemporary version of sovereignty may therefore mean that authority needs to be exercised in responsible ways, i.e., within a range of acceptable choices.³⁰

Political scientists and legal scholars may well find common ground in the quest for what is a responsible choice. More generally speaking, it seems that the three dimensions of sovereignty—legal authority, concrete capacity and moral responsibility—are not mutually exclusive, nor is one better than the other. They are simply different facets of a polysemous concept, and it seems key to recognize that in practice they work best when they work together. That said, the purpose of the following sections is to shed light on legal issues of Canadian sovereignty in the Arctic in a very classical way, that is, by focusing on questions of authority.

Uncertain Arctic Maritime Boundaries

At the outset, it should be noted that Canada's sovereignty over land territory (i.e., the continental part and islands), as well as the soil and subsoil beneath and the airspace above, is not questioned. In particular, with the sole exception of Hans Island, all islands of the archipelago off mainland Canada are undisputedly Canadian.³¹ Contentious issues are related to marine areas. It is therefore worth recalling basic elements of the law of the sea, as governed notably by the 1982 United Nations Convention on the Law of the Sea (UNCLOS).³²

Beyond its land territory, a state's territorial sovereignty extends to a strip of coastal waters, which encompasses two different zones. Abutting the land territory are the internal waters, whose breadth depends on the baselines, which mark the outer limit of these waters.³³ Predicated on the natural circumstances and the type of baselines used, variations in breadth may be significant. The



"normal baseline" follows the low-water line, assuming the natural shape of the coast³⁴ and results generally in narrow strips of internal waters. The "straight baseline,"³⁵ for its part, connects salient points on a coastline marked by indentations or fringing islands, therefore departing to some degree from the natural shape of the coast and including, at times, extensive areas of water. The territorial sea extends seaward of these baselines, with a maximum breadth of 12 nautical miles (NM) [22 kilometres (km)].³⁶ With some exceptions, Canada claims a territorial sea of 12 NM.³⁷

Seaward of its territory, two more maritime zones are of interest to the coastal state: the exclusive economic zone (EEZ) with a maximum breadth of 200 NM (roughly 370 km) measured from the baselines, ³⁸ and the continental shelf with a breadth of 200 NM measured from the baselines or where the natural continental shelf extends beyond 200 NM. ³⁹ These zones are not part of the state territory. The coastal state is nevertheless entitled to exercise exclusive sovereign rights and jurisdiction over the natural resources in the water column, soil and subsoil respectively. ⁴⁰ Canada claims, with some exceptions, an EEZ of 200 NM in the Arctic ⁴¹ and is currently in the process of establishing its outer continental shelf. ⁴² Two completely international zones are located beyond (i.e., the high seas and the Area [or deep ocean floor]), where no state has the authority to exercise territorial jurisdiction. ⁴³

The distinction between zones within the coastal state's territory and those beyond determines the type and scope of state authority. While the coastal state may exercise *territorial sovereignty* over its territory, that is, its internal and territorial waters, ⁴⁴ it is limited to *functional sovereignty* over the resources and related issues in its EEZ and on its (extended) continental shelf. ⁴⁵ In other words, beyond the territorial sea, the state has no authority *qua* territory, that is, over the water column, soil and subsoil as such, but only by virtue of the resources therein. The extent of the coastal state's authority in these various zones will be outlined in the last section. The expanse of the Canadian maritime Arctic determined by international boundaries and the status of the Northwest Passage need to be sketched first.

A maritime boundary is drawn to divide overlapping zones claimed by states with opposite or adjacent coastlines. Maritime boundaries may be drawn between territorial seas to apportion state territory as well as between EEZs and continental shelves to apportion zones concerning natural resources. However, many such overlapping claims go unsettled for a long time before they become disputes so pressing that energies are put into establishing a boundary. In the Arctic, Canada has been involved in two longstanding disputes.

Since 1977, Canada and the US have disagreed on the maritime boundary in the Beaufort Sea. Based on an 1825 treaty on the Alaska–Yukon/Northwest Territories boundary between Russia (predecessor of the US) and Great Britain (predecessor of Canada), Canada contends that the boundary follows the 141st meridian of longitude west, as it does on land territory. The US, by contrast, insists on applying the equidistance rule. The result is a 6,250 square NM (21,440 square km) pie-shaped zone of overlapping claims extending roughly up to the 200 NM limit. By a quirk of geography, both states seem to be disadvantaged by their own reasoning beyond 200 NM, as the influence of the westernmost islands of the Canadian Arctic Archipelago on the equidistance line would benefit Canada, while the US would be better off with a boundary following the 141st meridian.

Regarding the boundary between Canada and Greenland/Denmark, several aspects have been discussed for years. First of all, Hans Island, a barren, barely interesting islet in Nares Strait between Ellesmere Island and Greenland, is claimed by both states.⁵¹ While efforts to settle the dispute have resumed recently,⁵² the matter was left unsettled by literally skipping the islet when Canada and



Denmark agreed in 1973 on the boundary delineating their continental shelves between Lincoln Sea and Labrador Sea. ⁵³ Both states then also decided to postpone the delimitation in the Lincoln Sea. Only in 2012 did they reach a tentative agreement on the boundary up to the 200 NM limit, an agreement that has since been awaiting confirmation. ⁵⁴ Finally, another dispute may arise concerning the extended continental shelf off Lincoln Sea. While Denmark submitted its claim to the Commission on the Limits of the Continental Shelf in 2014, ⁵⁵ Canada is expected to do so in early 2019, ⁵⁶ and it is likely that there will be some overlap with Denmark's, and even Russia's, claims.

Besides the horizontal boundaries between different states and the seaward limit of a state's territory, vertical extent of state sovereignty needs to be addressed. While it is of particular relevance for the exercise of air power, there is no universally agreed upon legal definition of this boundary. For the time being, state practice has been too hesitant for customary law to form; although, there is growing support for the aerodynamic lift theory. Its rationale is to establish the skyward limit of state sovereignty at the maximum altitude where aircraft can benefit from air buoyancy to sustain flight. Its appeal is practical, as states' primary interest in their airspace is to regulate and control air traffic above their territory.⁵⁷ This consideration underpins the "Karman primary jurisdiction line,"⁵⁸ located at an "altitude where aerodynamic lift ceases and centrifugal force takes over." 59 The altitude of this boundary between areas of air travel and areas of space travel depends on variations in density of the atmosphere, but seems to be located somewhere between $83~\mathrm{km}$ and $100~\mathrm{km}$. The Karman line represents the theoretical maximum altitude of feasible aviation; normal aircraft fly at a much lower altitude. Satellites generally orbit well above an altitude of 100 km, but since they do occasionally descend below,⁶¹ basing the demarcation on space activities would not be helpful either. Clearly, these scientific and technical aspects only serve to stake out the parameters of the legal debate. 62 The need of legal certainty and the penchant of states for straightforward rules may ultimately prove decisive, explaining the emerging preference for the 100 km demarcation line.⁶³ The legal implication to bear in mind, in particular with regard to the deployment of air power, is that beyond the demarcation line, the state ceases to have authority over activities above its territory, such as overflight and orbiting: the principles of free access and absence of sovereignty apply to the outer space.⁶⁴

The Legal Status of the Northwest Passage

The geographical expanse of the coastal state's marine areas is but one element when it comes to determining the scope of its authority; the areas' legal status, generally commanding a particular legal regime, is another. Discussion on "Canadian sovereignty in the Arctic" in the media and broader public is often really a discussion on the legal status of the waters of the Northwest Passage. According to Canada, they are internal waters; according to the US, however, they are an international strait. These diverging views entail major differences regarding the extent to which Canada may govern international navigation in the Northwest Passage, as will be discussed in the last section.

As previously mentioned, internal waters are generally established through baselines, either normal or straight.⁶⁵ Under certain circumstances, however, states can claim what is called "historic (internal) waters." These are waters that, according to the International Court of Justice (ICJ), "are treated as internal waters but which would not have that character were it not for the existence of an historic title."⁶⁶ They acquire the status of internal waters provided the coastal state treats them as such over a sufficiently long period without being challenged.⁶⁷ Canada's position on the waters of the Arctic Archipelago as being historical internal waters was made explicit in 1973,⁶⁸ but comments made in the late 1960s and early 1970s by Canadian officials, including then Prime Minister



Trudeau, already reflect by and large the understanding that these waters are internal waters.⁶⁹ Still, the heavy burden of proof might be difficult for Canada to discharge; the requirements that it has exercised exclusive jurisdiction over the waters for a sufficiently long period and that it has done so with the acquiescence of third states are particularly problematic.⁷⁰

In 1985, Canada drew straight baselines around its archipelago⁷¹ with a view to defining "the outer limit of Canada's historical internal waters."72 The objective, clearly, was to demarcate the boundaries of the historical title and not to newly create internal waters. Given the uncertainty surrounding Canada's historic title, the question nevertheless arises whether these baselines can achieve the purpose of securing complete and full Canadian sovereignty over the enclosed waters. The answer to that question is affirmative if the baselines conform to international law and the internal waters thus created are free of any passage right. Conformity has been analysed extensively without a consensus emerging from the legal literature. Donat Pharand considers, with regard to the UNCLOS, the 1958 Territorial Sea Convention⁷³ and the Fisheries Case, that Canada not only has the right to resort to straight baselines, given the characteristic features of the Arctic Archipelago, but that it established its baselines also in such a way as to fulfil the requirements regarding their drawing.⁷⁴ In particular, he argues that the baselines follow the general direction of the coast and that the waters enclosed bear a sufficiently close link to the land domain.⁷⁵ W. Michael Reisman and Gayl S. Westerman notably challenge this conclusion.⁷⁶ More importantly, the US expressed the view that "the Canadian straight baseline claim in the Arctic was not based on principles of international law."⁷⁷ According to a 1986 British note, the European Community shared this view.⁷⁸

However, even assuming the conformity of the baselines, Canada's sovereignty could still be curtailed by the existence of a right of innocent passage. According to article 8(2) of the UNCLOS, taking up article 5(2) of the 1958 Territorial Sea Convention, a right of innocent passage exists in internal waters created by straight baselines, where these waters "had not previously been considered as such." Canada is not a party to the 1958 Territorial Sea Convention and was not a party to the UNCLOS at the time of drawing its baselines, which leads Pharand to conclude that the customary law as outlined by the ICJ in the 1951 Fisheries Case is applicable. Yet, nothing in this decision points to the existence of a right of innocent passage in internal waters.

A further, related question that arose in the 1960s or 1970s and gained traction in the aftermath of the 1985 *Polar Sea* crossing is whether the Northwest Passage is an international strait subject to the transit passage regime. This is the claim made by the US;⁸¹ Canada simply maintains that the waters of the Northwest Passage are internal waters.⁸² As a waterway connecting the Arctic Ocean (Beaufort Sea) to the Atlantic Ocean (Labrador Sea), the Northwest Passage, which is really a set of different waterways through the Canadian Arctic Archipelago,⁸³ undoubtedly meets the geographic criterion of connecting two parts of high seas or EEZ.⁸⁴ Opinions differ on whether it also satisfies the functional criterion, according to which the strait must be used for international navigation.⁸⁵

In the absence of a clear threshold of usage, the US claims that "all straits **capable** of being used for international navigation" [emphasis added] are to be considered legal straits, ⁸⁶ a position deemed "an isolated interpretation" that may prove difficult to defend. This does not prevent James Kraska from asserting that a functional criterion simply does not exist. ⁸⁸ Much of the scholarly discussion centres on the fact that international navigation has been scarce in the Northwest Passage so that the threshold needed for it to be an international strait might not have been attained. ⁸⁹ Indeed, it is generally considered that navigation not only needs to be of a certain—albeit admittedly undetermined—volume but also needs to be international in the sense that it corresponds to a variety of flags and is not carried out under Canadian authority. ⁹⁰ The latter aspect should be seen in the



context of discussions preceding the transformation of NORDREG into a mandatory ship-reporting and vessel-traffic system in 2010 (Northern Canada Vessel Traffic Services Zone Regulations), 91 which has effectively subjected international navigation to Canadian authority. Pharand, among others and writing before the 2010 regulatory change, concedes the possibility for the Northwest Passage to become an international strait through growing traffic not subject to Canadian authority. 92 The likelihood of such a change of status may have somewhat decreased since the compulsory application of NORDREG, but thorough surveillance and enforcement to ensure compliance with NORDREG will still be crucial.

Uncertainties Surrounding the Extent of Canada's Authority Over Its Arctic Waters

In principle, every legal status, that is, every maritime zone, comes with a specific legal regime that determines the extent of the coastal state's authority over the zone. However, under certain circumstances, generally applicable default regimes give way to others, prompting the question of which regime prevails. In respect to the Arctic, this adds a layer of complexity. In particular, the regime of innocent passage may be applicable in internal waters through article 8(2) of the UN-CLOS. 93 And the regimes of innocent and transit passage could yield to yet another regime, set out in article 234 for ice-covered waters. At the same time, the new International Code for Ships Operating in Polar Waters (Polar Code) could constrain coastal state authority under article 234. Part of the debate on "Canadian sovereignty in the Arctic" is therefore a debate on the extent to which Canada has the authority to govern international navigation in its "arctic waters." To highlight what is at stake, the characteristic features of the different, potentially applicable regimes and the impact of the Polar Code will be briefly portrayed in the following.

The regime of complete and full sovereignty in internal waters is the most favourable to the coastal state, allowing it to determine the conditions of access and use on a *completely discretionary* basis. ⁹⁵ Unsurprisingly, this is the regime Canada seeks to apply in its entire Arctic Archipelago, including the waterways of the Northwest Passage.

The regime of *innocent passage*, applicable in the territorial sea,⁹⁶ that is, seaward of the baselines drawn around the Arctic Archipelago, and potentially in its internal waters through article 8(2) of the UNCLOS,⁹⁷ restricts coastal state authority over international navigation. While the coastal state has legislative and regulatory power on a certain number of issues (including the prevention, reduction and control of vessel-source pollution),⁹⁸ it is not allowed to impose norms of construction, design, manning and equipment (CDME) standards on foreign ships unless they give effect to generally accepted international rules or standards.⁹⁹ In other words, the coastal state may enact discharge standards, but it is otherwise limited to internationally agreed upon norms. Furthermore, it may prescribe measures regarding safety of navigation and traffic regulation,¹⁰⁰ but needs to take into account recommendations made by the International Maritime Organization (IMO).¹⁰¹ The coastal state has also to make sure that none of its requirements hamper innocent passage, that is, that none of them "has the practical effect of denying or impairing the right of innocent passage, that is, that none of them "has the practical effect of denying or impairing the right of innocent passage," However, it may prevent non-innocent passage, ¹⁰³ having full jurisdiction over those vessels, including the entire range of enforcement jurisdiction.¹⁰⁴ Finally, it may suspend passage temporarily in specific areas provided this is necessary for its security and does not cause discrimination.¹⁰⁵

Air power may be deployed to monitor navigation in internal and territorial waters and, where relevant, help enforce applicable domestic regulations. It should also be noted that restrictions on



coastal state authority according to the regime of innocent passage only apply to international navigation. ¹⁰⁶ Issues of entry into the airspace above these zones and of overflight remain under the sole authority and control of the coastal state.

Were the Northwest Passage an international strait, the regime of *transit passage* would apply to both vessels and aircraft.¹⁰⁷ Much like the freedom of the seas principle, the transit-passage regime aims to ensure unimpeded international navigation and overflight. States bordering straits may regulate vessel traffic through sea lines and traffic separation schemes, ¹⁰⁸ provided they are approved—not merely recommended—by the IMO.¹⁰⁹ They may also prescribe standards to prevent, reduce and control vessel-source pollution but, unlike under the innocent passage regime, only to the extent they respect internationally discharge standards.¹¹⁰ The duty not to hamper transit passage is central¹¹¹ and explains why CDME standards must not be prescribed. Furthermore, transit may not be prevented, nor suspended for a limited period, not even for reasons of national security or environmental protection.¹¹² Submarines are allowed to proceed in their normal mode, that is, under water and without identifying themselves.¹¹³ Foreign vessels have no right to carry out research and survey activities except upon permission,¹¹⁴ raising the issue of how to control vessel activities in the vast Arctic Archipelago, especially if the vessels' presence goes unnoticed.

That said, according to article 234, states bordering ice-covered waters have the right to "adopt and enforce ... laws and regulations for the prevention, reduction and control of marine pollution from vessels." A particular feature of this "Arctic exception" is that the coastal state benefits from unilateral authority that is not subjected to any international norms and standards or approval procedures. Apart from Canada, so far only Russia has made use of this particular coastal state jurisdiction. The extent of power granted is controversial, as is the provision's applicability to international straits. However, the prime motivation for its inclusion in the UNCLOS was "to grant the coastal state the power to adopt and enforce stricter rules and standards to create a greater level of protection for the exceptionally vulnerable marine environment in ice-covered waters." It was carefully worded so as to avoid any impact on the position of either the US or Canada on the status of the Northwest Passage. Ted McDorman, agreeing with Suzanne Lalonde, therefore argues that Canada is "entitled to require and enforce against foreign commercial vessels the stringent pollution prevention measures" it has enacted under the Arctic Waters Pollution Prevention Act (AWPPA), even if the Northwest Passage were to be considered an international strait. Again, air power may be deployed to help enforce Canadian law.

Until January 2017, flag states, for their part, did not have to impose any specific standards upon their Arctic-going vessels. Ever since, however, the Polar Code, ¹²³ made applicable through amendments to the International Convention for the Prevention of Pollution from Ships, as Modified by the Protocol of 1978 Relating Thereto (MARPOL), ¹²⁴ the International Convention for the Safety of Life at Sea (SOLAS) ¹²⁵ and the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers ¹²⁶ conventions, has set forth a number of environmental and security obligations. Still, it does not address the entire range of environmental concerns ¹²⁷ nor does it apply to the entire range of vessels. ¹²⁸ Also, Canada is not fully satisfied by the standards' breadth and depth, which thrusts to the fore the issue of the Polar Code's relationship with article 234. In other words, the question is whether Canada, as a coastal state, may continue to impose its own standards on international navigation in its Arctic waters or whether the international Polar Code standards, to be imposed and enforced by the flag states, will take precedence. The latter would make sense from the perspective of international shipping, for which uniform standards are paramount. ¹²⁹ However, it would be unsound to assume that international standard setting has the



effect of eroding coastal state jurisdiction granted under the UNCLOS, even if the most interested coastal states—including Canada—consented to the new standards.¹³⁰ A relationship of complementarity seems indeed more to the point.¹³¹ According to Canada's interpretation of the applicable conflict rules,¹³² as reflected in the new Canadian Arctic Shipping Safety and Pollution Prevention Regulations,¹³³ coastal state jurisdiction is indeed maintained.¹³⁴

Conclusion

The legal—and admittedly technical—debate on the extent of Canadian authority in the Arctic is not just of theoretical interest. Its outcome has a real-world impact, determining Canada's prescriptive and executive jurisdiction. The Arctic is home to vulnerable people and a fragile environment, both exposed to the combined pressure of a warming climate and intensifying human activities. Their well-being will increasingly depend on Canada's resolve to control at least what it can control. Already, climate change is wreaking havoc on indigenous ways of life and the natural environment, and there should be some assurance that whatever activity will develop in the Arctic, Canada has at least some authority to contain its potentially detrimental effects.

