Edited by

Dwayne Ryan Menezes

Heather N. Nicol



THE NORTH AMERICAN ARCTIC

Themes in Regional Security

UCLPRESS

The North American Arctic

The North American Arctic

Themes in Regional Security

Edited by

Dwayne Ryan Menezes and Heather N. Nicol



First published in 2019 by UCL Press University College London Gower Street London WC1E 6BT

Available to download free: www.uclpress.co.uk

Text © Contributors, 2019

Images © Contributors and copyright holders named in captions, 2019

The authors have asserted their rights under the Copyright, Designs and Patents Act 1988 to be identified as the authors of this work.

A CIP catalogue record for this book is available from The British Library.

This book is published under a Creative Commons CC BY-NC license (CC BY-NC 4.0). This license allows you to share, copy, redistribute and adapt the work for noncommercial use, provided the original author and source are credited, and any changes made are indicated. Attribution should include the following information:

Menezes, D.R, and Nicol, H.N. (eds.). 2019. *The North American Arctic: Themes in Regional Security*. London: UCL Press. DOI: https://doi.org/10.14324/111.9781787356610

Further details about Creative Commons licenses are available at http://creativecommons.org/licenses/

Any third-party material in this book is published under the book's Creative Commons license unless indicated otherwise in the credit line to the material. If you would like to re-use any third-party material not covered by the book's Creative Commons license, you will need to obtain permission directly from the copyright holder.

ISBN: 978-1-78735-663-4 (Hbk.) ISBN: 978-1-78735-662-7 (Pbk.) ISBN: 978-1-78735-661-0 (PDF) ISBN: 978-1-78735-664-1 (epub) ISBN: 978-1-78735-665-8 (mobi)

DOI: https://doi.org/10.14324/111.9781787356610

Contents

List	t of Figures and Tables	X
List	t of Contributors	xiii
List	t of Abbreviations	XXV
Edi	torial Preface	xxix
Par	rt 1: Introduction: Security Paradigms for the North American Arctic	
1	Introduction	3
	Dwayne Ryan Menezes and Heather N. Nicol	
2	North by Far Northwest: Indigenising Regional Policy	
	Innovation in Border Management	23
	Christian Leuprecht and Todd Hataley	
	2.1. Introduction	23
	2.2. Canada's Cold War Border	26
	2.3. Post-Cold War Border	29
	2.4. The New Cold War Border	29
	2.5. The Bordering Process in the Arctic	31
	2.6. Conclusion	32
3	The History of the Jay Treaty, and its Significance to	
	Cross-Border Mobility and Security for Indigenous Peoples	
	in the North American Northern Borderlands and Beyond	35
	Greg Boos, Heather Fathali and Greg McLawsen	
	3.1. Introduction	35
	3.2. History	36
	3.3. Scope: A Determination based on Racial Considerations	37
	3.4. Canada	39
	3.4.1. Indigenous Groups in Canada: Indian, Inuit,	
	Métis and métis	39
	3 4 2 No Reciprocal Right to Enter Canada	40

	3.5. An Exploration of the Jay Treaty in the Northern	
	Borderlands	43
	3.5.1. The Arctic	44
	3.5.2. A Case Study: The Inuit	45
	3.6. Cross-Border Culture and Commerce	47
	3.7. Conclusion	50
4	A Land Without Borders – Inuit Cultural Integrity Dalee Sambo Dorough	67
	4.1. Introduction	68
	4.2. Background	69
	4.3. Major Events	70
	4.3.1. Inuit and International Political Development	70
	4.3.2. Developments within the United Nations	72
	4.3.3. Organisation of American States	78
	4.3.4. Present-Day Considerations	78
	4.4. Conclusion	86
Par	t 2: Defining Trends in North American Arctic Security	
5	Key Issues to Arctic Security	93
	Randy 'Church' Kee, Maj Gen, USAF (Ret.)	
	5.1. Introduction	93
	5.2. Defining the Arctic: The Big Picture	95
	5.3. The History of Arctic Security Interests	100
	5.4. A Physically Changing Environment of the Arctic	103
	5.5. Recent Trends and Associated Impacts to Arctic Residents	105
	5.6. Economic Aspects	107
	5.7. Implications for Safety and Security	109
	5.8. Factors to Consider for Improving the Future	
	Security and Defence Outlook for the Arctic	
	among Like-Minded Nations	111
	5.9. Conclusion	114
6	The North American Arctic Maritime and Environmental	
	Security Workshop 2018: Summary Workshop Report	116
	Randy 'Church' Kee, Maj Gen, USAF (Ret.);	
	Paula Williams and Heather N. Nicol	
	6.1. Introduction	116
	6.2. Description of the Workshop	117
	6.3. Summary of Plenary Panel Discussions	119
	6.4. Analysis	124