What practical conclusions can or should be drawn from this? First of all, Canada should continue to assert its claims. Whenever they are challenged, in word or deed, Canada should react in a firm but measured way. Canadian air power certainly may be and in fact already is harnessed for this purpose. RCAF responsibilities include defence operations, but are not limited to them.¹³⁵ Canada needs the certainty that its territory and borders are well defended, which is no small feat in the Arctic, given the immensity and remoteness of the territory. Collaboration with the United States Air Force under North American Aerospace Defence Command (NORAD), 136 charged with aerospace warning and control for North America, has proven important in this respect. Since 2006, NORAD has also had a "maritime warning" mission, which covers the "maritime areas ... of, and the maritime approaches to, Canada and the United States", to develop "a comprehensive shared understanding of maritime activities to better identify potential maritime threats to North American security."137 Accordingly, NORAD's and thus the RCAF's realm goes beyond traditional issues of defence, extending to wider issues of public security. 138 The RCAF can also play a particular role when it comes to asserting Canadian sovereignty in the Arctic by demonstrating presence. In times when threats posed by Russia are re-evaluated, 139 including in the face of potential incursions by Russian military aircraft in the North American airspace above the Arctic,140 the RCAF's role regarding Canadian sovereignty may take on a renewed significance. Another responsibility within the RCAF's remit is search and rescue off the Canadian coasts, 141 a particular challenge in the Arctic, given its size and remoteness. Air power is particularly suited for all these tasks, as its capabilities in terms of speed, reach and agility make it often more effective than land- or sea-based activities. 142 Even if Canada's sovereignty in the Arctic is not threatened from a legal perspective, it might at times seem precarious from a political viewpoint. In this context, it is good to know that Canada has the authority to exercise and defend its sovereignty, including by the deployment of air power.

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Abbreviations

AWPPA Arctic Waters Pollution Prevention Act

EEZ exclusive economic zone

CDME construction, design, manning and equipment

ICJ International Court of Justice

IMO International Maritime Organization

Km kilometre

MARPOL International Convention for the Prevention of Pollution from Ships

NM nautical mile

NORAD North American Aerospace Defence Command

NORDREG Northern Canada Vessel Traffic Services Zone Regulations

para paragraph

Polar Code International Code for Ships Operating in Polar Waters

RCAF Royal Canadian Air Force

SOLAS International Convention for the Safety of Life at Sea

UN United Nations

UNCLOS United Nations Convention on the Law of the Sea

UNTS United Nations Treaty Series

US United States

Notes

- 1. RCAF Air Power Symposium 2017, Air Power and Sovereignty: The Future of the RCAF, RCAF, Canadian Museum of Nature, Ottawa, April 20–21, 2017.
- 2. Martti Koskenniemi, From Apology to Utopia: The Structure of International Legal Argument (Cambridge: Cambridge University Press, 2007), in particular 17.
 - 3. Koskenniemi, From Apology to Utopia, 17.
 - 4. Koskenniemi, From Apology to Utopia, 17 and 18.
- 5. Hans Morgenthau's intellectual and professional trajectory from practising lawyer and law professor in troubled pre-Nazi Germany and Europe of the 1930s to leading figure of the realist school in international relations starting in the 1940s in the US is a pointed example of how even legal scholars struggle with the law's indispensable normative dimension.
- 6. Martti Koskenniemi, "Style as Method: Letter to the Editors of the Symposium", in *The Politics of International Law*, ed. Martti Koskenniemi, (Oxford: Hart Publishing, 2011), 298.
 - 7. Koskenniemi, "Style as Method", 298.
- 8. Arthur Kaufmann, "Durch Naturrecht und Rechtspositivismus zur juristischen Hermeneutik," *JuristenZeitung* 30 (1975): 339. A French translation, prepared by this author, will be published in the *Revue interdisciplinaire d'études juridiques* (2019/1).



- 9. See Royce A. Singleton Jr. and Bruce C. Straits, *Approaches to Social Research*, 5th ed. (Oxford, Oxford University Press, 2010), 33.
 - 10. Robert Jackson, Sovereignty (Cambridge: Polity Press, 2007), xii.
- 11. See also Montevideo Convention on the Rights and Duties of States (1933) that echoes Georg Jellinek's three-element doctrine: *Allgemeine Staatslehre*, 3rd ed. (Berlin: Verlag von O. Häring, 1914), 394–434.
- 12. James R. Crawford, *The Creation of States in International Law*, 2nd ed. (Oxford: Oxford University Press, 2006), 63.
- 13. Ex factis jus oritur (the law arises from the facts). For further discussion, see in particular Crawford, Creation of States, 45 and following.
- 14. Andreas Zimmermann, "Continuity of States," paragraph (para) 7, in *Max Planck Encyclopedia of Public International Law*, ed. Rüdiger Wolfrum (Oxford: Oxford Public International Law, August 2006), accessed October 11, 2018, http://opil.ouplaw.com/abstract/10.1093/law:epil/9780199231690/law-9780199231690-e1389?rskey=AuRzH1&result=1&prd=EPIL.
 - 15. Zimmermann, "Continuity of States," para 11.
 - 16. See Stephen Krasner, Sovereignty: Organized Hypocrisy (Princeton: Princeton University Press, 1999).
- 17. Jackson, *Sovereignty*, 14. Jackson states: "Sovereignty is a form of authority, and not a kind of power, but sovereignty can easily be construed and interpreted as irresistible or compelling power."
 - 18. Jackson, Sovereignty, 14.
- 19. Island of Palmas Case (USA c. Netherlands, April 4, 1928), Reports of International Arbitral Awards, vol. 2 (copyright 2006), 829, accessed October 11, 2018, http://legal.un.org/riaa/cases/vol_II/829-871.pdf.
 - 20. Crawford, Creation of States, 66.
 - 21. Ernest Barker, Principles of Social and Political Theory (Oxford: Clarendon Press, 1951), 60.
- 22. Charter of the United Nations, June 26, 1945, CTS 1945/7, accessed October 11, 2018, http://www.un.org/en/sections/un-charter/un-charter-full-text/.
 - 23. Charter of the United Nations.
- 24. Major-General William Seymour, "Air Power Support to Maritime Sovereignty Operations," paper, RCAF Air Power Symposium 2017, Air Power and Sovereignty: The Future of the RCAF, Ottawa, April 20–21, 2017. The legal understanding of sovereignty also informed Lieutenant-General Michael Hood's address, "The RCAF and Canadian Sovereignty," paper, RCAF Air Power Symposium 2017, Air Power and Sovereignty: The Future of the RCAF, Ottawa, April 20–21, 2017, accessed October 11, 2018, http://www.rcaf-arc.forces.gc.ca/en/article-template-standard.page?doc=the-rcaf-and-canadian-sovereignty/j1wgjk71.
 - 25. Hood, "RCAF and Canadian Sovereignty."
- 26. The Westphalian order is commonly accepted to have been established through the Treaty of Peace between the Holy Roman Empire and Sweden (Treaty of Osnabrück), October (14)24, 1648, Consolidated Treaty Series, vol. 1, 119, and the Treaty of Peace between the Holy Roman Empire and France (Treaty of Münster), October (14)24, 1648, Consolidated Treaty Series, vol. 1, 271.
- 27. On the long-lasting and evolving character of sovereignty, see Jackson, *Sovereignty*, 1. For the quest for alternatives to better address inequalities among states, see Benedict Kingsbury, "Sovereignty and Inequality," in *International Law: Critical Concepts in Law*, vol. 2, ed. Joseph Weiler and Alan T. Nissel (London, Routledge, 2011), 388. See also Wouter G. Werner and Jaap H. de Wilde, "The Endurance of Sovereignty," *European Journal of International Relations* 7, no. 3 (2001): 283–313.
- 28. International Commission on Intervention and State Sovereignty, *The Responsibility to Protect: Report of the International Commission on Intervention and State Sovereignty* (Ottawa: International Development Research Center, 2001).



- 29. For a critical note, see Georg Nolte, "Sovereignty as Responsibility?," *Proceedings of the ASIL* [American Society of International Law] *Annual Meeting*, 99 (2005): 389–92.
 - 30. Jackson, Sovereignty, 18 and following.
- 31. The last uncertainties were resolved when Denmark abandoned all claims over Ellesmere Island in the 1920s (see Donat Pharand, *Canada's Arctic Waters in International Law* [Cambridge: Cambridge University Press, 2008, 47]) and Norway recognized British sovereignty over the Sverdrup Islands in 1930 (see Exchange of Notes Regarding the Recognition by the Norwegian Government of the Sovereignty of His Majesty over the Sverdrup Islands, August 8, 1930, CTS 1930/17).
 - 32. UNCLOS, December 10, 1982, United Nations Treaty Series (UNTS), vol. 1833, no. 31363, 396
 - 33. UNCLOS, articles 5-7.
 - 34. UNCLOS, article 5.
 - 35. UNCLOS, article 7.
 - 36. UNCLOS, article 3.
- 37. Oceans Act, S.C. 1996, chapter 31, section 4 (a), last amended February 26, 2015. See also UNCLOS, article 3.
 - 38. UNCLOS, articles 55-75.
 - 39. UNCLOS, see articles 76-85.
 - 40. UNCLOS, parts V and VI respectively, in particular articles 56 and 77.
 - 41. Oceans Act, section 13(1)(a).
- 42. Canada, Partial Submission of Canada to the Commission on the Limits of the Continental Shelf Regarding Its Continental Shelf in the Atlantic Ocean, Executive Summary (Ottawa: Government of Canada, 2013), 6, accessed October 11, 2018, http://www.un.org/Depts/los/clcs_new/submissions_files/can70_13/es_can_en.pdf, 3. See also UNCLOS, article 76; and Oceans Act, section 17(1)
- 43. See notably UNCLOS, articles 86, 87 and 89 (high seas) and articles 1(1)(1), 136 and 137 (Area). In these zones, States exercise authority in their capacity as *flag states* for the high seas and as *sponsoring states* for the Area.
 - 44. UNCLOS, article 2.
 - 45. UNCLOS, articles 56 and 77.
 - 46. UNCLOS, articles 15 (territorial sea), 74 (EEZ) and 83 (continental shelf).
- 47. See Convention between Great Britain and Russia Concerning the Limits of their Respective Possessions on the North-West Coast of America and the Navigation of the Pacific Ocean, February 16, 1825, Consolidated Treaty Series, vol. 75, 95. The original text is in French, and the issue arises out of article III, according to which the boundary follows the 141st meridian "dans son prolongement jusqu'à la Mer Glaciale," (as it extends into the Arctic Ocean) which in Canada's view makes it applicable to the maritime boundary as well. See Fishing Zones of Canada (Zone 6) Order, SOR/77-173, February 24, 1977 (replaced by Fishing Zones of Canada (Zone 6) Order, CRC, chapter 1549), last amended January 29, 2009.
- 48. US, Maritime Boundaries between the United States and Canada, Public Notice 506, November 4, 1976, 41 Fed Reg 48619-48620, ILM, vol. 15, 1435-1436 (replaced by Department of State, Exclusive Economic Zone and Maritime Boundaries, Public Notice 2237, August 23, 1995, 60 Fed Reg 43825-43829).
- 49. James S. Baker and Michael Byers, "Crossed Lines: The Curious Case of the Beaufort Sea Maritime Boundary Dispute," *Ocean Development and International Law* 43, no. 1 (2012), 72 and following.
 - 50. Baker and Byers, "Crossed Lines," 72.



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- 52. Chris Fitch, "Divided Island," *Geographical Week*, August 2018, accessed October 11, 2018, https://geographical.co.uk/geopolitics/geopolitics/item/2834-divided-island.
- 53. Agreement between the Government of Canada and the Government of the Kingdom of Denmark Relating to the Delimitation of the Continental Shelf between Greenland and Canada, December 17, 1973, UNTS, vol. 950, no. 13550, 152
- 54. Canada, *Partial Submission of Canada*. See also Canada, Ministry of Foreign Affairs, "Canada and Kingdom of Denmark Reach Tentative Agreement on Lincoln Sea Boundary," November 28, 2012, accessed October 11, 2018, www.canada.ca/en/news/archive/2012/11/canada-kingdom-denmark-reach-tentative-agreement-lincoln-sea-boundary.html?=undefined&wbdisable=true.
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- 56. "Arctic Rocks Could Prove Canada Has Greater Claim over Resources in the North," CBC News, last updated December 9, 2017, accessed October 11, 2018, https://www.cbc.ca/news/canada/ottawa/arctic-rocks-canada-north-resources-1.4440796. See also Canada, *Partial Submission of Canada*.
- 57. Gbenga Oduntan, Sovereignty and Jurisdiction in the Airspace and Outer Space: Legal Criteria for Spatial Delimitation (London: Routledge, 2012), 298.
- 58. Frans von der Dunk, "International Space Law," in *Handbook of Space Law*, ed. Frans von der Dunk (Northampton: Edward Elgar Publishing, 2015), 65.
- 59. Von der Dunk, "International Space Law," 65, citing a speech delivered in 1957 at the University of California by physicist Theodore Von Kármán. The Karman line is based on physical considerations. Satellites follow so-called Keplerian orbits, which result from gravitational forces only. For circular orbits, the speed of these orbits depends only on the altitude above Earth. Airplanes, by contrast, balance the gravitational forces with the lift produced by their wings. This lift depends on the density of atmosphere and the plane's speed, among other factors. At higher altitudes, where the density is lower, a higher speed is required to balance the gravitational forces. The Karman line marks that altitude at which the plane's speed would be equal to the speed of a circular Keplerian orbit.
 - 60. Von der Dunk, "International Space Law," 65 and following.
 - 61. Von der Dunk, "International Space Law," 67 and following.
- 62. To that effect, see also Gbenga Oduntan, "The Never Ending Dispute: Legal Theories on the Spatial Demarcation Boundary Plane between Airspace and outer Space," *Hertfordshire Law Journal* 1 (2013): 65.
 - 63. See von der Dunk, "International Space Law," 69 and following, with further references.
- 64. Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, Including the Moon and Other Celestial Bodies, January 27, 1967, UNTS, vol. 610, no. 8843, 205, articles I and II, accessed October 11, 2018, https://treaties.un.org/doc/Publication/UNTS/Volume%20610/volume-610-I-8843-English.pdf.
 - 65. See UNCLOS, articles 5 and 7 and accompanying text.
 - 66. Fisheries Case (United Kingdom v. Norway) [1951], ICJ Rep 116, 130.
 - 67. Fisheries Case (United Kingdom v. Norway) [1951], ICJ Rep 116, 136 and following.
- 68. Canada, Department of External Affairs, Bureau of Legal Affairs "Letter," December 17, 1973, as reproduced in *Canadian Yearbook of International Law* 12 (1974): 279.



- 69. See McDorman, Saltwater Neighbors, 233 and following, with further references.
- 70. Pharand, Canada's Arctic Waters in International Law, 125.
- 71. Territorial Sea Geographical Coordinates (Area 7) Order, SOR/85-872, September 10, 1985.
- 72. Joe Clark, Minister for Foreign Affairs, House of Commons Debates, September 10, 1985, 6462-6464.
- 73. Convention on the Territorial Sea and Contiguous Zone, April 29, 1958, UNTS, vol. 516, no.7477, 205.
- 74. Pharand, *Canada's Arctic Waters in International Law*, 159 and following. (with further references to concurring opinions) and conclusion, 178 (in particular points 3 and 4).
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- 76. W. Michael Reisman and Gayl S. Westerman, *Straight Baselines in Maritime Boundary Delimitation* (New York: St. Martin's Press, 1992), 168; see also 111.
- 77. J. Ashley Roach and Robert W. Smith, eds., *United States Responses to Excessive Maritime Claims*, 2nd ed. (The Hague: Martinus Nijhoff, 1996), 118.
- 78. British High Commission, *Note No. 90/86*, July 9, 1986; see partial reprint in Roach and Smith, *United States Responses to Excessive Maritime Claims*, 121.
 - 79. UNCLOS, article 8(2).
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- 81. US, The White House, "National Strategy for the Arctic Region," May 10, 2013, 11, accessed October 11, 2018, https://obamawhitehouse.archives.gov/sites/default/files/docs/nat_arctic_strategy.pdf. For a more recent reaffirmation, see US, Arctic Executive Steering Committee, "Implementation Framework for the National Strategy for the Arctic Region (Appendix A)," March 10, 2016, 9–10, accessed October 11, 2018, https://obamawhitehouse.archives.gov/sites/whitehouse.gov/files/documents/National%20Strategy%20 for%20the%20Arctic%20Region%20Implementation%20Framework%20%28Appendix%20A%29%20 Final.pdf.
- 82. Donat Pharand, "The Arctic Waters and the Northwest Passage: A Final Revisit," *Ocean Development and International Law* 38, no. 1-2 (2007): 51.
 - 83. Pharand, Canada's Arctic Waters in International Law, 190-91. Pharand identifies seven different routes.
- 84. UNCLOS, article 37; and Corfu Channel Case (United Kingdom of Great Britain and Northern Ireland v Albania) [1949], ICJ Rep. 3, 28.
 - 85. UNCLOS, article 37; and Corfu Channel Case, 28-29.
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- 88. James Kraska, "The Law of the Sea Convention and the Northwest Passage," *International Journal of Marine and Coastal Law* 22, no. 2 (2007): 275.
- 89. Pharand, "Arctic Waters and the Northwest Passage," 37; Frédéric Lasserre and Olga Alexeeva, "Analysis of Maritime Transit Trends in the Arctic Passages," in *International Law and Politics of the Arctic Ocean: Essays in Honor of Donat Pharand*, ed. Suzanne Lalonde and Ted McDorman (Leiden, Netherlands: Brill/Nijhoff, 2015): 181, 183 and following. For a critical stance on this conclusion, see Ashley Roach and Robert W. Smith, *Excessive Maritime Claims*, 3rd ed. (Leiden, Netherlands: Martinus Njhoff, 2012), 319–20.
- 90. See Donald R. Rothwell and Tim Stephens, *The International Law of the Sea*, 2nd ed. (Oxford: Hart Publishing, 2016), 252.