	6.5. Recommendations	126
	6.6. Conclusions	131
7	Regional Border Security Management in the Territorial North Heather N. Nicol, Adam Lajeunesse, P. Whitney Lackenbauer and Karen Everett	134
	7.1. Introduction	134
	7.2. Land Borders and Borderlands	136
	7.3. Air Borders	145
	7.4. Maritime Boundaries	146
	7.5. Terrorism and Undocumented Immigration7.6. Conclusions	150 151
8	Bridging the Gap: Fostering Military-Civilian Collaboration to Improve Marine, Aviation and Telecommunications	
	Infrastructure in the US Arctic	155
	Mead Treadwell and Taylor Drew Holshouser	
	8.1. Absence of US Arctic Infrastructure Creates a Power	
	Imbalance in the Arctic, and a Change in Approach	
	is Needed	155
	8.2. Historically, US Arctic Military and Civil Development	
	have helped each other, but Revenue Considerations often came later	157
	8.3. Developing Revenue to pay for Arctic Infrastructure	13/
	helps expand both Civil and Military Infrastructure	160
	8.3.1. Shipping	161
	8.3.2. Aviation	163
	8.3.3. Telecommunications	164
	8.4. Conclusion	165
Par	t 3: Security: Policy, Cooperation and Institutional Challenges	
9	Canada's Northern Borders in the Context of National	
	Border Regimes	171
	Karen Everett	
	9.1. Introduction	171
	9.2. Methods and Methodology	172
	9.2.1. The Canadian Government Documents	172
	9.2.2. The Copenhagen School and the Five	
	Security Sectors	175
	9.3. Analysis	176
	9.4. Maritime Border Management	180

CONTENTS

	9.5. Developing Security Policy for the North	183
	9.6. Conclusion	184
10	An Evaluation of the Security Relationship between	
	Canada and Greenland	188
	Andrew Chater	
	10.1. Introduction	188
	10.2. Hans Island	190
	10.3. The Continental Shelf10.4. Oil and Gas in Greenland	192 194
	10.5. Borders	194
	10.6. Conclusion	197
11	Arctic Security for a Big Small Country	200
	Tony Penikett	
	11.1. Introduction	200
	11.2. Old Crow	200
	11.3. Difficult Choices	201
	11.4. Different Perspectives on Security	202
	11.5. Securing the Arctic Community	207
	11.6. Conclusion: A Security Framework	210
Par	t 4: Emerging Trends	
12	Minimising Vulnerability in Canada's Arctic Borderlands	
	through Cross-scale Linkages: The Beaufort Sea Partnership	215
	Justin Barnes	
	12.1. Introduction	215
	12.2. Defining Vulnerability	216
	12.3. Climate Change Vulnerabilities in the Canadian North	217
	12.4. Vulnerability, Interdependence, and Multi-Level	
	Governance in the Canadian Arctic	219
	12.5. Reducing Vulnerability through Cross-Scale	
	Governance Structures	221
	12.6. The Beaufort Sea Partnership 12.7. Discussion	224 226
	12.8. Conclusions	229
		22)
13	Reconciling the North: Transit Pipelines and the Pursuit of	
	Self-Sufficient Self-Government in the Yukon Nicholas Wilson	233
	13.1. Introduction	233
	13.2. Challenging the Westphalian 'State' System	235