- 91. Northern Canada Vessel Traffic Services Zone Regulations, SOR/2010-127, June 23, 2010 and Shipping Safety Control Zones Order, C.R.C., c. 356, June 10, 2010. For the discussion, see Canada, "The Coast Guard in Canada's Arctic: Interim Report," *Report of the Standing Senate Committee on Fisheries and Oceans*, 39th Parliament, 2nd Session, 2008, 40; Canada, "Rising to the Arctic Challenge: Report on the Canadian Coast Guard," *Report of the Standing Senate Committee on Fisheries and Oceans*, 40th Parliament, 2nd Session, 2009, 67 and 69; see also F. Griffiths, "The Shipping News: Canada's Arctic is Not on Thinning Ice," *International Journal* 58, no. 2 (Spring 2003): 272; Suzanne Lalonde, "Increased Traffic through Canadian Arctic Waters: Canada's State of Readiness," *Revue juridique Thémis* 38, no. 49 (2004): 121–24; and Pharand, "Arctic Waters and the Northwest Passage," 49–51.
 - 92. Pharand, "Arctic Waters and the Northwest Passage," 44.
 - 93. See UNCLOS, article 8(2).
- 94. For the definition of these waters, see *Arctic Waters Pollution Prevention Act* (AWPPA), R.S., 1985, chapter A-12, section 2.
 - 95. UNCLOS, article 2 (indirectly).
 - 96. UNCLOS, article 17.
 - 97. See UNCLOS, article 8(2); and Pharand, Canada's Arctic Waters, 228.
 - 98. UNCLOS, article 21(1)(f).
 - 99. UNCLOS, article 21(2).
 - 100. UNCLOS, article 21(1)(a) and article 22.
 - 101. UNCLOS, article 22(3)(a).
 - 102. UNCLOS, article 24(1)(a).
- 103. UNCLOS, article 25(1). See also articles 18–20. It is noteworthy that article 20 requires submarines to navigate on the surface and to show their flag.
- 104. Richard A. Barnes, "Article 25: Rights of Protection of the Coastal State," in *United Nations Convention on the Law of the Sea: A Commentary*, ed. Alexander Proelss (Munich, Germany: C. H. Beck, 2017), para 5.
 - 105. UNCLOS, article 25(3).
 - 106. UNCLOS, article 17.
 - 107. UNCLOS, article 38.
 - 108. UNCLOS, article 41(1).
 - 109. UNCLOS, article 41(4).
 - 110. See in particular UNCLOS, articles 42(1)(b).
 - 111. UNCLOS, articles 42(2) and 44.
 - 112. Part III of the UNCLOS does not include a provision equivalent to UNCLOS article 25(1) and (3).
 - 113. UNCLOS, article 39(1)(c).
 - 114. UNCLOS, article 40.
 - 115. UNCLOS, article 234.
- 116. Kristin Bartenstein, "The 'Arctic Exception' in the Law of the Sea Convention: A Contribution to Safer Navigation in the Northwest Passage?," *Ocean Development and International Law* 42, no. 1–2 (2011): 31; Eric Franckx and Laura Boone, "Article 234: Ice-Covered Areas," in Proelss, *United Nations Convention*, para 13.
- 117. For comprehensive interpretations, see Bartenstein, "Arctic Exception" and Franckx and Boone, "Article 234."



- 118. Franckx and Boone, "Article 234," para 2.
- 119. McDorman, Saltwater Neighbors, 242.
- 120. Lalonde, "Increased Traffic through Canadian Arctic Waters," 103.
- 121. AWPPA, St Can 1969-1970, chapter 47(now: R.S.C., 1985, chapter A-12). Note that negotiations on article 234 were notably spearheaded by Canada seeking a legal basis in international law for its AWPPA. See also Bartenstein, "Arctic Exception," 25 and following; and Franckx and Boone, "Article 234," para 2.
 - 122. McDorman, Saltwater Neighbors, 243 and following.
- 123. International Code for Ships Operating in Polar Waters (Polar Code): "Amendments to the Annex of the Protocol of 1978 Relating to the International Convention for the Prevention of Pollution from Ships," 1973, Res MEPC.265(68), May 15, 2015, in *Report of the Marine Environment Protection Committee* [MEPC] on its Sixty-eighth Session, IMO Doc MEPC 68/21/Add.1, Annex 11; and "Amendments to the International Convention for the Safety of Life at Sea," 1974, Res MSC.386(94), November 21, 2014, in *Report of the Maritime Safety Committee on its Ninety-Fourth Session*, IMO Doc MSC 94/21/Add.1, Annex 7.
- 124. International Convention for the Prevention of Pollution from Ships, as Modified by the Protocol of 1978 relating thereto (MARPOL), as amended, February 7, 1978, UNTS vol. 1340, no. 22484, 62.
- 125. International Convention for the Safety of Life at Sea (SOLAS), as amended, November 1, 1974, UNTS vol.1184, no. 18961, 278.
- 126. International Convention on Standards of Training, Certification and Watchkeeping for Seafarers, as amended, July 7, 1978, UNTS vol. 1361, no. 23001, 2.
 - 127. Issues like noise or black carbon emissions, among others, are not addressed.
 - 128. SOLAS, chapter 1, part A, regulation 3.
- 129. See Aldo Chircop, "Jurisdiction Over Ice-Covered Areas and the Polar Code: An Emerging Symbiotic Relationship?," *Journal of International Maritime Law* 22, no. 4 (2016): 282.
- 130. This is why Canada sought to include a clarifying conflict clause in the Polar Code. See Ted McDorman, "A Note on the Potential Conflicting Treaty Rights and Obligations between the IMO's Polar Code and Article 234 of the Law of the Sea Convention," in *International Law and Politics*, ed. Suzanne Lalonde and Ted McDorman, 141.
 - 131. Chircop, "Jurisdiction Over Ice-Covered Areas," 283.
 - 132. MARPOL, article 9(2); and SOLAS, chapter XIV, regulation 2, para 5.
 - 133. Arctic Shipping Safety and Pollution Prevention Regulations, December 19, 2017, SOR/2017-286.
- 134. See Kristin Bartenstein, "Between the Polar Code and Article 234: The Balance Struck in Canada's New Arctic Shipping Safety and Pollution Prevention Regulations," *Ocean Development and International Law* (2019) (forthcoming).
 - 135. Hood, "RCAF and Canadian Sovereignty."
- 136. Agreement between the Government of Canada and the Government of the United States of America concerning the Organization and Operation of the North American Air Defence Command, May 12, 1958, CTS 1958/9. It is currently operated under the Agreement between the Government of Canada and the Government of the United States of America on the North American Aerospace Defense Command [NORAD 2006], April 28, 2006, CTS 2006/6.
 - 137. NORAD 2006, article I (1)(c) and (2)(c).
- 138. For a discussion on whether NORAD will need to adapt to changes affecting Arctic, see Andrea Charron, "Canada, the Arctic, and NORAD: Status Quo or New Ball Game?," *International Journal* 70, no. 2 (2015): 215–31.



- 139. With respect to events in Ukraine and Crimea and elsewhere, see Charron, "Canada, the Arctic, and NORAD," 217.
- 140. The latest incident, on January 26, 2019, sent Canadian fighter jets on an interception mission to ensure that the Russian bombers respect the Canadian airspace. "Canadian and U.S. fighter planes scramble to escort Russian jets out of Arctic region," CBC News, last updated January 26, 2019, accessed February 1, 2019, https://www.cbc.ca/news/canada/airforce-arctic-canada-u-s-russia-1.4994702. Also note the expansion, in May 2018, of Canada's air defence identification zone to cover the entire Canadian Arctic; see NAV Canada, Notice of Change: Adjustment to the Canada Air Defence Identification Zone, accessed October 11, 2018, http://www.navcanada.ca/EN/products-and-services/Service Project Announcements/SPA-2018-ADIZ-EN.pdf.
 - 141. Hood, "RCAF and Canadian Sovereignty."
 - 142. Hood, "RCAF and Canadian Sovereignty."

CHAPTER 5

ARCTIC SEABED RESOURCES AND COMPETING IDEAS OF SOVEREIGNTY

BY ELIZABETH RIDDELL-DIXON

Author's Note: This article draws heavily on my book, *Breaking the Ice: Canada, Sovereignty, and the Arctic Extended Continental Shelf.* ¹

Introduction

Asserting sovereignty in the Arctic has long been a focus of Canadian policy, from the early twentieth century when Captain Joseph-Elzéar Bernier was exploring the Arctic archipelago and claiming it for Canada, to the passing of the 1970 Arctic Waters Pollution Protection Act, to government assertions of sovereignty in the 1970s and 1980s when American tankers sought to traverse the Northwest Passage, to ongoing programmes, such as Operation NANOOK and the Arctic Rangers. The Arctic seabed is known to contain large quantities of oil, gas, and minerals; hence, there is a strong economic imperative to establish coastal state jurisdiction. According to the United States (US) Geological Survey's estimates, there are "approximately 90 billion barrels of oil, 1,669 trillion cubic feet of natural gas, and 44 billion barrels of natural gas liquids" yet to be discovered in the areas north of the Arctic Circle.² Canada's initial priority pertaining to the continental shelf was the desire to own and control non-living seabed resources. In recent decades, the focus has broadened to include concern for the Arctic environment and the potential consequences of resource development for the economic and cultural well-being of Arctic inhabitants, particularly Indigenous peoples. Canada has the world's second largest continental shelf (2,545,259 kilometres), surpassed only by that of the Russian Federation (4,099,812 kilometres).³ Establishing rights to its continental shelf resources has been a law of the sea priority for Canada since the Second World War.

This paper makes two sets of arguments pertaining to sovereignty and the delineation of Canada's Arctic extended continental shelf (ECS). The first does not come as a surprise: the traditional concept of state sovereignty—rather than the concept of pan-Arctic sovereignty, espoused by the Inuit Circumpolar Council—remains paramount in the foreign policies of Arctic states. Secondly, contrary to popular perceptions that competition for Arctic resources is causing conflict among sovereign states, the delineation of Arctic ECSs has been marked by high levels of cooperation. It begins by examining the United Nations Convention on the Law of the Sea (UNCLOS), which specifies the rules and regulations governing the world's oceans, including the provisions for the ECS. Thereafter, the two sets of arguments are discussed sequentially.

The International Legal Regime

UNCLOS gives the coastal state sovereignty over a 12-nautical mile territorial sea.⁵ Beyond the territorial sea, the coastal state has an exclusive economic zone extending from the seaward edge of the territorial sea up to "200 nautical miles from the baselines from which the breadth of the territorial sea is measured." Within the exclusive economic zone, the coastal state exercises sovereign rights to explore, exploit, conserve, and manage the living and non-living resources in the water



column and seabed.⁷ Beyond 200 nautical miles from shore (i.e., beyond the exclusive economic zone), a coastal state has an extension where the continental shelf extends as a natural prolongation of its land territory.⁸ "Prolongation" means that there must be unbroken continuity "from the shoreline to the outer edge of the continental margin." On its continental shelf, the coastal state has sovereign rights to explore and exploit "the mineral and other non-living resources of the seabed and subsoil together with living organisms belonging to sedentary species." ¹⁰

Responsibility for defining its continental shelf rests with the coastal state, which must conduct scientific research to determine if its continental shelf extends beyond 200 nautical miles and, if so, the limits of its outer edge in accordance with the provisions of UNCLOS. The process of precisely defining the outer limits of a country's ECS, in accordance with UNCLOS provisions, is called delineation. Delimitation refers to the process of establishing political boundaries when the maritime zones of two or more states overlap.

After gathering and analysing the scientific data and relating the findings to the legal requirements of the ECS regime, the coastal state makes a submission to the Commission on the Limits of the Continental Shelf.¹¹ The international regime specifies deadlines for making submissions. Countries, such as the Russian Federation and Norway, that ratified or acceded to UNCLOS prior to 1999, had until 2009 to make their submissions, while states, such as Canada and Denmark, that became parties after 1999, had 10 years from the time of ratification or accession. Having ratified on November 7, 2003, and having become a party to UNCLOS on December 7, 2003, Canada's original deadline for presenting its documentation to the Commission was December 6, 2013; however, this requirement was amended before that date. By 2008, it was clear that many countries—particularly developing states—would not make the 2009 deadline; hence, states parties to UNCLOS agreed that countries could fulfil their obligations by filing preliminary information indicating that they intend to make a submission, the status of the preparatory work, and when they expect to submit.¹² In December 2013, Canada presented its submission pertaining to its Atlantic ECS and preliminary information relating to its Arctic ECS.

The commissioners review the coastal state's submission, assess the extent to which it has defined its ECS in conformity with existing international legal norms and make recommendations to the state regarding the establishment of the outer limits of its continental shelf. According to UNCLOS, "The limits of the shelf established by a coastal State on the basis of these [the commission's] recommendations shall be final and binding." The Commission serves as the legitimator in the ECS delineation process:

Where a coastal State and the Commission are generally in accord with the location of an outer limit this will provide great legitimacy to that boundary and make challenges of the boundary more difficult. A coastal State outer limit not in accord with Commission recommendations will be less legitimate and more open to challenge by other States or perhaps even the International Seabed Authority.¹⁴

Nonetheless, it is the coastal state—not the Commission—that establishes the outer limits of the continental shelf. The deference to state sovereignty reflected in the roles assigned to the coastal state and the Commission, respectively, provides a good segue into the first set of arguments.

State Sovereignty, Not Pan-Arctic Sovereignty

In traditional political science terms, sovereignty is the right of a state to determine its own domestic and foreign policies without foreign interference. This state-centric approach contrasts with



the concept of sovereignty enunciated by the Inuit Circumpolar Council, which focuses on cooperation that transcends national boundaries and whose objective is to advance the economic, social and cultural well-being of Arctic inhabitants and to safeguard their environment. In *A Circumpolar Inuit Declaration on Sovereignty in the Arctic*, the Inuit Circumpolar Council describes the Inuit as a united, single people, and refers to Inuit Nunaat, which spans the circumpolar world and stretches from Alaska to Canada's three northern territories, to Greenland, to Russia's coastal region of Chukotka. The Declaration described sovereignty as a "contested concept" that "does not have a fixed meaning," and challenges the traditional concept in several respects. It points out that the Inuit have multifaceted identities that go well beyond being citizens of sovereign states to encompass a range of other attributes, including being indigenous people, and citizens and indigenous citizens of diverse subnational units. The Declaration asserts the Inuit right to self-determination and declares government discussions of Arctic sovereignty to be flawed because they fail to include Indigenous peoples as partners and do "not reference existing international instruments that promote and protect the rights of indigenous peoples."

While Arctic countries cooperated and collaborated in the delineation process, they never seriously considered any kind of joint management of their Arctic ECSs, let alone joint management focused on the well-being of Arctic inhabitants. Canadian officials kept Arctic Indigenous peoples apprised of their work, which is consistent with the duty to consult with Indigenous peoples when projects are likely to affect the latter's well-being. 16 Meetings were held with five Indigenous coastal communities in the Western Arctic as well as in Grise Fjord, Nunavut. Federal government officials made presentations explaining their research programmes, which were followed by questions from the community members and general discussion.¹⁷ In the course of these consultations, it was agreed that Indigenous mammal observers would travel on the icebreakers and, in keeping with the environmental assessment, that the seismic airguns would not be fired within one kilometre of a mammal. As the Inuit are a maritime people, fish and marine animals are vital to their health and economic, social and cultural well-being. Not surprisingly, their principal concern was the impact that the deployment of the airgun on Canada Coast Guide Ship LOUIS S. ST-LAURENT would have on wildlife. 18 Although mammals are relatively rare in the completely ice-covered, northerly regions beyond 200 nautical miles from shore, Indigenous wildlife monitors were also employed in the ice camps. The mammal observers were not only important to the safety of humans and other mammals, but their knowledge of how to live and work in the Arctic, including techniques for keeping equipment functioning in -30° and -40° celsius temperatures, was extremely valuable to the success of the survey missions. Nonetheless, the roles of the Indigenous mammal observers should not be overstated. No survey mission had more than four mammal observers and no Indigenous women participated in the missions.

There are Inuit, such as Senator Charlie Watt, who are very concerned that his people have had so little involvement in the development and management of the ECS regime. The studies commissioned by Senator Watt¹⁹ address important questions often raised in feminist theory. Who makes which decisions and why? Who has access to resources and who controls resources? Towards whom is a policy or programme targeted? Who will benefit? Who will lose? Who is consulted when solutions to a problem are being sought? The people most likely to be affected by resource development on Canada's Arctic ECS are its Arctic inhabitants:

any resource extraction that occurs in the extended continental shelf has the potential to impact the marine wildlife in the Arctic Ocean, not only in the immediate area but throughout the Arctic ocean [sic] due to the migration of various species



though the Arctic Ocean and also due to ocean currents and hydrological cycles that would spread any oil spill, or other environmental contaminants beyond the immediate area of the resource extraction.²⁰

Damage to the Arctic environment and its wildlife could do irreparable harm to the economic, social and cultural well-being of Indigenous peoples.

Neither the Indigenous communities, for the most part, nor federal government officials appeared to consider the ECS delineation a priority for Indigenous peoples for two reasons. First, the ECS surveys were conducted a long way north of any settlements or traditional hunting grounds. The area mapped for Canada's ECS stretches from the Amundsen Basin down into the Canada Basin and over 800 kilometres out from shore. For the most part, the ECS surveys took place far beyond the jurisdiction of Indigenous governance bodies, and little of the area covered by treaty agreements extends into Canada's Arctic ECS.²¹ Secondly, Arctic resource development beyond 200 nautical miles from shore is decades away, and there are so many other pressing issues affecting the well-being of Indigenous peoples that need immediate attention.

While the Inuit concept of pan-Arctic sovereignty is not reflected in the ECS regime, the traditional concept of state sovereignty pervades it. UNCLOS was negotiated under the auspices of the United Nations—a state-centric organization premised on the principle of state sovereignty. The primacy of state sovereignty in the ECS regime is clear: it is the coastal state—not the Commission on the Limits of the Continental Shelf—that establishes a state's ECS. The multilateral cooperation and collaboration involved government officials from the Arctic states. Domestically, the delineation process is the domain of the federal government.

Although the principle of state sovereignty pervades the ECS regime, it is far from being a neutral construct. It has been vigorously criticized by several prominent Canadian scholars for being state-centric, militaristic, and focused on the exploitation of natural resources, while at the same time perpetuating gender, racial and colonial biases, failing to give adequate attention to climate change and environmental degradation, and serving as an impediment to addressing the myriad of environmental, social and economic problems facing the Arctic.²²

The requirements of the ECS regime differ in a significant respect from those often associated with sovereignty. When it comes to the development of customary international law in the case of jurisdiction over land or the legal status of the Northwest Passage, the exercising of sovereignty is important; however, UNCLOS is clear that the coastal state does not have to exercise sovereignty over the continental shelf to enjoy its rights: "The rights of the coastal State over the continental shelf do not depend on occupation, effective or notional, or on any express proclamation." These rights are exclusive; if a coastal state does not explore or exploit the resources of its ECS, no other state may engage in such activities without the former's express consent. Russia planting a flag on the Arctic seabed beneath the North Pole in August 2007 was a symbolic gesture that had no legal ramifications for any Arctic country, including Canada. Delineating the outer limits of the continental shelf is not governed by the "use it or lose it" maxim. It is not a case of "use it or lose it," as former Prime Minister Stephen Harper asserted in 2007. A state's continental shelf either meets UNCLOS criteria for an ECS or it does not.



The traditional concept of sovereignty implies a legal equality among states; however, the ECS regime privileges some states over others. Most coastal states do not have continental shelves that meet the criteria for an extension and those, like Canada, that do are indeed fortunate. The ECS provisions are of little use to landlocked and geographically disadvantaged countries. Under UN-CLOS, the seabed beyond national jurisdiction is to be developed to benefit humanity as a whole, giving special consideration to the needs and interests of the Southern countries. In an Arctic context, these provisions will be of little use to Southern countries because, by the time the five Arctic coastal states have delineated their ECS, there will be little of the Arctic Ocean left for the common heritage of humanity. In recognition of the fact that ECSs reduce the area otherwise considered the common heritage of humanity, article 82 of UNCLOS requires coastal states to make monetary payments or contributions in kind related to the exploitation of non-living seabed resources beyond 200 nautical miles.

In the interest of promoting some notion of social justice, it is to be hoped that coastal states with ECSs will not focus solely on their rights to seabed resources but will also fulfil their responsibilities, including those outlined in article 82, and implement measures to promote the well-being of Arctic inhabitants and to safeguard their environment. When resource exploitation on Canada's Arctic ECS is contemplated, it will be important to ensure that Indigenous peoples participate fully in the decision-making process and that their rights are fully reflected in the domestic rules and regulations that are formulated and implemented to manage Canada's continental shelf beyond 200 nautical miles from shore.

State Sovereignty, Resources and Conflict

Media headlines frequently raise fears that Arctic countries are engaged in a highly competitive scramble to stake claims to resources beyond 200 nautical miles from shore, as exemplified by the following titles: "Cold Calling: Competition Heats Up for Arctic Resources;" Resource Grab Risks Arctic Arms Race, Study Says;" Arctic Draws International Competition for Oil;" International competition over Arctic resources imminent; A New Cold War: Denmark Gets Aggressive, Stakes Huge Claim in Race for the Arctic; and "Arctic Resources: The Fight For the Coldest Place On Earth Heats Up." Such titles imply a degree of lawlessness and conjure images of a wild frontier.

Scholars such as Michael Klare predict that competition for resources leads to conflict among sovereign states. In *Resource Wars: The New Landscape of Global Conflict,* Klare examines state responses to the scarcity of oil, natural gas, minerals and water in other parts of the world and concludes that states are increasingly resorting to military policies in their global scramble for natural resources.³³ While there has been military rhetoric to back claims of sovereignty in the Arctic generally, the process of delineating the ECSs has been characterized primarily by bilateral and multilateral cooperation and by deference to international law. There is a regime in place. Furthermore, compliance is the norm. The five Arctic coastal states—Canada, Denmark, Norway, Russia and even the US, which is not a party to UNCLOS—are defining (or have defined) their ECSs in accordance with the norms enshrined in UNCLOS. Furthermore, 12 non-Arctic states have agreed to respect the sovereignty of Arctic countries, as a condition for being granted Observer status at Arctic Council meetings.³⁴ This condition includes respecting coastal states' rights as specified in UNCLOS. In short, there is no need for Arctic states to resort to gunboat diplomacy because their rights already exist in law and they are being respected.



The process of delineating Arctic ECSs has been marked by high levels of bilateral and multilateral cooperation among Arctic countries. In 2007, Canadian, Danish, and Russian scientists began holding annual meetings to discuss scientific and technical matters pertaining to the Arctic ECSs. By 2010, the meetings involved legal advisors as well as scientists from all five Arctic coastal states. The commitment to peaceful cooperation is evident not only in meetings but also has been formalized. In the 2008 *Ilulissat Declaration*, Canada, Denmark, Norway, the Russian Federation, and the US recalled the extensive legal framework that applies to the Arctic Ocean, pledged to strengthen their existing close cooperation in the delineation of their respective Arctic ECSs, and committed themselves to the orderly settlement of any possible overlapping claims.³⁵ Seven years later, all eight Arctic countries reaffirmed their "commitment to maintain peace, stability and constructive cooperation in the Arctic" in the 2015 *Iqaluit Declaration*.³⁶

The commitment to cooperate was also exemplified in practice. Canadian and Danish scientists conducted seven joint surveys (2006–09) in which they collected and analysed data pertaining to the area north of Greenland and Ellesmere Island. Canadian and American scientists conducted surveys together in the Canada Basin and Arctic Ocean (2008–11). Such collaborations resulted in numerous joint publications and joint presentations at scientific conferences. As the commissioners review the submitted information in light of accepted scientific knowledge, having the data and analysis accepted by the international scientific community prior to a submission makes good sense.

What accounts for the high level of cooperation in the delineation of Arctic ECSs? Three sets of factors help answer the question. First, scientists have a long history of cooperating in the Arctic and delineating the continental shelf has been largely a scientific endeavor. Secondly, Arctic countries have a mutual interest in cooperating and the need to do so is well recognized, as evidenced by the formal bilateral and multilateral agreements to cooperate and ensure peaceful relations, the sharing of information at the meetings of the Arctic coastal states, the many joint surveys, the collaborative analysis of data, and the joint presentations and publications. Collaboration makes good sense in light of the exorbitant costs. In 2007, Denmark and Canada engaged the escort services of the world's most powerful nuclear icebreaker, Russia's 50 Let POBEDY (50 Years of Victory), at a cost of \$60,000 a day.³⁷ The limited number of experts able to undertake the work, and the logistical difficulties of Arctic surveys provide additional incentives for cooperation. Joint operations reduce the number of data collection missions, which, in turn, lessens the environmental impact of the testing. Working together, officials from cooperating countries can share information and learn from each other, which will enhance the quality of the submissions. Each country's case will be stronger if they agree on the scientific data, and the Commission's task will be easier if there is consistency in the data submitted and agreement on them. Collaboration helps to legitimize the findings when they are presented to the Commission on the Limits of the Continental Shelf.

Thirdly, there is little immediate pressure to develop resources on the ECS. While the long-term potential for exploiting natural resources beyond 200 nautical miles may be considerable, expectations of great riches need to be tempered for several reasons. The greatest potential is on land and within the exclusive economic zones. According to the US Geological Survey, Arctic deposits comprise some 22% of the world's undiscovered, technically recoverable hydrocarbon resources, and 84% of them are located offshore;³⁸ however, 95% of these resources are found within the exclusive economic zones of Arctic countries,³⁹ particularly Russia, rather than on the ECS. What resources do exist beyond 200 nautical miles will be difficult and exorbitantly expensive to develop. Exploring for offshore resources, extracting them, and transporting them to distant Southern markets, with short seasons, challenging climatic conditions, and high insurance premiums, would be a logistical



nightmare involving enormous monetary costs and environmental risks. As a general rule, the deeper the water, the more difficult and expensive the extraction, and Arctic waters can be very deep, as exemplified by the eastern Canada Basin, whose depth is around 3,800 metres. Oil rigs are very expensive to build, let alone to transport to Arctic waters, and the drilling season lasts only three to four months in the summer.⁴⁰ Highly specialized seismic and drilling technologies are required to operate in Arctic waters where icebergs abound, storms are frequent and violent, and powerful currents are prevalent. Global warming causes glaciers to calve, sea ice to become more mobile, and weather to be less predictable and more extreme, all of which increase the risks of damage to rigs and shipping accidents. When accidents occur, expenditures soar. After the tanker Exxon Valdez ran aground off Alaska in 1989, spilling 257,000 barrels of oil, Exxon was forced to pay US\$2.5 billion for the cleanup.⁴¹ In 2010, it took three months to stop the oil spill in the Gulf of Mexico, where in spite of "thousands of highly skilled workers, scores of specialized vessels and several nearby ports and staging areas, a gusher of unstoppable oil spewed nearly five million barrels of oil for 87 days until it was plugged in a multibillion-dollar effort."42 Cleaning up the devastation caused by that massive spill continues to this day. An oil spill in Arctic waters would be more catastrophic because of the fragile Arctic ecosystem. It would also be much harder to address because of a myriad of problems: remoteness, ice-clogged channels, winter darkness, high waves that disperse oil and impede the recovery work by skimmers, and ice fog that prevents aircraft from spraying dispersants. Furthermore, oil trapped in or under the ice is less susceptible to bacterial degradation. Since the 2010 Deepwater Horizon spill in the Gulf of Mexico, environmental safeguards have been strengthened for offshore operators, resulting in additional expenses related to emergency response and containment. All these factors make offshore oil and gas exploitation extremely risky and costly. The expenses and logistical problems would be infinitely greater in an Arctic context than they are in open waters closer to shore.

Oil and gas from Canada's Arctic ECS cannot compete with more accessible southerly sources, such as the Alberta oil sands and the shale gas deposits in the US. Oil and gas companies have been scaling back on their investments in Arctic territorial seas and exclusive economic zones, 43 where the logistics, costs and risks would be far less daunting than they would be beyond 200 nautical miles. After spending US\$7 billion on offshore exploration in the Beaufort and Chukchi Seas, Royal Dutch Shell announced in September 2015 that it would end exploration off Alaska's coast "for the foreseeable future" because the amounts of oil and gas found were inadequate, especially in light of the huge risks and the drop in petroleum prices.⁴⁴ In December 2014, Chevron Canada announced that its Arctic drilling plans were being placed on hold "indefinitely" because of "the level of economic uncertainty."45 The private sector's dwindling enthusiasm for Arctic exploration was reinforced on December 20, 2016, when President Obama and Prime Minister Trudeau issued a joint statement banning offshore oil and gas development in the Arctic. 46 The president used an obscure provision in his country's 1953 Outer Continental Shelf Lands Act to ban offshore oil and gas drilling in US waters in the Chukchi and Beaufort seas indefinitely. The prime minister declared a five-year moratorium on granting new licences in Arctic waters, which will be reviewed, considering climate and marine science, at the end of the period. It remains to be seen what will happen when Canada conducts its review. President Obama's move may be challenged in the US courts or rescinded by President Trump.

In short, the costs of resource exploitation in polar regions beyond 200 nautical miles are expected to far outweigh the returns; hence, oil and gas development on the Arctic ECS will not be economically viable in the foreseeable future. There are still many resources to develop on Canada's mainland, where the risks and logistical problems are less daunting; thus, there is not much interest



in resource development on the islands of the Arctic Archipelago, let alone on the seabed within the exclusive economic zone, and even less interest in resource exploitation on the continental margin beyond two hundred nautical miles.

Nonetheless, land-based deposits are finite, and worldwide demand for oil and gas is expected to rise in the next twenty years. ⁴⁷ The Canadian Polar Commission's report points out that "long-term demand for energy, metals and precious gems accompanied by shrinking global reserves will continue to gradually shift competitive advantage to the region's high cost deposits prompting future growth of the North's non-renewable resource sector." ⁴⁸ Thus, there may come a day when technological innovation and worldwide demand will make such exploitation politically and economically desirable, but there is no immediate pressure for such development.

The lack of immediate pressure for resources development, the strong incentives for bilateral and multilateral collaboration, and the well-established patterns of scientific cooperation have all contributed to making the delineation of Arctic ECSs peaceful, orderly, and notable for the high levels of cooperation engendered. Can the same be said of future efforts to resolve overlaps in the ECSs of Canada and its Arctic neighbours?

Just as there may be overlaps in the exclusive economic zones between adjacent or opposing states, as exemplified by the ongoing maritime boundary dispute between Canada and the US in the Beaufort Sea, there will be overlaps in the ECSs of Canada and its neighbours. Canada, Denmark, and the Russian Federation either have or are expected to include sections of the Lomonosov Ridge in their respective submissions, although, until Canada actually makes its submission, the extent to which they are claiming the same seabed will not be fully known. Likewise, there are likely to be overlaps between the US and Canadian ECSs in the Canada Basin.

The Commission is a technical body responsible for making recommendations pertaining to the outer limits of the continental shelf. It was never intended to be a court of law and it has no mandate to resolve overlapping maritime boundaries.⁴⁹ Responsibility for resolving overlapping claims rests with the countries involved—another example of deference to state sovereignty.⁵⁰ Past experience has shown that resolving maritime boundary disputes can be difficult and protracted. In the 1970s, Canadian and US negotiators worked for years to reach an agreement on fishing rights in the Gulf of Maine, only to have the settlement rejected in the US Senate. The maritime boundary dispute was then referred to the International Court of Justice, which issued its judgment in 1984.⁵¹ The Canada-US boundary dispute in the Beaufort Sea has dragged on for years and it is definitely an irritant in bilateral relations.⁵² These examples indicate that resolving disputes over maritime boundaries can be difficult and time consuming; however, political and legal channels have been used in the past and they will be used in the future, as evidenced by the 2010 agreement between the Russian Federation and Norway, ending their bitter maritime boundary dispute of some 40 years in the Barents Sea. Their agreement serves as an encouraging example of maritime boundary dispute settlement, involving interests important to both parties (petroleum resources and fish) and a significant power imbalance between the two countries. Neither the Soviet Union nor the Russian Federation that succeeded it resorted to its vastly superior military might to take control of the area. Instead, the slow process of negotiation ultimately resulted in pacific settlement.

Conclusion

In contrast to alarmist media headlines and scholarly findings pertaining to resource wars in other parts of the world, the process of delineating Arctic ECSs has been marked by exemplary



bilateral and multilateral cooperation among Arctic countries. There is no need to resort to military solutions as there is a regime in place and its rules are being respected. Indigenous communities were consulted about the ECS surveys. In turn, they contributed valuable Arctic knowledge and expertise as well as some personnel. Yet, overall, their involvement was pretty minimal, and the Inuit concept of pan-Arctic sovereignty never received serious consideration. State sovereignty remains the cardinal principle underlying international relations, generally, and the ECS regime, in particular.

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Abbreviations

ECS extended continental shelf

UNCLOS United Nations Convention on the Law of the Sea

USGS United States Geological Survey

Notes

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- 3. The PEW Charitable Trusts, "Exclusive Economic Zones," in *Sea Around Us Project: Fisheries, Ecosystems and Biodiversity*, 2014, http://www.seaaroundus.org/eez/ [site active; article not found].
- 4. United Nations Convention on the Law of the Sea, November 16, 1994, UNTS (United Nations Treaty Series) vol. 1833, 397. Its provisions are legally binding on its 167 parties. The international regime to delineate the outer limits of the continental shelf beyond 200 nautical miles and the rights and responsibilities of coastal states in this area are specified in Part VI (articles 76 to 85) and Annex II of UNCLOS.
 - 5. UNCLOS, articles 2 and 3, 3



- 6. UNCLOS, article 57, 18.
- 7. UNCLOS, article 56(1)(a), 18.
- 8. UNCLOS, article 76(1), 27. Scientists and lawyers define the continental shelf quite differently. In scientific terms, the continental shelf makes up one part of the continental margin. That is a geological formation that includes the continental shelf, continental slope, and continental rise. In juridical (or legal) terms, the continental shelf is a submerged prolongation of a coastal state's land territory that can be narrower or wider than the continental margin or encompass all the latter. The term "continental shelf" is used in this article in accordance with its juridical definition.
- 9. Thomas H. Heidar, "Legal Aspects of Continental Shelf Limits," in *Legal and Scientific Aspects of Continental Shelf Limits*, ed. Myron H. Nordquist, John Norton Moore and Thomas H. Heidar (Leiden, NL: Martinus Nijhoff, 2004), 24.
- 10. UNCLOS, article 77, 28. The water column above the ECS is classified as "high seas," meaning that all states enjoy freedom of navigation and overflight, and the right to fish, conduct scientific research, construct artificial islands and other legal installations, and lay submarine cables and pipelines. UNCLOS, article 87(1), 30–31.
- 11. UNCLOS, article 76(8), 28. Every five years, states parties to UNCLOS elect the 21 members of the Commission. The commissioners are chosen individually for their expertise in geology, geophysics, or hydrography, and collectively to ensure due regard for the UN rules on geographic representation. The mandate, membership, and decision-making procedures for the Commission on the Limits of the Continental Shelf (CLCS) are outlined in Annex II of UNCLOS.
- 12. Meeting of States Parties, Decision Regarding the Workload of the Commission on the Limits of the Continental Shelf and the Ability of States, Particularly Developing States, to Fulfil the Requirements of article 4 of Annex II to the United Nations Convention on the Law of the Sea, As Well as the Decision Contained in SPLOS/72, Paragraph (A), 18th Meeting, June 20, 2008, SPLOS/183, http://www.un.org/Depts/los/meeting_states_parties/SPLOS_documents.htm.
 - 13. UNCLOS, article 76(8), 28.
- 14. Sara Cockburn et al., "Intertwined Uncertainties: Policy and Technology on the Juridical Continental Shelf," paper presented at the 2001 Advisory Board on the Law of the Sea (ABLOS) Conference: Accuracies and Uncertainties in Maritime Boundaries and Outer Limits, Monaco, October 15–17, 2001, 7. See also Ted L. McDorman, "The Role of the Commission on the Limits of the Continental Shelf: A Technical Body in a Political World," *International Journal of Marine and Coastal Law* 17 (2002): 301–24; and Ted L. McDorman, "The Continental Shelf," in *The Oxford Handbook of the Law of the Sea*, ed. Donald R. Rothwell et al. (Oxford: Oxford University Press, 2015), 192.
 - 15. Inuit Circumpolar Council Canada, A Circumpolar Inuit Declaration on Sovereignty in the Arctic, 2010.
- 16. The requirement to consult with Indigenous peoples is stipulated in numerous articles of the United Nations Declaration on the Rights of Indigenous Peoples, as well as in Section 35 of Canada's Constitution Act of 1982 and the Nunavut Land Claims Agreement.
- 17. Kevin DesRoches, Physical Scientist, UNCLOS, Geological Survey of Canada, Natural Resources Canada, interview, Halifax, Nova Scotia, May 26, 2015. Information sharing was also done by teleconferencing and when the ECS scientists and Indigenous leaders met at conferences or meetings pertaining to other matters.
 - 18. DesRoches, interview.
- 19. Peter W. Hutchins et al., "Setting out Canada's Obligations to Inuit in Respect of the Extended Continental Shelf in the Arctic Ocean," paper commissioned by Senator Charlie Watt, October 20, 2015; and Hutchins Legal Inc., "Canada's Submission to the Commission on the Limits of the Continental Shelf and the Legal Protections for Inuit Rights to the Arctic Ocean," paper commissioned by Senator Charlie Watt, March 2014.