		13.2.1.	The Colonial Context	235
		13.2.2.	Borders: A Reconceptualisation	237
		13.2.3.	Borders in the Northern Context	238
	13.3.	The Inc	entive Model: Finding a Way	240
			The Practice of Bordering	241
			Market Incentives and the Provision of	
			Public Goods	242
		13.3.3.	The Umbrella Final Agreement and SGYFNs	243
	13.4.		entive Model: Funding the Right of	
			termination	245
		13.4.1.	The Power to Levy Taxes: A Lawful Solution	
			to an Enduring Problem	245
		13.4.2.	Historical Convention vs. Present Need	246
		13.4.3.	Transit Fees: An Economic Model from	
			Developing Countries	248
		13.4.4.	Revisiting Border Porosity and the Strength	
			of Incentives	251
	13.5.	Conclu	ding Remarks	251
11	(That	1	th 27 I I Tue ffi alain d Ca assuitas in	
14			s up there?' Human Trafficking and Security in	260
	Mike I		erican Arctic	260
		Introdu	tation	260
	14.1.			261
	140		It Happens Up There	
	14.2.		Trafficking	261
		14.2.1.	Anti-Trafficking Law in the North American	0.00
		1400	Arctic	262
			North American Arctic States' Policies	264
	1.4.0		Regional Efforts	265
	14.3.		happening 'up there'	266
			Climate Change	266
			Business, Migration and Borders	267
	14.4.	Recomi	mendations	275
15	Infor	mal Disa	ster Governance in the Arctic	289
	Patriz	zia Isabel	lle Duda	
	15.1.	Introdu	action	289
	15.2.	Charac	terising Disasters and DRR/R in the Arctic	291
			Beyond the Arctic as the 'Canary in the	
			Goldmine' for Climate Change	291
		15.2.2.	Cross-Border and Transboundary Disasters	292
			Arctic Disasters as Wicked Problems	203

CONTENTS

15.3. Challenges of (Cross-Border) FDG	294
15.3.1. Institutional Misfit with Current Disaster	
Realities	296
15.3.2. Problems understanding Disasters as	
Inhibitors for Effective DRR/R	296
15.3.3. Disaster Governance and Associated Problems	297
15.4. Informal Disaster Governance in the Context of	
Cross-Border Disasters in the Arctic	299
15.5. Conclusion	302
16 Historical Ecology for Risk Management	309
Anuszka Mosurska and Anne Garland	
16.1. Introduction	309
16.2. Arctic Risk Management Network (ARMNet)	310
16.2.1. Potential Partners	311
16.2.2. Interoperable Communications	311
16.2.3. Clearinghouse: DRR Information	311
16.2.4. Sponsors and Funding	312
16.3. Coastal Observers of Barrow Community Based	
Monitors (COBCBM)	312
16.4. Perceptions of Risk, Communication, Interpretations,	
and Actions in Social-Ecological Systems (PERCIAS)	313
16.5. Insider/Outsider Relations for Disaster Risk	
Reduction in Utqiaġvik, Alaska	315
16.5.1. Utqiaʻgvik, Alaska	316
16.5.2. Insider/Outsider Tensions in DRR in Utqiagvik	317
16.5.3. Relocation	319
16.6. Conclusion	322
Bibliography	325
Index	351

List of Figures and Tables

List of Figures

	3	
3.1	A reproduction of John Jay's diplomatic credential for	
	presentation to British authorities. Source: The National	
	Archives, Kew	51
3.2	A reproduction of an announcement summarising	
	the conclusion of the Jay Treaty (1 of 4). Source:	
	The National Archives, Kew	52
3.3	A reproduction of an announcement summarising	
	the conclusion of the Jay Treaty (2 of 4). Source:	
	The National Archives, Kew	53
3.4	A reproduction of an announcement summarising	
	the conclusion of the Jay Treaty (3 of 4). Source:	
	The National Archives, Kew	54
3.5	A reproduction of an announcement summarising	
	the conclusion of the Jay Treaty (4 of 4). Source:	
	The National Archives, Kew	55
3.6	A reproduction of George Washington's analysis of	
	Article III of the Jay Treaty. Source: The Library of Congress	56
3.7	A reproduction of a Jay Treaty negotiator's notes related	
	to Indian trade. Source: The National Archives, Kew	57
3.8	A reproduction of a portion of an early draft of treaty	
	provisions with particular reference to commerce	
	between Indians, settlers and British subjects. Source:	
	The National Archives, Kew	58
5.1	The complex array of features and factors that contribute	
	to the 'big picture' with regard to security in the Arctic.	
	Source: Author, Arctic Domain Awareness Center	97
11.1	NASA Earth Observatory maps comparing minimum	
	extent of Arctic sea ice from 2012 (top) and 1984	
	(bottom). Source: Public domain. Retrieved from	
	http://earthobservatory.nasa.gov/IOTD/view.php?	
	id=79256 via Wikimedia Commons.	203