- 20. Hutchins et al., "Setting out Canada's Obligations to Inuit in respect of the Extended Continental Shelf in the Arctic Ocean," 21.
- 21. The exception is the Inuvialuit settlement region that extends beyond Canada's exclusive economic zone and "overlaps with a portion of the extended continental shelf." Hutchins et al., "Setting out Canada's Obligations to Inuit in Respect of the Extended Continental Shelf in the Arctic Ocean," 18.
- 22. Lee-Anne Broadhead, "Canadian sovereignty versus northern security: The case for updating our mental map of the Arctic," *International Journal* 65, no. 4 (2010): 913–30; Heather A. Smith, "Forget the Fine Tuning: Internationalism, the Arctic, and Climate Change," in *Canada in the World: Internationalism in Canadian Foreign Policy*, ed. Heather A. Smith and Claire Turenne Sjolander (Don Mills, ON: Oxford University Press, 2013), 200–16; and "Choosing Not to See: Canada, Climate Change and the Arctic," *International Journal* 65, no. 4 (2010): 931–42. Franklyn Griffiths makes a compelling case for expanding our notion of sovereignty to encompass the idea of stewardship, arguing that the latter is not only essential to protecting the Arctic's natural environment and its inhabitants but also enhances national sovereignty. Franklyn Griffiths, "Towards a Canadian Arctic Strategy," Session Paper No. 5, in *Foreign Policy for Canada's Tomorrow No. 1* (Toronto: Canadian International Council, May 2009); and Franklyn Griffiths, "Stewardship as Concept and Practice in an Arctic Context," *Cyber Dialogue 2012* (Toronto: Munk School of Global Affairs, March 2012). Natalia Loukacheva advocates broadening our understanding of sovereignty from the traditional state-centric focus to include Northern perspectives. Natalia Loukacheva, "Nunavut and Canadian Arctic Sovereignty," *Journal of Canadian Studies* 43, no. 2 (2009): 82–108.
 - 23. UNCLOS, article 77(3), 28.
 - 24. UNCLOS, article 77(2), 28.
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- 26. On August 17, 1967, Maltese ambassador Arvid Pardo made an historic speech to the United Nations General Assembly, declaring the international seabed (the seabed beyond national jurisdiction) to be the "common heritage of mankind." UN General Assembly, Declaration and Treaty Concerning the Reservation Exclusively for Peaceful Purposes of the Sea-Bed and of the Ocean Floor Underlying the Seas Beyond the Limits of Present National Jurisdiction, and the Use of Their Resources in the Interest of Mankind, 22nd Session, August 18, 1967, A/6695. His vision was incorporated into UNCLOS, with the specific provisions outlined in Part XI. Ambassador Pardo's phrase "common heritage of mankind" is now frequently replaced by the gender-neutral wording "common heritage of humanity."
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CHAPTER 6



CHINA'S UNFOLDING ARCTIC STRATEGY: THREATENING OR OPPORTUNISTIC?

BY FRÉDÉRIC LASSERRE, OLGA V. ALEXEEVA AND LINYAN HUANG

Abstract

Rapid climatic changes in the Arctic—the fast melting of permafrost, the decline of glaciers, the melting of sea ice—have created perceived strategic and economic opportunities for the littoral states, but have also attracted the attention of states beyond the region. China, for example, without direct access to the Arctic, displays an interest in Arctic research, natural resources, and shipping potential. However, its diplomatic, economic, political and scientific efforts in this region arouse negative reactions among Western media. The media often draw up a portrait of an ambitious and arrogant China, ready to push aside the sovereignty of the Arctic countries to defend Chinese interests in the Arctic. From this perspective, it seems relevant to analyse China's activities in the region and try to assess Beijing's strategy in the Arctic, which seems more driven by opportunism than by a long-term desire to challenge the littoral states' sovereignty.

The commercial and strategic implications of climate change and the melting of the sea ice in the Arctic have drawn attention not only of Arctic states but also of some other countries that have no territorial access to the region, such as China and Japan. The growing Chinese interest in the Arctic appears to be a rather recent phenomenon.¹ There have been many publications and considerable speculation on that topic, resulting in the construction of an image of a potentially threatening China, which is often described as being very interested in both Arctic mineral resources and the opening of Arctic shipping routes. In addition, China increasingly describes itself as a "near-Arctic" [近北极国家]state,² as if attempting to legitimize its growing interest in the region. But in this characterization, there is a hint of a perceived threat, as commentators are often stressing that China's appetite may lead Beijing into considering the Northwest Passage as an international strait, and Arctic resources as up for grabs. Thus, the intensified interest of the world community towards the Arctic and towards China's growing presence in this region have raised several questions. What does China's interest in the Arctic denote regarding its long-term goals? What is the scale of China's polar research and collaboration? What is the official position of the Chinese government towards the Arctic? What strategy has Beijing developed regarding Arctic issues—of sovereignty of Arctic states, the exploitation of natural resources, and the development of new navigation passages? In fact, after lengthy speculations, China eventually published its Arctic policy in January 2018,3 but does not wish to, nor does it represent a threat to claims put forward by Arctic coastal states.

China's Longstanding Scientific Interest in Polar Regions

China's political interest in the Arctic seems to be relatively recent, but actually goes back to the 1980s, with science programmes. The report of the Stockholm International Peace and Research Institute (SIPRI)—*China Prepares for an Ice-Free Arctic*—was one of the first research publications to draw international attention to the increasing presence of China. The report analysed Chinese



activities in the Arctic, as well as the evolution of Beijing's official line regarding energy and trade issues of the region.⁴ Since then, China has been the focus of many mass-media reports and academic publications analysing Beijing's aspirations to become one of the main actors in resource management and in the debate regarding the governance of the Arctic.⁵

What is China's scientific production regarding the Arctic?

China's Arctic research programme officially started in 1989 with the creation of the Polar Research Institute of China (PRIC) in Shanghai. According to the principal Chinese database Wanfang Data [万方数据—wanfang shuju], initial research on the Arctic was conducted in the late 1980s. In 1988, the Chinese Academy of Sciences also launched Beiji yanjiu [北极研究], or the Chinese Journal of Polar Research, a new quarterly journal dedicated entirely to issues regarding the Arctic and Antarctic.

Since the late 1980s, different Chinese journals have published hundreds of articles on the Arctic written by Chinese researchers in all fields of specialization. Most of them deal with topics related to exact sciences, such as problems linked to global warming in the Arctic, and the impact of global warming on temperature variations and rainfall in China. We searched the *Wanfang Data* and identified 10,262 different entries including the word "Arctic" in the title, of which 9,692 articles were published by about a hundred Chinese journals between 1988 and 2017. The other entries are academic works, such as masters and doctorates theses defended during the same time (330), and conference proceedings (240). Most of these publications (21% of all) are dedicated to a broad range of subjects relating to Earth sciences (climatology, oceanography, geology, astronomy and geophysics), while others deal with issues regarding education (15%), the economy (7%), biodiversity (6%), industry and technology (6%), politics and law (5%), agriculture (5%) and the environment (3%). Finally, several articles are devoted to topics related to history, culture, art and languages spoken in the different regions and countries of the Arctic (13%).

Since 2007, the number of publications that deal with issues specific to social sciences has increased: questions regarding sovereignty in the Arctic, analysis of the circumpolar countries' Arctic policy, the place of the Arctic in China's future economic and geostrategic development, etc. ¹⁰ We found 258 documents (208 articles, 46 doctorate and masters' theses, as well as 4 conference proceedings) published between 2006 and 2017, most having been published between 2012 and 2017, dealing with the place of the Arctic in international relations (53%), geopolitical or economic issues (6%), and the legal aspects of the matter, with most regarding questions of international law (41%). To our knowledge, the questions were raised for the first time in 2006 in an article¹¹ on Canada's Arctic strategy. In 2007, Wang investigated political rivalries and sovereignty issues in the Arctic. In 2008, Liu analysed Russia's strategy in the Arctic and Ren and Li again brought up questions of sovereignty. Since 2009, many articles on political issues in the Arctic or those underlying China's interests in the area have been published.

China's interest in the Arctic appeared to be the focal point of Chinese academic discussions and for a while was tackled with little restraint and caution. Dome Chinese scientists have asked the government to change its neutral position by becoming more involved in the process of delimiting sovereignty areas in the Arctic and dividing the resources, maybe even promoting the idea that Arctic resources should be considered as part of the heritage of humanity. This position has been taken up by the press, but it has never been specified on which legal basis this policy might be pursued. Jia Yu, freeenrcher at the Institute for Ocean Development Strategy of the State Oceanic



Administration (SOA), or Cheng Baozhi,¹⁶ from the Shanghai Institute of International Studies (SIIS), uphold that the extension of continental shelves beyond the limits of exclusive economic zones should be limited, and the maritime space beyond these limits should fall within the heritage of humanity. Through these semi-official publications, Beijing seems to challenge sotto voce the notion of extended continental shelf as applied in the Arctic.

Those opinions, sometimes very different from Beijing's official position, are published not only by conventional academic journals but also by official Chinese periodicals that never publish content or opinions not authorized beforehand. The existence of such publications within the general trend of rising nationalism in China is difficult to interpret. It could be a sign of Beijing's will to convince the population of the importance of Arctic issues for the country's socio-economic future and the necessity for China to become a more active player in this area of the world, or to let the population express this nationalism to divert the attention of public opinion without intentionally intervening (as hinted by Godement)¹⁷. However, it would be wrong to think that all Chinese scientific articles actively promote China's interests in the Arctic. Liu and Yang or Mei and Wang take a very moderate line, and after 2014, it seems that Chinese papers toned down their criticism of China merely acting as an observer.¹⁸ It would be hard to see a challenge of international law in the Chinese government's position. Beyond the official recognition of sovereign rights of coastal states when the country was admitted as an observer on the Arctic Council, China does not seem to entertain revisionist ideas regarding the Arctic when one analyses its standpoints and official statements,¹⁹ a fact confirmed in *China's Arctic Policy*, published in 2018.

Deployment of field research tools

China's interest in the Arctic is reflected not only in academic publications but also in the field through scientific exploration. In 1992, before the possibility of opening the Arctic routes was abundantly discussed, Beijing organized its first five-year scientific research programme in the Arctic Ocean in cooperation with the German universities of Kiel and Bremen. This project was followed by the admission of China into international organizations with missions to lead cooperative Arctic research, such as the International Arctic Science Committee (IASC) and the Pacific Arctic Group (PAG).²⁰

The acquisition of a Polar Class 5 icebreaker in Ukraine in 1994, christened Xuelong [雪龙 or Snow Dragon], allowed the Chinese to develop an independent polar research programme and lead several scientific expeditions to the Arctic and Antarctic. Research coordinated by the national agency—Chinese Arctic and Antarctic Administration (CAA)—grew to reach a very large scale. A second icebreaker, the Xuelong 2, was undertaken in 2016, launched in 2018 and should be operational in 2019.21 Besides its 34 expeditions to the Antarctic, by early 2018, China prepared and led 9 expeditions to the Arctic (1999, 2003, 2008, 2010, 2012, 2014, 2016, 2017 and 2018, with the 2017 expedition implying an authorized transit of the Chinese icebreaker Xuelong across the Northwest Passage) and founded its first station, Yellow River [黃河- Huanghe], in Ny-Ålesund in the archipelago of Svalbard (Norway). It thus completed a polar-station network along with four stations in Antarctica (Great Wall, established in 1985, Zhongshan, established in 1989, Kunlun, since 2009, and Taishan, since 2014). A fifth station is set to be built in the Ross Sea region (Xinhua, in 2017). In China, it is research in Antarctica and not in the Arctic that receives most of the polar research budget (almost 80%),²² mainly because according to the Antarctic Treaty (1959), Beijing does not need any authorization to develop bases and research programmes in Antarctica.²³ It would be inaccurate to surmise that from the establishment of polar programmes in 1981,



Chinese research agencies have considered Antarctica as a step towards the Arctic. Nothing in the literature could lead to such a conclusion. China's research programme in the Arctic is dedicated primarily to the study of interactions between the Arctic icy ocean, maritime ices, and the atmosphere to gain a better understanding of the influence of abnormal climatic changes in the North Pole on China's climate. The expeditions of the research icebreaker *Xuelong*, which take place almost exclusively in the Eurasian portion of the Arctic—rarely in the Chukchi Sea or Beaufort Sea, and rarely in or around the Canadian Arctic Archipelago or Greenland—seem to confirm the accentuated interest in Arctic oceanographic research linked to climatic mechanisms affecting Northeast Asia.

Such research tools translate to an actual scientific interest, but also give Beijing the possibility of greater presence in the field, structuring a true research diplomacy in Antarctica, where China is considerably more active than in the Arctic.²⁵ Polar missions allow China to better understand Arctic navigation and technological difficulties related to it. They also help China to establish all the scientific procedures necessary for working in polar conditions.²⁶ Some analysts would say that China is only one step away from reducing the Arctic scientific policy to a mere political instrument.²⁷ They highlight the fact that research results are poor, considering the funds invested, and that China's oil and gas interests are in the Siberian sector of the Arctic. Drawing such a parallel might be tempting, but one should refrain from a hasty interpretation of China's scientific Arctic programmes, and especially of China's interest in the Canadian Arctic. On the one hand, the Polar Research Institute seriously considered a campaign project in the Canadian Arctic in 2013,²⁸ suspended later until the summer of 2017. On the other hand, while shipping and oil and gas cooperation projects are all located in the Russian Arctic (except one off the Icelandic coast), China's mining projects are all in the Canadian and Greenlandic Arctic.

An aggressive Chinese diplomacy in the Arctic?

Silence on China's official position

Despite China's growing interest in the Arctic, particularly in science, but also increasingly at the diplomatic and economic levels, there was no formal strategy guiding the actions and statements of the Chinese government about this region and its potential (energy, maritime, economic, scientific, military, etc.) until the White Paper on *China's Arctic Policy* was published in 2018.²⁹ Beijing strongly denies the existence of such a strategy and highlights the foremost scientific nature of its interest in the Arctic,³⁰ although it readily acknowledges that it nurtures interests in the region.³¹

The statements of officials used to be conservative and would deal mainly with climate change and environmental questions.³² Changes in atmospheric circulation from the Arctic seem to be the main cause of significant weather changes observed in China in recent years, including decreased precipitation in Northern China. Thus, the Arctic region is directly linked to the security of the socio-economic development of China, and the reason underlying the interest of the Chinese government in gaining a better understanding of climate mechanisms in this region.³³ However, the People's Republic of China (PRC) officials also emphasize that most Arctic issues are "regional" and not just "national,"³⁴ a point stressed in the very foreword of the 2018 *China's Arctic Policy*: "The Arctic situation now goes beyond its original inter-Arctic States or regional nature, having a vital bearing on the interests of States outside the region and the interests of the international community as a whole."³⁵ Therefore, by simple virtue of their geographical location, the Northeast Asian states and the European Union (EU) would have a legitimate right to participate in the debates on Arctic affairs and to play an active role in the regional cooperation initiatives.



As for the issues of sovereignty in the Arctic and the exploitation of natural resources in the region, reports from Beijing are rare and remain vague. For a long time now, the Chinese government has cast doubt about its interest in these Arctic resources: "Since there is no reliable information on oil and gas reserves in the Arctic, China is interested only in climate changes in this region. Before formulating any policy on this issue, we must first gather information on the mineral and petroleum potential [of the Arctic]," stated Xu Shijie, director of the policy division of the Chinese Arctic and Antarctic Administration,³⁶ leaving doubts as to how China would react if large fields were discovered.

China's government had neither recognized nor denied sovereign rights claimed by the Arctic states founded on the United Nations Convention on the Law of the Sea (UNCLOS 1982, effective in 1994). China ratified UNCLOS in 1996 and, therefore, officially supports it. However, considering Chinese policy in the South China Sea, an abundant literature beyond the scope of this paper tackles the issue of how China understands the provisions of the Convention. China is taking refuge behind a cautious wait-and-see policy formulated to maintain much speculation as to its real intentions: "China takes note of the exclusive economic zones and extended continental shelves of the countries bordering the Arctic, particularly because these continental shelves have yet to be defined. China considers ... the indeterminate nature of the legal positions of the maritime areas of the Arctic region," said Hu Zhengyue, Assistant Minister of Foreign Affairs, in 2009, in Svalbard.³⁷

These disputes have been analysed by many Chinese authors, who generally conclude that the international community should follow the UNCLOS recommendations, although some say that extended continental shelves claimed by the countries bordering the Arctic should remain open to all;³⁸ that is, they should remain part of what UNCLOS calls the "Zone." Rear-Admiral Yin Zhuo is often cited, having stated that "the Arctic belongs to all nations around the world and no state has sovereignty over it."³⁹ We do not know what maritime areas the Rear-Admiral was referring to, or whether his radical remarks, certainly relayed by the China News Service, are endorsed by the government.

However, this position, if it were to become the official policy of China, is surprising because it could harm Chinese interests in the South and East China Seas. It would be difficult for Beijing, which for years has been seeking to have its maritime claims recognized, to justify the extension of Chinese maritime areas, but deny this right to the Arctic states. Similarly, several Canadian analysts fear that China could challenge the sovereignty claimed by Canada over the Northwest Passage. However, if Beijing denied the status of the internal waters claimed by Ottawa over the Passage, it would be difficult for China to defend a very similar claim on the Qiongzhou Strait. In fact, as early as March 2013, during a meeting between Canadian researchers (including F. Lasserre), representatives of the Canadian Embassy, Chinese researchers, and officials from the PRIC, the official Chinese scientific leaders stressed that China intended to seek permission to transit through the Northwest Passage for their research icebreaker, thus implicitly recognizing the Canadian position. In addition, the Chinese government did abide by Canadian regulatory procedures during the journey of the icebreaker *Xuelong* in Tuktoyaktuk (Canada) in 1999, 1 and Russian procedures during the transit of the Northeast Passage in 2012.

It was only in May 2013, following the admission of China as an observer to the Arctic Council, that Beijing dispelled any ambiguity when Hong Lei, spokesperson of Chinese Ministry of Foreign Affairs, asserted that "China recognizes the sovereignty, sovereign rights and jurisdiction of Arctic countries in the Arctic region." However, the recognition of "the sovereignty, sovereign rights and jurisdiction" of Arctic states was a mandatory prerequisite to becoming an observer since the adoption of Nuuk criteria in 2011. This recognition was again asserted in *China's Arctic Policy* in 2018.



Active Chinese diplomacy directed at the European Arctic

In addition to and parallel to its scientific activities, the Chinese government has also developed numerous political and economic partnerships with Arctic countries such as Denmark, Iceland, Sweden and Finland.⁴⁵ In the wake of the financial crisis that hit Iceland in 2008, the former President of Iceland, Ólafur Ragnar Grimsson (1996–2016) visited Beijing five times during the crisis, and considered China's financial support to be invaluable. In return for it, President Grimson promoted Iceland as a potential logistics centre in the Arctic. China now occupies an important place in Iceland's economic life.⁴⁶

During the official visit of Chinese Premier Wen Jiabao to Reykjavik in April 2012, China signed six cooperative agreements with Iceland in the fields of energy, science and technology,⁴⁷ thus confirming the partnership drafted in 2010. In April 2013, Iceland and China signed a free-trade agreement. At the same time, Iceland's confirmation of its support of the candidacy of China as an observer in the Arctic Council⁴⁸ contributed to China's accession to observer status in May 2013. Analysts have repeatedly stated that China has the largest embassy in Reykjavik,⁴⁹ which is correct in terms of building size but certainly not with respect to the number of nationals on staff. As of December 31, 2014, the Chinese Embassy had seven Chinese employees, the same number as Mexico, Germany and France. However, the Indian and Japanese embassies each had eight, Singapore 11; Russia 13, and the United States (US) 14.⁵⁰ Therefore, one cannot affirm that the Chinese delegation dominates the Icelandic diplomatic landscape.

The Chinese government has also developed many political and economic partnerships with Arctic countries, Norway (2001) and Denmark (2010) in particular. In May 2010, Denmark hosted the first delegation of Chinese traders and investors who signed contracts and letters of intent in the fields of energy, green economy, and agriculture and food security, for a total estimated value in excess of US\$740 million. According to Norwegian academics, the outlook of Asian countries' engagement in the Arctic will increase slowly but steadily, mainly in shipping and oil fields.

The signed agreements focus primarily on the development of cooperation in the fields of research on Arctic navigation, exploitation of natural resources, and joint scientific research, but also on the support of China's application to the Arctic Council. In fact, since 2008, China applied as a permanent observer to the Council, a position that would not confer any decisional leverage, but would give China a voice in this regional intergovernmental forum that promotes cooperation and consultation between the Arctic countries.⁵² After failing to obtain this status in 2009, China renewed its request and was admitted in May 2013. On May 15, 2013, the Chinese Ministry of Foreign Affairs was quick to state that it recognized the sovereignty of states bordering the Arctic, simultaneously dispelling many suspicions about China's long-term intentions.

The question of the participation of China as an observer seemed to be a major issue for Chinese diplomacy in the Arctic, not for the purpose of altering the governance of the region—the Arctic Council makes few binding decisions for members, and observers are not entitled to vote—but simply to make the voice of Beijing heard regarding the exploitation of resources, the navigation system, and the implementation of UNCLOS. At the same time, China's presence in the Arctic Council helps Beijing legitimate its active interest in the Arctic region. For instance, while participating in the debate on Artic governance, Chinese delegates constantly used terms such as "countries of Central Arctic" or "countries close to the Artic," which include, according to Beijing, the PRC.⁵³ The promotion of such terms, which are slowly entering the international vocabulary used in research and public debates on various Arctic topics, could strengthen China's position as one of the major actors in the region.



Economic Interests for China?

It appears that China's behaviour in the Arctic hints that its strategy is opportunistic: Beijing seems keen to develop access to resources and to commercial routes, realizing that the Arctic represents only one among numerous market possibilities. This is consistent with the fact that Chinese companies may also, especially in the mining sector, be developing their autonomous economic strategies without being directed by the Chinese government, a point also apparent regarding the relatively poor interest for Arctic shipping among Chinese shipping firms, except for a few government-owned corporations like COSCO.⁵⁴

An interest in mining taking shape

China is not only interested in the Arctic Council. In Denmark, Beijing stressed the substantial mining potential of Greenland. Considerable Chinese capital was invested by Xinye Mining in London Mining, a British firm slated to exploit a very important iron mine in Isua in 2015. The firm went bankrupt in October 2014, but General Nice, one of China's largest coal and iron ore importers, took over the Isua mine project in January 2015.

In Canada, the Chinese company WISCO (Wuhan Iron and Steel Co.) is considering exploiting a major iron deposit at Lac Otelnuk (Nunavik, QC). In January 2010, the mining firm Jilin Jien Nickel, one of the most important Chinese nickel producers, acquired Canadian Royalties Inc., and invested nearly US\$800 million to exploit a nickel deposit located near Kangiqsujuaq, an Inuit community also in Nunavik (Investissement Québec 2011). The company MMG is planning to open two major zinc and copper mines near Coronation Gulf in mainland Nunavut (Izok Lake and High Lake).⁵⁵ In 2008, Jinduicheng Molybdenum Group acquired the Canadian company, Yukon Zinc. Since 2009, Jiangxi Zhongrun Mining and Jiangxi Mining Union have been exploring copper and gold deposits in South Greenland following the acquisition of the British company, Nordic Mining.⁵⁶ In most other cases, Chinese mining interests are limited to a participation in the share capital of firms, for the most part Canadian, that develop projects often related to iron ore.

Many of these projects were questioned because of the drop in iron ore prices in the fall of 2014. The bankruptcy of London Mining highlighted the fact that for all firms, including the Chinese, the Arctic remains a very expensive area in which to exploit a mineral deposit. However, for most projects, Chinese companies have sought an industrial partner and advanced their interests according to the rules of the market. Although Asian countries do invest in the natural resources of both Asia and the Arctic, the amount of investment in the Arctic is minimal when compared to worldwide investment,⁵⁷ even in the mining sector.⁵⁸

The exploitation of hydrocarbons: an expensive dream?

At the heart of the widely publicized coverage of the exploration of Arctic mineral and energy resources is the question of the extent of oil and gas deposits. The media have largely reflected the idea that the region would contain huge deposits. The 2000 report of the United States Geological Service (USGS) has often been misquoted to make it state that the Arctic contains about 25% of oil reserves to be discovered, but the 2000 study addressed not only the Arctic but also boreal regions. A more specific and rigorous study published by the USGS in May 2008 estimated the Arctic hydrocarbon reserves (i.e., north of the Arctic circle) at some 90 billion barrels of oil, 47,261 billion cubic metres of natural gas, and 44 billion barrels of gas condensate, namely 29% of the gas deposits



to be discovered and 10% of the oil deposits⁵⁹—a significant decline since the first report of 2000! Even these revised figures from the USGS fail to win unanimous support. For example, Paul Nadeau of the Norwegian company StatoilHydro has stated the USGS' estimates are 2 to 4 times too optimistic. "We believe that their figures are too high. This does not matter for the oil companies but could mislead governments." A study published in 2012 reports reserves in the Arctic and the former Soviet Union of around 66 billion barrels of oil, of which 43% (28.4 billion. barrels) are in the Arctic, and about 60,100 billion cubic metres of natural gas, of which at least 58% would be in the Arctic (34,860 billion cubic metres of natural gas). Over time and the accumulation of more accurate data, estimates on the extent of Arctic deposits are growing smaller.

The discovery of deposits in Northern Alaska and in the Barents and Kara seas raises the question of product delivery to consumer markets. The Arctic dimension, also at the heart of Sino-Russian relations, is addressed as part of broader discussions on a strategic and energy partnership between the two countries. It appears that despite the mistrust that can colour bilateral relations, Russia intends to take advantage of China's economic interest in the Arctic as China becomes a major buyer of Russian oil and gas. ⁶² Since the 1990s, the economies of China and Russia have become increasingly complementary. The Sino-Russian strategic partnership provides for cooperation in several fields of economic development and includes "Arctic scientific cooperation." As a result, China and Russia have conducted several joint scientific research programmes to address technical and technological problems in the construction of gas and oil pipelines in Arctic and sub-Arctic conditions. ⁶³

Moscow, which controls the Northeast Passage and would like to accelerate the exploitation of natural resources in its own Arctic zone, sees China as a potential user of the Northern Sea Route (NSR)⁶⁴ and a potential provider of the capital needed to support its development.⁶⁵ However, the exploitation of these resources in an Arctic environment requires highly advanced technological expertise and specific equipment (adapted drilling platforms) that China does not have and that Russia poorly masters.⁶⁶ This was evidenced by frequent delays and cost overruns occurring before the commissioning of the Prirazlomnoye oil field in the Pechora Sea in December 2013 (ten years late), and by the indefinite postponing in August 2012 of the Shtokman gas field in the Barents Sea. The decline of current hydrocarbon prices would tend to indicate that such setbacks and postponements will not be reversed in the short term. For Beijing, gaining access requires investments in research, development and expertise totalling billions of dollars over several years, thus highlighting the relevance of joint ventures.⁶⁷

These technical difficulties in the exploitation of hydrocarbons, and the high cost of activities in the Arctic in general, have pushed Russia to seek partners abroad, especially in China, to facilitate the current exploitation of terrestrial deposits. Recent Western sanctions consequential to the conflict in Ukraine in the summer of 2014 reinforce Moscow's overtures to China, but also to India and Vietnam. The Sino-Russian strategic partnership was recently reaffirmed, confirming that Russia needs partners to finance the costly exploitation of Arctic resources. Three Chinese companies have offered to provide capital as well as the necessary workforce: China National Petroleum Corporation (CNPC), China National Offshore Oil Corporation (CNOOC), and China Petroleum and Chemical Corporation (Sinopec). As early as 2009, an agreement was signed between CNPC and Transneft and Rosneft, with the Chinese company providing long-term loans of US\$25 billion for the construction of the Eastern Siberia-Pacific Ocean (ESPO) pipeline. A major new agreement was signed in June 2013, whereby CNPC acquired 20% of gas projects from Novatek. A memorandum signed in October 2013 between Sinopec and Sibneft provides for the annual supply of 100 million tons of Russian oil to China. This 10-year agreement would make China the largest buyer of



Russian oil in the world. Most of the oil and gas that Russia plans to extract from Arctic deposits is intended for the Asian market, and China in particular. In November 2014, Russia granted a gas exploration license to the Chinese company CNOOC,⁶⁸ which had already concluded a similar agreement with Iceland in March 2014.⁶⁹

Facing difficulties in acquiring drilling technology in the Arctic for Russia and even more so for China, major costs related to the development of Arctic resources, and the technical embargo imposed since March 2014 by the West following the war in Ukraine, China will probably be more interested in buying oil extracted under purchase agreements or joint ventures rather than trying to purchase operating sites by itself. However, China has capital and may wish to use this leverage to partner with Russia for the development of projects. Russia needs the Chinese partnership too much to forego its support, at the risk of developing a real dependence on the Chinese market and capital. Because of this geopolitical situation, in October 2014, a major agreement worth US\$400 billion was signed between Gazprom and CNPC for the annual delivery of 38 billion cubic metres of Siberian gas to China over 30 years (2018–48).⁷⁰ Despite the impressive cost of the contract, Russia must finance the major part of the infrastructure related to the project, which requires the total investment of US\$70 billion. The PRC has agreed to provide only US\$25 billion; the rest of this sum is to be secured by Russia. Given the price structure, Gazprom is unlikely to make much profit from the deal.⁷¹

Chinese companies are not limited to cooperation with Russia: CNOOC signed a cooperation agreement with Icelandic companies Petoro and Eykon Energy in November 2013 for the exploration of the Dreki sector on the Icelandic continental shelf. As is the case with mining activities, Chinese oil companies reveal their interest by signing partnership agreements in legal and market frameworks in areas that they target. There is no attempt at intimidation, contrary to the echoes of some media.

Furthermore, since 2011, the discovery of significant gas deposits and oil shale in China has greatly increased local hydrocarbon reserves. But these deposits are expensive to extract and pose serious environmental issues, especially owing to the large volumes of water necessary for their operation in a very arid environment. Will these findings dampen China's interest in Arctic hydrocarbons? This question remains open to debate. However, since the stunning fall of oil prices in 2014, China is concentrating its efforts on exploiting the low prices while temporarily putting on hold more costly and uncertain investments in hydrocarbons. The future evolution of the world's oil prices will certainly have some influence on the degree of Chinese involvement in the international relations in the Arctic.⁷²

Navigation in the Arctic

In Chinese academic literature, as well as in reflections on the reasons behind China's interest in the Arctic, navigation is a key element. Whether it is for the West or the Chinese, the potential opening of shorter maritime routes between Asia and the Atlantic Ocean would be of great interest to China. Executive director of PRIC, Yang Huigen, estimated that by 2020, between 5% and 15% of China's international trade would pass through the NSR (the business name for the segment of the Northeast Passage between the Kara Strait and the Bering Strait), north of Siberia.⁷³

Trial journeys have been carried out, mainly with the transportation of raw materials exploited in the Arctic region. The first attempt to transport Russian hydrocarbons to China using the NSR was made in August 2010, when the tanker *Baltica* delivered natural-gas condensate from Murmansk to Ningbo in China's Zhejiang province.



This first attempt was followed in November 2010, by the signing of an agreement on long-term cooperation in Arctic navigation for the development of the NSR between Sovcomflot, a Russian maritime transport company, and CNPC. This agreement underlines the fact that China does not contest the sovereignty claimed by Moscow over the internal waters of the Russian Arctic archipelagos. Consequently, it would be difficult for China to challenge Canada's claim, which is very similar to Russia's.

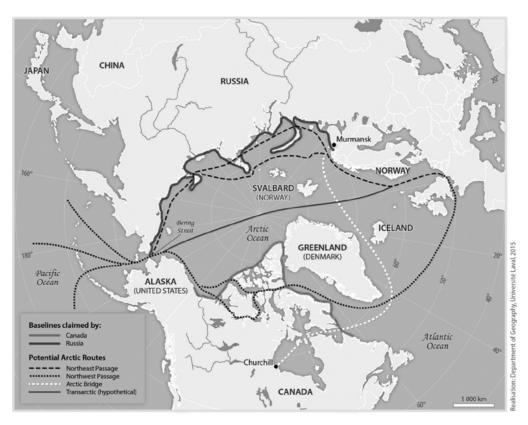


Figure 1. Potential sea routes through the Arctic.

In addition to the conventions already established, this agreement determines the conditions of joint use of the potential Northeast Passage, whether for transiting or transporting hydrocarbons from the Arctic oil and gas deposits, underlining the mutual interest in this route. Moscow sees in it the potential development of a lucrative partnership, while Beijing sees a fast route to ship the raw materials that China needs. Since 1991, Moscow has been promoting the NSR as an international sea route. In 2011 and 2012, several bulk carriers transported iron ore, loaded in Murmansk or Kirkenes (Norway), to Chinese harbours, transiting by the NSR. Several oil tankers and liquid-natural-gas tankers did the same between Vitino, Russia, and China.⁷⁴

Russia's efforts to develop international maritime traffic along the NSR are starting to pay off. There were only 4 transits in 2010, but 34 in 2011, 46 in 2012 and 71 in 2013, a number that dropped to 31 in 2014, 18 in 2015, 19 in 2016, and 27 in 2017.⁷⁵ These figures were indeed in-



creasing, but collapsed after 2014. The traffic is powered mainly by the export of natural resources from the Arctic to end markets in Europe and Asia; there are few pure transits in these Russian statistics. Besides, they are far from the numbers of transits through the Malacca Strait (65,000 yearly), Suez (18,000) or Panama Canal (11,000). Chinese commercial navigation companies do not abound in the Arctic. All the traffic is in the hands of Russian or European companies, which explains the low interest of Chinese ship owners in Arctic navigation. During the fall of 2013 and summer of 2014, the authors conducted a series of interviews with 31 major Chinese shipping companies. During these interviews, COSCO, China Shipping Development, China LNG CLSICO and Tong Li were the only carriers to claim an interest in the Arctic routes. COSCO, a major shipping company, admitted that profitability was unsure, while China Shipping Development and China LNG CLSICO were interested in the natural-gas projects of the Yamal peninsula, and consequently, in destination traffic related to resources. Another general survey with Asian, European and North American shipping companies also underlined the very limited interest of Asian shipping companies for Arctic shipping.

Despite the economic recess triggered by international sanctions and the oil-price drop, the Russian government has recently declared that it will continue to invest in the Arctic and is even considering starting new projects in the area.⁷⁹ One such project is the construction of a new container terminal in Murmansk, whose main purpose will be to connect Murmansk with Chukotka, Magadan and Kamchatka. According to the vice-governor of the Murmansk region, Chinese and Japanese private transportation companies have shown a very keen interest in the realization of this project.⁸⁰ Another investment is the construction of the new Belkomur railway line that should connect the White Sea, the Komi Republic, and Ural to facilitate the export of wood to China.⁸¹ The Russian government seems to link the realization of Russian Arctic ambitions with the construction of a strong and proactive partnership with China.

In fact, China seems more interested in Arctic routes to the extent that they provide access to the additional basins of natural resources—resources that China plans to obtain by market mechanisms—rather than other transit possibilities, which do not seem to interest the ocean carriers, Western or Asian. 82 From this point of view, China's strategy is opportunistic: Chinese firms explore the possibilities of improved access to resources and to commercial routes, as China knows that in both sectors, the Arctic represents only one of numerous possibilities. This practice could also be reflected in the trial voyages in the Arctic from Chinese shipping giant COSCO—the company sent five ships along the NSR in the summer of 2016: two in transit, the Yong Sheng and the multipurpose carrier Tian Xi from Finland via the Northeast Passage, while three other multipurpose ships carried construction parts for the Yamal LNG project to the Sabetta port in Russia.⁸³ With respect to resources, Chinese companies are much more active in Central Asia and Africa. Furthermore, China is investing significantly more in the development of a rail cargo service to Europe, which would also offer the advantage of bypassing Russia and certainly producing political effects in Central Asia.⁸⁴ At the end of March 2015, China's National Development and Reform Commission, the ministry of Foreign Affairs, and the ministry of Commerce jointly released the official longterm foreign and economic policy plan-Vision and Actions on Jointly Building Silk Road Economic Belt and 21st-Century Maritime Silk Road,85 which calls for billions of dollars in investments in Asia along the maritime and continental routes between China and Europe. This plan includes the NSR but also highlights the ongoing railroad projects linking China and Europe via Russia or Central Asia, which are witnessing a fast development for container traffic since 2013, as well as the stakes Chinese shipping companies take over in major ports along the Suez or the Panama routes. 86



Nonetheless, in September 2012, the Chinese press announced the conclusion of an agreement between Russian authorities and COSCO to study the profitability of commercial transit routes via the Russian Arctic zone.⁸⁷ On August 8, 2013, a COSCO ship, the *Yong Sheng*, a multipurpose cargo ship, left Dalian in the Chinese province of Liaoning for Europe. Though the *Yong Sheng* carried out a second voyage along the Northeast Passage in 2015, and a third in 2016, it is still too early to say that COSCO is strongly driven by the Arctic shipping commercial outlook. Is this a sign of the onset of China's commercial use of the Northeast Passage, or is it a political experiment above all, given that COSCO is a state-owned enterprise that did not show great enthusiasm for Arctic routes?

China's current military maritime strategy, although mostly focused on Chinese geopolitical interests in the South and East China Seas, do not entirely exclude the possibility of military manoeuvres in polar zones. Although the Artic region is not mentioned in China's first White Paper on military strategy released in 2015, it places a specific emphasis on the strategic management of sea areas. This new military strategic layout calls for China to protect its interests beyond Chinese territorial waters and to actively participate in securing international sea lines of communication. China intends to build military forces that are capable of performing certain operations in "far seas." Whether these far seas include Arctic areas remains an open question, although the current state of Chinese military forces makes it difficult to envision Chinese military intervention in polar conditions any time soon.⁸⁸

Conclusion

Despite China's growing presence in the Arctic, and the fact that research programmes have been ongoing for some time, the country's alleged political will is a very recent development. Many aspects have yet to be discovered and studied because Beijing has yet to articulate an official doctrine on the subject. However, analysing the evolution of Beijing's Arctic policy over the last fifteen years allows us to point to the existence of a strategy progressively being implemented by China to defend its interests in that region.