Modern Treaties Territories Map. Source: Land Claims	
Coalition of Canada	206
A Kenn Borek Twin Otter aircraft flies over Antarctica.	
Source: Public domain. Photograph by Christopher	
Michel, 2013. Retrieved from Wikimedia Commons.	208
An effective Arctic security framework should involve	
two-way coordination, deep connection, wide	
cooperation and long-term investments. Source: Author	210
Revenue Growth Potential. Source: Author	250
SGYFN Economic Growth Potential. Source: Author	250
Government of Canada Transfer Payments (CAD).	
Source: Author	254
f Tables	
Themes of breakout group recommendations and	
· ·	
-	127
,	173
•	174
Government of Canada Transfer Payments (CAD).	255
	A Kenn Borek Twin Otter aircraft flies over Antarctica. Source: Public domain. Photograph by Christopher Michel, 2013. Retrieved from Wikimedia Commons. An effective Arctic security framework should involve two-way coordination, deep connection, wide cooperation and long-term investments. Source: Author Revenue Growth Potential. Source: Author SGYFN Economic Growth Potential. Source: Author Government of Canada Transfer Payments (CAD). Source: Author f Tables Themes of breakout group recommendations and solutions, solutions and recommendations fitting into those themes, and total and weighted votes. List of Analysed Border Management Documents. List of Northern Security and Governance Documents.

List of Contributors

Dr Dwayne Ryan Menezes is the Founder and Managing Director of Polar Research and Policy Initiative (PRPI), a London-based international think-tank dedicated to Arctic, Nordic, North Atlantic, North Pacific and Antarctic affairs. Over his academic career, he read Imperial and Commonwealth History at the London School of Economics and Political Science (LSE) and the University of Cambridge, graduating from the latter with a PhD in History. Subsequently, he held visiting or postdoctoral fellowships at various research centres at the universities of Cambridge, Oxford and London. At present, he is an Honorary Fellow at the UCL Institute of Risk and Disaster Reduction at University College London and an Associate Fellow at the Institute of Commonwealth Studies, School of Advanced Study, University of London. Over his policy career, Menezes has served as Head of the Secretariat of the All-Party Parliamentary Group for Yemen in the UK Parliament (2015-present); Consultant to the Secretary-General of the Commonwealth (2014–16); Principal Consultant to the European Parliament Intergroup on the Freedom of Religion or Belief (2015-16) and Research Associate to a UN Special Rapporteur (2013–14). He is also the Founder and Managing Director of Human Security Centre and the Commonwealth Policy Development Centre; Founder and Chairman of the Advisory Board at Think-Film Impact Production; Co-Chair of Arctic Encounter London; a Board Member at Arctic Today and JONAA, Journal of the North Atlantic & Arctic; and a Fellow of the Royal Historical Society, Royal Geographical Society and the Royal Society of Arts. He is the Associate Producer of four critically-acclaimed films: the Oscar-shortlisted, Emmy-nominated My Enemy, My Brother; Complicit; La Soledad and The Number.

Dr Heather N. Nicol is a Professor in the School of the Environment and Acting Director of the School for the Study of Canada at Trent University (Canada). She is a member of the Academic Leadership Team at the University of the Arctic (UArctic), the Lead of the UArctic Circumpolar

Studies Program, and a member of the UArctic Thematic Network on Geopolitics and Security and the EU- and Canada-funded Borders in Globalization international research network. She also sits on the International Advisory Board of Polar Research and Policy Initiative (PRPI) and serves as its Canada Lead. Formerly, she was the 2015–16 Fulbright Visiting Research Chair in Arctic Studies at the University of Washington in Seattle. Nicol's research is focused on exploring the dynamics which structure the political geography of the circumpolar North, with a specific focus on the North American Arctic and Canada-US relations. Her work also explores Canada-US cross-border relations more generally, and the tensions, geopolitical narratives and mappings of power and sovereignty they embody. She received her BA from the University of Toronto, her MES from York University and her PhD from Queen's University.