On the one hand, China has conducted a wide polar-research programme and implemented an actual management structure for its activities in the Arctic, thus reinforcing its presence in the region. On the other hand, after developing relationships with neighbouring countries of the Arctic Ocean, and participating in international debates regarding the future of the Arctic and its role in the world's global development, China is now seen as a key player in the Arctic without even having direct geographic access to it. While many variables remain unknown in the China-Arctic equation, China appears to have reached its first goal in this international matter: making itself heard in regional governance discussions, and having options in the development of market resources via market mechanisms. Finally, there is no doubt that China is interested in the Arctic's natural resources and maritime transportation potential. The country itself is intensely active diplomatically, and its companies are very dynamic in the region in efforts to make China's interests materialize—conduct that is neither threatening nor different from that of any other international player.

As China continues to develop a cross-regional diplomacy through new institutions, including the Belt and Road trade initiatives, it is becoming more apparent that the government of Xi Jinping has begun to view the Arctic as a zone of economic opportunities, even if the fruition of investment takes years or even decades.⁸⁹ The diplomatic and economic action taken by China is meant to position it as an indispensable partner for Arctic development.



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Abbreviations

CHNL Centre for High North Logistics

CNOOC China National Offshore Oil Corporation

CNPC China National Petroleum Corporation

NSR Northern Sea Route

PRC People's Republic of China

PRIC Polar Research Institute of China

SCIO State Council Information Office

Sinopec China Petroleum and Chemical Corporation

UNCLOS United Nations Convention on the Law of the Sea

USGS United States Geological Society

Notes

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CHAPTER 7



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Background

This paper outlines Canada's sovereign interests in space; its key messages were initially provided at the Royal Canadian Air Force's (RCAF's) 2017 Air Power Symposium in an address delivered by the Director General Space (DG Space). Shortly after, Canada released its new defence policy, *Strong, Secure, Engaged (SSE)*, which included significantly updated policy and levels of ambition for the defence space programme. This paper provides an overview of the space environment and discusses the RCAF's space programme and strategic plan.

The Space Environment

Canada has a long history of space accomplishments, beginning with the Alouette 1 satellite in 1962. It was the first satellite launched into space that was built entirely by a country other than the United States (US) or the Union of Soviet Socialist Republics, and it signaled to the world that Canada was a spacefaring nation. Having become the third such nation, Canada has since established itself as a leader in many areas of space, including earth observation (surveillance from space, especially with the RADARSAT programme and its synthetic aperture radar [SAR] technology), robotics (notably the Canadarm on the National Aeronautics and Space Administration [NASA] Space Shuttle and the International Space Station), space exploration (notably Colonel Chris Hadfield, as commander of the International Space Station), and in the fields of satellite communications (SATCOM). The Canadian Armed Forces (CAF) also has a long history of using space capabilities as part of defending Canadian sovereignty. Such capabilities include position, navigation and timing (PNT), SATCOM and space situational awareness (SSA). RCAF involvement can be traced to 1961, when the United States Air Force transferred a Baker-Nunn surveillance-of-space camera to Canada; it was installed at RCAF Station Cold Lake, Alberta, and another soon followed at St. Margarets, New Brunswick, due to an increase in the number of satellites on orbit.² The SSA mission expanded to include missile warning. Starting in 1988, and still in operation today, the Department of National Defence (DND) uses a leased commercial satellite system as part of the North Warning System to enable communications from the radar sites to the Canadian Air Defence Sector (CADS) and, ultimately, to the North American Aerospace Defence Command (NORAD) to support the aerospace-warning-and-control mission. In 2013, CAF launched its first operational satellite, Sapphire, as an integral sensor that contributes to the US Department of Defense (DoD) Space Surveillance Network (SSN) in support of SSA. Finally, PNT, delivered by the US DoD Global Positioning System (GPS), is ubiquitous throughout CAF operations, as it is embedded in most fleets and leveraged by tactical units for navigation and many other applications.



Sovereignty in the Space Environment

The space environment is considered a global commons, the unencumbered use of which is essential to the security and sovereignty of states. Space systems, for example, significantly enable the world's economies—consider that timing signals from the GPS system are used in defence, banking, trade, commerce, flight operations and telecommunications among other sectors. The fact that space underpins the global economy means that what happens in space impacts a state's security and, therefore, is a critical element of states' national infrastructure. A space system includes not only the satellites but also the ground segment that commands and controls the satellite; the communications and information systems that carry the signals; and, ultimately, the data and the users who operate/manage/use the data.

The concept of state sovereignty (as it applies to the air, land, maritime, cyber and space environments) is based in international law. While each state can claim sovereignty of their airspace, the same is not true for space. "From as early as 1919, international air law provided that a nation's sovereignty extended vertically to the airspace over its territory." It is generally accepted, yet imprecisely defined, that airspace ends and space begins at an altitude of approximately 100 kilometres, a demarcation known as the Karman Line. In accordance with international space law, based largely on the United Nations (UN) Outer Space Treaty, space is a global commons and belongs to no state. While the notion of sovereignty is different from that which exists in airspace, that does not mean that sovereignty is void in space. Satellites launched by states (or by entities under its control) are considered sovereign. A launching nation maintains sovereignty, jurisdiction and liability over any manned or unmanned spacecraft, and a satellite remains the property of its owner even after its operational life.

In addition to these unique facts about sovereignty in space, space capabilities are essential in enabling the defence and protection of Canadian sovereignty. Given the vast size of the Canadian territory and its dispersed population, CAF faces some challenges in guaranteeing national sovereignty. Harnessing the advantages of space-based capabilities, therefore, is a key element of mission planning and execution. The RCAF space programme provides surveillance "of" and "from" space, SATCOM and PNT in support of every defence mission, whether at home or abroad. SATCOM enable global command and control for commanders and provide direct communication between strategic and deployed headquarters or directly to tactical-level units, such as ships or special operations forces. Surveillance of space is used to gain SSA to ensure a known status of valuable assets in space and their protection in cooperation with allies. Surveillance from space, also known as earth observation, contributes to intelligence requirements and critical maritime domain awareness. These are some of the many examples of how space is leveraged to support every CAF role, including sovereignty missions conducted by Canadian Joint Operations Command (CJOC), Canadian Special Operations Forces Command (CANSOFCOM) and NORAD. As space activity increases, our vigilance in protecting these capabilities must also increase.

Space Is Increasingly Congested and Competitive

The Canadian defence policy, SSE, rightly describes the space environment "as being congested, competitive and contested." This characterization provides both a sense of urgency for the accelerated development of the RCAF space programme and attendant capabilities as well as an indication of risks that must be mitigated.



According to Space-track.org, the public space-object database provided by the US DoD and its SSN, there are over 70 states (the state itself or commercial/research entities under its control) and over a dozen international partnership organizations (such as the European Space Agency [ESA]) that operate satellites in space. The rate of launch in the commercial sector has increased *dramatically* over the last approximately five years—as the number of active satellites in orbit has grown by almost 40 per cent. The numbers will continue to increase, as costs have dropped and industry sees opportunity. "SpaceX deployed two satellites as part of its test for a constellation network that will consist of approximately 4,500 satellites. Another company, OneWeb, has approval for a network of 720 satellites and Telesat Canada has approval for one with 117." Canada currently has 47 satellites (commercial and government) in space, of which 42 are active on orbit. In 2015, the Canadian space sector contributed \$2.7B to Canada's gross domestic product as well as represented 24,000 jobs and more than \$256M in research and development (R&D).8

Innovation and technology have advanced significantly in the past decade, which has reduced costs and opened up the growing space industry to smaller players who represent a growing market area known as "New Space." Space-track.org tracks over 24,000 objects larger than a softball orbiting the earth. There are countless more objects with a much smaller diameter, all of which would have catastrophic consequence should collisions occur and debris be created. "According to the Center for Orbital and Reentry Debris Studies, a piece of metal space junk the size of a tennis ball is as lethal as 25 sticks of dynamite."9 While the probably of collision remains low, it is not insignificant, and collisions have occurred. In addition, deliberate debris-creating activity has occurred. In 2007, the Chinese FENGYUN 1C polar-orbiting weather satellite was destroyed as a result of a test of an antisatellite weapon. While the test did not contravene any legal agreements, it did create a large debris field of thousands of pieces (over 3,000 pieces of trackable debris) that cause a safetyof-flight issue for other satellites. The debris field will remain for a long time, as the rate of decay is measured in decades. "In less than a quarter of a century, the number of orbiting fragments large enough to destroy a spacecraft has more than doubled And the estimated tally of tiny objects which can harm or degrade spacecraft in the event of a collision, and are hard to track—is now around 150 million."10 "More than 750,000 fragments larger than a centimeter are already thought to orbit Earth, and each one could badly damage or even destroy a satellite."11 There are near collisions on a daily basis, and while satellite operators are normally notified in advance of a pending collision (known as a conjunction), there is little that can be done unless the satellite is capable of manoeuvring. Further, while the number of objects in space continues to grow, the numbers of useful orbits do not. Prime space "real estate" is in high demand—especially in low-earth orbit; the highly valued slots in the geostationary earth orbits; and, increasingly, in polar sun-synchronous orbits. Frequency-spectrum allocations are also in high demand and require judicious management.

The international community is aware of these issues, and solutions are being proposed to better manage the use of space in a more responsible manner, given the unimaginable alternative. Global Affairs Canada (GAC),¹² with the assistance of the Canadian Space Agency (CSA) and others, is playing an important role in this area, having recently assumed the chair of the UN Committee on the Peaceful Uses of Outer Space (COPUOS), which is working on initiatives such as debris-mitigation guidelines.¹³ Canada is also an active member of the International Telecommunication Union, a specialized UN agency responsible for managing the radio frequency (RF) spectrum. Through its partnership with the ESA, the CSA also participates in the European Union–led initiative to draft an international code of conduct for outer space activities.¹⁴ The overarching objective is to ensure a coordinated approach that continues to promote the peaceful use of space to assure continuous access to the space environment.



Space Is Increasingly Contested

International law regarding the use of space is largely anchored by the Outer Space Treaty, which was created in 1967. Per Article II: "Outer Space … is not subject to national appropriation by claims of sovereignty, by means of use or occupation, or any other means." The peaceful use of space is addressed in Article IV; signatories:

undertake not to place in orbit around the earth any objects carrying nuclear weapons and any other kinds of weapons of mass destruction, install such weapons on celestial bodies, or station such weapons in outer space in any other manner.

The moon and other celestial bodies shall be used by all State Parties to the Treaty exclusively for peaceful purposes. The establishment of military bases, installations and fortification, the testing of any type of weapons and the conduct of military manoeuvres on celestial bodies shall be forbidden. The use of military personnel for scientific research or for any other peaceful purposes shall not be prohibited. The use of any equipment or facility necessary for peaceful exploration of the moon and other celestial bodies shall also not be prohibited. ¹⁶

While the Outer Space Treaty is widely accepted by states, it is facing new challenges, given that space is no longer purely the purview of governments. The Outer Space Treaty was opened for signature in 1967 at the height of the space race between the only two nuclear powers. Today's global security environment is far more complex. Further, emerging concepts (e.g., on-orbit servicing) may be for stated peaceful purposes (e.g., to support timely repair of a satellite), but they can also be used as a weapon (e.g., to disable a satellite or displace it from its intended orbit). As noted in SSE, "how close is too close when it comes to approaching military satellites? Should testing or using debris-causing counter-space capabilities be prohibited?"17 The US, Russia and China, as already mentioned, have all tested antisatellite weapons (land-, air- or space-based) that can disable or destroy other satellites. Other weapons include lasers, to blind sensors; radiators to jam communication links (whether they are for data or to command the satellite); cyberattacks;¹⁸ and others that remain national secrets. The reality is that there is a broad spectrum of existing counter-space capabilities that threaten the notion of the peaceful use of space. SSE recognizes that "the return of major power rivalry, new threats from non-state actors, and challenges in the space and cyber domains have returned deterrence to the centre of defence thinking." Despite these threats and the ongoing work of the international community to address them, the existing legal framework governing what actions a state can legally take can be ambiguous.

Defence Space Program and the RCAF's Strategic Plan

SSE recognizes the importance of space as a critical emerging area in the defence of Canada.²⁰ Through SSE, the government has charged the Defence Team with an expanded space mission, specifically to "defend and protect military space capabilities,"²¹ while remaining committed to the peaceful use of space. It also recognizes the global nature of space and further charges the team to work "closely with allies and partners to ensure a coordinated approach to assuring continuous access to the space domain and space assets."²² Since 2014, the RCAF and its allied partners are coordinating and collaborating their space efforts through the Combined Space Operations Initiative (CSpO). SSE also requires CAF to



Invest in and employ a range of space capabilities, including space situational awareness, space-based earth observation and maritime domain awareness and satellite communications ... Conduct cutting-edge research and development on new space technologies in close collaboration with allies, industry and academia to enhance the resilience of space capabilities and support the Canadian Armed Forces' space capability requirements and missions.²³

In 2016, the Vice Chief of the Defence Staff transferred functional responsibility of space to the RCAF. The Commander RCAF, supported by DG Space, has developed the *Canadian Armed Forces Defence Space 5-Year Roadmap* that:

lays out the framework for the Defence Space Program [see Figure 1] ... designed to integrate space-enabled effects into joint military operations through a comprehensive approach across Force Development, Generation and Employment. The Program is designed to support the DND/CAF's space goals of employing space capabilities in support of Canada's Defence commitments, assuring DND/CAF access and use of space and protecting critical national and allied space systems.²⁴

This plan provides a solid foundation and must now be updated and integrated into the *Royal Canadian Air Force Campaign Plan* to ensure optimal alignment with *SSE*.

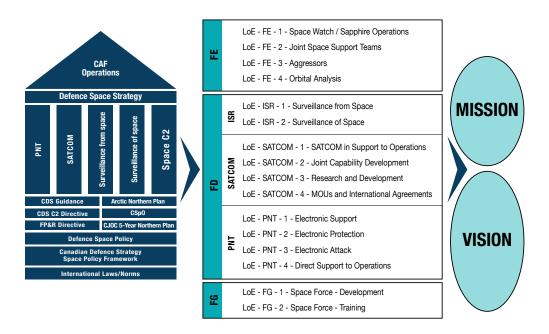


Figure 1. Defence Space Programme²⁵

The DG Space mission is "to maintain Space Domain Awareness, and to develop, deliver and assure space-based capabilities in order to enable the Joint warfighter at home and abroad." The resources and personnel presently allocated to deliver this vital mission have been modest, and yet, the work accomplished to date has been remarkable with, in addition to RCAF members, integrat-



ed support by personnel in the Canadian Army, Royal Canadian Navy, CANSOFCOM, Canadian Forces Intelligence Command (CFINTCOM), Information Management Group (IM Gp) and Defence Research and Development Canada (DRDC). Recognizing a need for increased capacity, *SSE* provides an additional 120 civilian and nearly two dozen military positions to the DND/CAF space enterprise. In addition, given the importance of space to Canada, coordination with other government department (OGD) partners (including GAC, Innovation, Science and Economic Development [ISED] Canada, CSA and Natural Resources Canada) will also remain a key requirement for optimal whole-of-government outcomes.²⁷

Force Employment

In the force employment (FE) role, the RCAF delivers and provides integrated space capabilities to the Commanders of CJOC and CANSOFCOM. The position of DG Space is double-hatted as the Space Component Commander, and responsibilities are referenced in the Royal Canadian Air Force Doctrine Note 17/01, Space Power.²⁸ Reporting to DG Space, the Director of Space Operations and Readiness is responsible for coordinating space effects through the Canadian Space Operations Centre (CANSpOC). CANSpOC achieved initial operational capability (IOC) in 2014 and is staffed to provide a 24/7 space watch that is integrated with the Canadian Forces Integrated Command Centre (CFICC). Through the CSpO, CANSpOC coordinates with the US DoD Joint Space Operations Center (JSpOC), soon to be evolved into a combined space operations centre, and other Five Eyes space operations centres. The space watch monitors and reports on SSA, missile warning (as reported by the US DoD JSpOC), space weather and status of space mission systems. CANSPOC has the capability to generate joint space support teams (JSSTs), which provide space-effects subject matter expertise for a deployed commander. A JSST, for example, is being generated for deployment to Latvia in support of Canada's contribution to the North Atlantic Treaty Organization's (NATO's) enhanced forward presence under Operation REASSURANCE.²⁹ CANSPOC also coordinates with the SATCOM Operations Centre (SOC), which is the responsibility of 764 Communication Squadron within the IM Gp, and the Sensor System Operations Centre (SSOC), which is embedded within 22 Wing / CADS and supports Sapphire operations.

CANSPOC is evolving in support of SSE; is developing improved SSA, orbital analysis and space operational planning; and is responsible for overseeing the navigation warfare (NAVWAR) programme. The NAVWAR programme's goal is to achieve PNT information superiority for CAF across all domains and the full spectrum of operations. While PNT enables many applications, should the capability be denied through jamming or spoofing, it could severely impact operations. In coordination with Australian, British and American partners as well as through joint research-and-development efforts led by DRDC, the NAVWAR programme seeks to provide the tools, training, tactics and procedures to ensure that operational commanders and forces are capable of operating in PNT-degraded environments. CANSPOC also provides support to ISED in developing a PNT strategy for Canada.

Force Development

In the force development (FD) role, the RCAF verifies and coordinates CAF space requirements as well as develops, delivers and assures projects, which are then implemented by IM Gp, OGDs or in partnership with allies. The result is a mix of CAF, Government of Canada, allied and commercial assets/systems that are used to generate space effects in support of operations and in the defence of sovereignty. This role is led by the Director of Space Requirements, who reports to DG Space. The RCAF has a range of space capabilities for SATCOM, surveillance of space and surveillance from space.