Dr Christian Leuprecht (PhD, Queen's) is Class of 1965 Professor in Leadership in the Department of Political Science and Economics, Royal Military College of Canada (RMC), and Eisenhower Fellow at the NATO Defence College in Rome. He is also cross-appointed to the Department of Political Studies and the School of Policy Studies, Queen's University (Canada), where he is affiliated with both the Queen's Centre for International and Defence Policy and the Institute of Intergovernmental Relations, and serves as Adjunct Research Professor, Australian Graduate School of Policing and Security, Charles Sturt University (Australia). A recipient of RMC's Cowan Prize for Excellence in Research and an elected member of the College of New Scholars of the Royal Society of Canada, Leuprecht is also Munk Senior Fellow in Security and Defence at the Macdonald Laurier Institute. An expert in security and defence, political demography, and comparative federalism and multilevel governance, he has held visiting positions in North America, Europe and Australia, and has been called 19 times as an expert witness to testify before committees of Parliament. He holds appointments to the board of two new research institutes funded by the German government, including the German Institute for Defence and Strategic Studies. His publications have appeared in English, German, French and Spanish, and include 12 books and scores of articles. His editorials appear regularly across Canada's national newspapers and he is a frequent commentator in domestic and international media.

Dr Todd Hataley is a professor in the School of Justice and Community Development at Fleming College. He is a retired member of the Royal Canadian Mounted Police. During his tenure as a federal police officer, he

conducted investigations into the smuggling of drugs, weapons and humans, money laundering, organised crime, national security and extraterritorial torture investigations. Hataley is also an adjunct associate professor at the Royal Military College of Canada. His research currently focuses on the management of international boundaries, regional security, public safety and transnational crime. He is the author of over 35 scholarly publications.

Greg Boos is a noted US immigration lawyer and cross-border advocate. His practice emphasises business immigration, and he represents a broad spectrum of multi-national companies and international businesspersons. Greg has been named one of the world's leading practitioners of US immigration law by the International Who's Who of Corporate Immigration Lawyers. Based on peer reviews, Martindale-Hubbell has awarded Greg an AV Preeminent rating, a testament to the fact that his colleagues rank him at the highest level of professional excellence. Greg received his Juris Doctor degree from the University of Idaho in 1977. He is a member of the Washington State Bar Association and the bars of various US Federal courts. He is also licensed as a Practitioner of Foreign Law by the Law Society of British Columbia. The International Criminal Court has approved Greg to practise before it; he is one of approximately 300 lawyers worldwide on its List of Counsel. Greg is an Adjunct Professor at Western Washington University where he acts as an external advisor to its Border Policy Research Institute. He is President of the Pacific Corridor Enterprise Council, a non-profit organisation promoting cross-border trade and advocating for removal of barriers that impede the legitimate flow of people, goods and services across the Canada/US border. Greg splits his time between Vancouver, BC, and Bellingham, WA. He enjoys early music, opera and theatre.

Heather Fathali is a US immigration lawyer with Cascadia Cross-Border Law in Bellingham, Washington. Heather received her Juris Doctor degree from Seattle University School of Law in May 2014, graduating summa cum laude. Her practice focuses primarily on employment-based US immigration, with a large portion of her client base consisting of professionals, entrepreneurs and persons of talent, as well as US citizenship and US expatriation matters. During law school, Heather served as judicial extern to Justice Charles W. Johnson at the Washington State Supreme Court, and also completed externships with two immigration non-profit organisations: the Ronald A. Peterson Law Clinic's Immigration Clinic, where she represented asylum applicants detained at the Tacoma Northwest Detention Center; and Catholic Community Services Family

Immigration, where she provided immigration and citizenship assistance to low-income residents of Washington State. Heather holds a Bachelor's Degree in Cultural Anthropology from Western Washington University, and continues to be interested in the study of diverse cultures. She enjoys travelling the world and spending time with her family and her dogs.