SATCOM

As a key partner to the RCAF, IM Gp provides SATCOM capabilities for CAF, manages the DND/CAF RF spectrum and provides life-cycle-management support for the ground segment of space systems. In the past, SATCOM services have been delivered through contracts with commercial suppliers or by requesting allied military satellite bandwidth on an ad hoc basis. Neither option has been sufficient to reliably meet CAF's demand in a timely fashion. To provide the capability required by the operational community, CAF has partnered with the US DoD and other allies to provide military satellite communications (MILSATCOM) through two projects. The first, Protected Military SATCOM (PMSC) project and presently in the implementation phase, leverages the US DoD Advanced Extremely High Frequency (AEHF) constellation to provide survivable and jam-resistant SATCOM in Ka and Q bands³⁰ to global users. The capability achieved IOC in 2013 and will reach full operational capability (FOC) in 2024. Through a memorandum of understanding (MOU) and foreign military sales, the project will provide two ground stations (that connect to DND networks and provide guaranteed bandwidth on the AEHF constellation [equivalent to 4.3 per cent of total capacity]) and 43 mobile (tactical), naval and strategic terminals. The second, the Mercury Global (MG) project and also in the implementation phase, leverages the US DoD Wideband Global SATCOM (WGS) constellation to provide high bandwidth SATCOM in X band and military Ka band to global users. The capability achieved IOC in 2013 and will achieve FOC in 2018. The project includes national and international ground stations that connect to DND networks as well as 1.9 per cent of the WGS's bandwidth. The WGS can be accessed by terminals in the land, air and naval environments.

Notwithstanding the capabilities delivered by PMSC and MG, several challenges remain in the SATCOM area. *SSE* recognizes these challenges, and two new projects are being initiated to address critical capability deficiencies. The first, the Tactical Narrowband Satellite Communications (TNS) Project,³¹ will provide guaranteed, reliable and secure SATCOM (voice and data) in the narrowband ultra-high frequency (UHF) band for operations and will provide coverage from 65 degrees South to 65 degrees North. The TNS Project will establish an MOU with the US DoD to gain assured access to the Mobile User Objective System (MUOS) UHF SATCOM constellation. This will fill a critical capability deficiency, with a planned IOC in 2021 and FOC in 2023. The second project is the Enhanced Satellite Communication Project – Polar (ESCP-P); it will provide guaranteed, reliable and secure access in narrowband and wideband to support operations at the operational and tactical levels in the Arctic, which is critical to domestic sovereignty missions, including NORAD operations. The planned IOC is no later than 2029, with FOC no later than 2031. This project seeks to include the requirements of OGDs and allies such as the US, Norway and Denmark. Given the international scope of ESCP-P, the project is one where Canada will demonstrate leadership in the MILSATCOM area.

Surveillance of Space

As mentioned above, the surveillance of space has been an activity with a long history in the RCAF. Having situational awareness of the vastness of space is the first step in ensuring that space-based capabilities can be defended and protected. The most recent capability enhancement, Sapphire, achieved IOC in 2013 and is a strategic national contribution to the SSN. *SSE* recognizes the need to replace Sapphire with a new capability through the Surveillance of Space 2 (SofS 2) project. SofS 2 seeks to acquire capabilities to identify and track objects in space that could threaten Canadian and *allied* space-based systems³² as well as *defend* and *protect* military space capabilities. Like Sapphire, the capability delivered by SofS 2 will be integrated into the SSN.



Surveillance from Space

The capability in the space environment that has perhaps demonstrated the greatest growth is surveillance from space. Ever-evolving technologies, innovative approaches and user adaptation have yielded significant operational gains for CAF. To date, surveillance from space has been used primarily to support intelligence, surveillance and reconnaissance (ISR) as well as maritime domain awareness—known also as near real-time ship detection. Surveillance from space is an area where there has been significant cooperation with OGDs, given the application of such technology. Led by the CSA, for example, RADARSAT and RADARSAT-2 evolved into strategic SAR and maritime-identification programmes. To meet DND/CAF needs, the Polar Epsilon ground segment project was implemented to obtain downlink data from the RADARSAT-2 satellite and to deliver SAR data to CJOC's regional and deployed task forces as well as to NORAD.

The follow-on project to RADARSAT-2, the RADARSAT Constellation Mission (RCM), will provide an even greater global situational awareness, including the Arctic and maritime domains through identification and tracking.³³ RCM, a CSA-led government project, includes three satellites scheduled to launch in fall 2018, each featuring a dual payload: SAR and maritime automatic identification system (AIS).³⁴ The resulting on-satellite processing enables improved data fusion between the two payloads to expose "dark" contacts in the maritime environment, with significantly reduced latency from existing methods. Another strategic national asset, RCM will also deliver improved land surveillance and intelligence products. RCM IOC is expected in early 2019. Classified data will be delivered to CAF through an augmented ground segment that is labelled the Polar Epsilon 2 project.

Another surveillance-from-space capability, delivered via the Joint Space Surveillance project, is the Unclassified Remote-Sensing Situational Awareness (URSA) system. URSA leverages SAR data from RADARSAT-2 and imaging from seven commercial satellites and comprises two air-transportable ground stations that can be deployed to support deployed commanders. As the system is mobile and the imagery is unclassified, products can be shared with allies and partners. The deployment of the URSA capability earned recognition from the US National Geospatial Intelligence Foundation at its annual awards programme in 2017. The citation for the URSA team, which was led by CJOC's Canadian Forces Joint Signals Regiment, reads:

Military Achievement Award:

Canadian Armed Forces

In December 2016, the Canadian Armed Forces (CAF) deployed the Unclassified Remote-sensing Situational Awareness (URSA) system to the Middle Eastern AOR [area of responsibility] under Operation Foundation. The innovative addition of a near real-time ship detection capability allows the system to support CAF and coalition maritime operations by sharing with the region's combined maritime forces and U.S. Central Command. The result is an enhanced maritime common operating picture in previously dark areas of interest, improved situational awareness for deployed commanders, and cross-cueing of space, air and seaborne assets. URSA is a force multiplier highlighting the effective operational use of space-based maritime domain awareness.³⁵

With the recent transfer of functional authority for space, the URSA capability is in the process of being transferred from CJOC to the RCAF.



As mandated by SSE, the Defence Enhanced Surveillance from Space – Project (DESS-P) will implement a follow-on to RCM for surveillance-from-space capabilities for CAF. DESS-P requirements may include any combination of SAR, multispectral and hyperspectral imagery as well as RF-based systems. CSA is also developing a project called Synthetic Aperture Radar – Data Continuity (SAR-DC), intended to deliver remote-sensing capabilities for civil applications, with a capability beyond RCM's expected end of life in 2025. As with all national space initiatives, potential synergy between these two projects will be fully evaluated as they evolve to ensure optimal outcomes for national objectives.

Conclusion

In conducting operations to defend Canada's sovereignty, CAF is enabled by indispensable space systems, including GPS, SATCOM as well as surveillance from and of space. Space capabilities are high pay-off force enablers and multipliers, especially when considering the size of the territory CAF must defend and Canada's dispersed population. CAF needs to be able to defend and protect space capabilities to assure resilient systems and redundancy in cooperation with allies and partners. The RCAF will continue to advance space capabilities to further enhance sovereignty operations in the areas of improved SATCOM availability as well as coverage and enhanced surveillance of and from space. Given the projected global increase in space activity and areas of growing risks, the mission to defend and protect space capabilities will require increased attention. In addition to enhancing capabilities, international efforts must continue to reinforce accepted norms in space to address emerging challenges in a congested, competitive and contested environment. The issues of congestion and debris as well as orbit and frequency saturation require solutions that are widely accepted by spacefaring nations for the benefit of all. Along with all stakeholders in the CAF defence space enterprise (and in collaboration with OGD partners and allies), the RCAF will continue to evolve its leadership role in the development, delivery and assurance of space capabilities that are essential to almost all CAF missions, including in the defence of Canada's sovereignty.

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Abbreviations

AEHF Advanced Extremely High Frequency

C2 command and control
CADS Canadian Air Defence Sector
CAF Canadian Armed Forces

CANSOFCOM Canadian Special Operations Forces Command

CANSPOC Canadian Space Operations Centre

CDS Chief of the Defence Staff

CJOC Canadian Joint Operations Command

CSA Canadian Space Agency

CSpO Combined Space Operations Initiative

DESS-P Defence Enhanced Surveillance from Space – Project

DG Space Director General Space

DND Department of National Defence (Canada)

DoD Department of Defense (US)

DRDC Defence Research and Development Canada

ESA European Space Agency

ESCP-P Enhanced Satellite Communication Project – Polar

FD force development
FE force employment
FG force generation

FOC full operational capability
FP&R force planning and readiness

GAC Global Affairs Canada
GPS Global Positioning System

IM Gp Information Management Group IOC initial operational capability

ISED Industry Science and Economic Development ISR intelligence, surveillance and reconnaissance

JSpOC Joint Space Operations Center (US)

JSST joint space support team

LoE line of effort

MG Mercury Global

MILSATCOM military satellite communications
MOU memorandum of understanding



NAVWAR navigation warfare

NORAD North American Aerospace Defence Command

OGD other government department

PMSC Protected Military SATCOM
PNT position, navigation and timing

R&D research and development **RCAF** Royal Canadian Air Force

RCM RADARSAT Constellation Mission

RF radio frequency

SAR synthetic aperture radar
SATCOM satellite communications
SofS 2 Surveillance of Space 2
SSA space situational awareness

SSE Strong, Secure, Engaged: Canada's Defence Policy

SSN Space Surveillance Network

TNS Tactical Narrowband Satellite Communications

UHF ultra-high frequency
UN United Nations

URSA Unclassified Remote-Sensing Situational Awareness

US United States

WGS Wideband Global SATCOM

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- 28. Canada, DND, Royal Canadian Air Force Doctrine Note 17/01, *Space Power*, 2017-06-27, Chapter 3, accessed April 12, 2018, http://w08-ttn-vmweb01/CFAWC/en/doctrine/index.asp. This is the first ever publication of space doctrine for CAF, and an updated version is expected in 2018.
- 29. "Operation REASSURANCE," Canada, DND, accessed April 12, 2018, http://www.forces.gc.ca/en/operations-abroad/nato-ee.page.
- 30. Used for SATCOM (and other RF) systems, the X (8–12 GHz), Ka (27–40 GHz) and Q (33–50 GHz) bands are ranges of frequencies in the microwave region of the RF/electromagnetic spectrum. In general, these bands provide extremely good rain resilience and can be used by users in remote areas who are not normally connected to higher bandwidth systems. Systems in these frequency ranges use smaller satellite dishes that offer reduced costs and increased mobility advantages.
- 31. "Tactical Narrowband SATCOM," Canada, DND, accessed April 12, 2018, http://www.forces.gc.ca/en/business-defence-acquisition-guide-2015/joint-and-other-systems-444.page.
 - 32. Canada, DND, Strong, Secure, Engaged, 39.
- 33. "RADARSAT Constellation," Canada, CSA, accessed April 12, 2018, http://www.asc-csa.gc.ca/eng/satellites/radarsat/default.asp.
- 34. "Automatic Identification System," Wikipedia, accessed April 12, 2018, https://en.wikipedia.org/wiki/Automatic_identification_system.
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CONCLUSION

CANADIAN SOVEREIGNTY CHALLENGES AND THE IMPERATIVE FOR A NEW DEFINITION



BY PIERRE-GERLIER FOREST AND JEAN-CHRISTOPHE BOUCHER

As mentioned in the introduction, this project began with an exchange over a dinner in Calgary between Lieutenant-General Hood, then Commander of the RCAF, and P. G. Forest, as both recognized the difficulty for the RCAF to promote its core missions and to convince policy makers and Canadians to devote significant resources to the organization to accomplish these tasks. For them, the problem revolved around how the RCAF articulated its "policy claims" and defined its relevance, as an institution, for Canadians born or even raised after the Cold War. Through these claims, the RCAF outlines its role in Canada's defence policy and more largely, in Canadian society, as do all other major groups or organizations (including private sector actors).

The recognition of the legitimacy of these claims has considerable consequences on policy formulation and, of course, on public resource allocation. In a democratic society, one is always faring better if the government of the day is convinced the claim to public resources and influence is in line with public preferences. If a large section of the population disagrees with an organization's approach or just doesn't pay attention, that organization may easily find itself at the bottom of the government's list of priorities—even if the cases were good and based on the best possible evidence. To be sure, ongoing national conversations on the state of the RCAF, especially with respect to replacing its major legacy platforms, have been characterized by contestations made by different segments of the Canadian public of the organization's policy claims. In many ways, these debates have made it more difficult for the RCAF to promote policy options to the government of the day, and frankly, it is not clear its current approach resonates well with the preoccupations and priorities of many younger Canadians.

What does the RACF have to say about its role in the broader policy landscape of Canadian defence policy? What are the threats faced by Canadians in the 21st century? Is the RCAF vision aligned with Canada's understanding of its role in world affairs? These foundational questions pertaining to the RCAF mission are grounded in a larger issue: the concept of sovereignty. Indeed, to defend Canada is to protect its sovereignty, the integrity of Canadian territory and the authority of its democratic government.

Nevertheless, the conversations across Canada during the round tables as well as the chapters in this book highlight how this traditional conceptualization of sovereignty is problematic. Indeed, the contributions in this book suggest a much more nuanced and richer understanding of what the notion of sovereignty means for Canadians. This conceptual aperture, this rift between RCAF and other Canadians' views of sovereignty, has real policy implications. As the RCAF anchors its policy claims in a traditional view of sovereignty, the organization is unable to articulate a vision that would profit from the enthusiasm this notion creates in other areas, such as international economy (what is sovereignty in an age of digital communication, block chain technology, and 3D printing?) or cultural studies (how do other actors, such as Indigenous peoples, consider this issue?).



Furthermore, the RCAF does not benefit from the opportunity to redefine its mission within our defence policy. In this sense, this project stemmed from the recognition of senior leadership in the RCAF of the need to reformulate their traditional policy claims and, notably, to move away from operational considerations to focus on the broader challenges of leading a military organization in a democratic society with particular arrangements of civil-military relations.

We find three distinct claims within Canada that challenge the Westphalian definition of sover-eignty. First, some actors believe Canada has limited resources, which must be allocated according to the "real" threats we face as a nation, not to pursue symbolic issues (a war against Denmark? Be serious!) or address remote possibilities. In Calgary, for example, participants argued that we need to recognize that finite resources must go first to real and more immediate threats; for example, being capable to intervene abroad when failed states become a risk for the international order might be more important than preserving an outdated vision of Canadian dominion over the Northwest Passage.

Economists, like those who were meeting during the round table in Calgary, think in terms of trade-offs. If one sees the world through a Westphalian prism, very few things are more relevant, from a sovereignty viewpoint, than protecting the integrity of our territory, including the Arctic borders or our commercial fishing zones. But what if one doesn't believe these are essential, vital challenges to Canadian sovereignty? If we were to invest more in the defence of the Arctic, there would be less resources left to do something else. What if one believes instead that what we need to be doing is investing ourselves in multinational activities, including military operations? What if one believes that the fundamental threats come from subnational actors, private actors, failed states, and so forth?

Much of the discussion in Calgary was in fact focussed on Canada's relationship with the US and notably, on the future of NAFTA. Suffice it to say for the time being that for a trading nation like Canada, with more than 50% of our gross domestic product (GDP) engaged in trade, this is truly an existential conversation. Our freedoms are not independent of our prosperity and the latter, in turn, is very much dependent on our capacity to trade. Like the Netherlands during the Golden Century—a small democratic federation surrounded by powerful neighbors—our economic policy is an essential tool for the affirmation and promotion of our national interests. One can also argue that a prosperous nation is in a better position to afford a robust army, air force or navy. Given our relative wealth, therefore, we should be expected to spend more for our collective defence. Nevertheless, successive governments have avoided substantially increasing military expenditure, and there are no realistic expectations that Canada will devote 2% of GDP to conform to NATO's 2014 Wales Summit Declaration. Despite calls to nationalism and patriotism underlying some recent political events, the concept of sovereignty itself is contested.

Also, there are actors who believe we have already entered a new international regime, post-West-phalian, in which states have limited (albeit important) roles in comparison with transnational forces and international "hybrid" organizations. We probably all remember Thomas Friedman's prediction that economic globalization and the worldwide circulation of data and information would result in a "flat world." Yet, the truth seems to be that we are entering instead a world that feels very "spiky": vast economic zones with large populations that aspire to live in quasi-autarky. This is a world in which the sovereignty of a few major powers like China, Russia, or the US is affirmed, but where many smaller nations find themselves forced to live by the rules imposed by their imperial leader. Recent trends in Chinese and Russian assertiveness, and the underlying sabotage of multilateral governance structure, warrants pessimism in the capacity of Canada to promote a rule-based international system by itself.



In the short term, obviously, the regime born from the Treaty of Westphalia still prevails: for each territory, one government, undivided, with all the legal and political implications that such structure entails. Yet, it would be hazardous to believe that the Westphalian order is with us forever—an illusion similar to the mistaken belief that followed the fall of the Berlin Wall, when many read Francis Fukuyama's famous thesis on the end of history as a declaration on the definitive triumph of democracy.² Good strategic thinking requires us to look at the margins, where the new trends are born and the new dogmas emerge, even when the odds are low. In our minds, two intertwined processes are already indicative of a world in flux. First, if we were to talk to Canadians, we would be surprised at how many are already thinking of a different world, guided by different principles. Second, there are good indications that the post–Second World War order and its fundamental institutions are in fact in jeopardy, and that the traditional bases of Canadian foreign policy are being displaced, forcing us to reconsider our assumptions.

Third, other actors (such as the Inuit in the Arctic) believe our country is a multinational reality, of which borders do not necessarily coincide with the limits of different nations. At the round tables at Massey College in Toronto and Université Laval, the group heard several stakeholders suggest that Indigenous Peoples may well question the notion that the Arctic is in fact Canadian territory. In this volume, Heather Exner-Pirot makes a similar argument that the management of Northern territories should take into consideration multiple sovereignty claims. We can multiply the examples, but the underlying message should be clear: Canadian political elites, and certainly senior leadership in the RCAF, cannot continue to take for granted the definition of sovereignty in which most traditional policy claims are grounded.

These three groups of actors, who are ready to question the traditional conception of sovereignty, each have a voice. Some of their contentions can even be quite sophisticated. Furthermore, they also have the attention of some of our own political masters. For example, if the government were to take seriously its own reconciliation agenda with Canada's Indigenous Peoples, it cannot but end with a new concept of sovereignty. Is the RCAF, or other branches of the Canadian Armed Forces, for that matter, prepared for this discussion? Is the RCAF prepared not only to argue in defence of the traditional definition of sovereignty, which we are sure we can all do at a level of perfection, but also to think of its role in radically different systems of thought? How does one embrace reconciliation in strategic thinking? What essential role can the air force play to support the role of Canada in the emerging global order? How does one demonstrate to Canadians that the RCAF leadership is not only the steward of a collection of ageing aircraft—as the media like to portray it—but a shield to real and current threats aimed at our freedoms and safety?

We believe it is time for the Government of Canada, the Canadian Armed Forces, and Canadians as a whole to engage in some difficult policy thinking, of a sort we are not used to in this country, in which we tend to concentrate our attention on the world as we want it to be—a system regulated by the principles of international liberalism.

Notes

- 1. Thomas Freedman, *The World is Flat: A Brief History of the Twenty-first Century* (New York: Farrar, Straus and Giroux, 2005).
 - 2. Francis Fukuyama, The End of History and the Last Man (New York: Free Press, 1992).