Greg McLawsen takes the road less travelled to help lawyers deliver better service to the public, while having the freedom to live full, passionate lives. Greg's projects reflect the belief that law is improved by borrowing the best ideas from other disciplines. Greg samples from Agile project management, design thinking and behavioural economics, to name a few. Greg manages two law firms that he created. Immigration Support Advocates (www.i-864.net) helps vulnerable immigrants gain self-sufficiency by recovering compensation from their visa sponsors. Sound Immigration (www.soundimmigration.com), America's webbased immigration law firm, helps families unite and begin new lives in the United States. Both firms use decentralised teams of lawvers and creative practices such as India-based legal process outsourcing. The focus of Greg's leadership in the legal community, and most of his public speaking, focuses on using technology and creative practices to improve effectiveness. His publications cover those topics, as well as substantive legal issues including enforcement of the Form I-864, Affidavit of Support, the intersection of law and psychology, and professional ethics relating to innovation. Greg strongly believes that professionals should shape their work lives to support their passions. For him, that includes exploring the world, so his firms are designed to be fully mobile. Travels in recent years have included northeast India, Bhutan and numerous trips to Thailand and Laos.

Dr Dalee Sambo Dorough (Inuit-Alaska) is the international Chair of the Inuit Circumpolar Council. She also serves as a Senior Scholar and Special Advisor on Arctic Indigenous Peoples at the University of Alaska. Previously, Dorough was an Associate Professor of Political Science at the University of Alaska Anchorage, responsible for the sub-field of International Relations. She is also a former Fulbright scholar. Active for decades in the promotion and protection of indigenous human rights at the United Nations, International Labour Organization, Organization of American States and with Alaska Native tribal governments, she also served as the Chairperson and an Expert Member of the UN Permanent Forum on Indigenous Issues. Dorough specialises in public international law, international human rights law, international relations, indigenous human rights standards, political and legal relations between

nation-states and indigenous peoples, and the status and human rights of Alaska Natives. She holds a PhD from the University of British Columbia, Faculty of Law (2002), and a Master of Arts in Law and Diplomacy from The Fletcher School at Tufts University (1991). Recent publications include 'The Rights, Interests and Role of the Arctic Council Permanent Participants' in R. Beckman, T. Henriksen, K.D. Kraabel, E.J. Molenaar and J.A. Roach (eds.), *Governance of Arctic Shipping: Balancing Rights and Interests of Arctic States and User States* (Brill: 2017); Expert Commentary of the Committee on Rights of Indigenous Peoples of the International Law Association; the 'Human Rights' chapter of *State of the World's Indigenous Peoples (New York: UN, 2009)*; and 'Reflections on the UN Declaration on the Rights of Indigenous Peoples: An Arctic Perspective' in Stephen Allen, Alexandra Xanthaki (eds.), *Reflections in the UN Declaration on the Rights of Indigenous Peoples* (Oxford: Hart Publishing, 2011).

Maj Gen Randy 'Church' Kee, USAF (ret), is the Executive Director of the Arctic Domain Awareness Center of Excellence, a US Department of Homeland Security Center of Excellence in Maritime Research hosted by the University of Alaska. He arrived at the University of Alaska Anchorage in January 2016, following a 30-year career in the United States Air Force. General Kee was commissioned in 1985 through the Reserve Officer's Training Corps programme at Oregon State University. He has commanded at the squadron, group and wing levels, and served operationally in the Western Pacific, Southwest and Central Asia, the Balkans and Afghanistan. He has held a variety of staff assignments including US Transportation Command, Headquarters US Air Force, and the US Joint Staff in both Operations and Strategic Plans and Policy Directorates. He has also served as Vice Commander of the US Air Force's Global Air Mobility Operations Center. General Kee has been a contributor on US Arctic Strategy and Policy development, supported domain awareness technology development, and contributed to defence support to US Federal agencies on several Arctic search, rescue and humanitarian assistance planning initiatives. Along with a Norwegian Director of Strategy, he served as co-chair of the multi-national Arctic Security Forces Roundtable. He culminated his military service as the Director of Strategy, Policy, Planning and Capabilities for US European Command in Stuttgart Germany. General Kee is a command pilot and previously qualified navigator who has flown a variety of aircraft, with approximately 4,700 flight hours, including 700 in combat. He has earned numerous awards and decorations throughout his military service, including the US Air Force Distinguished Service Medal, the Defense Superior Service Medal, the Legion of Merit and the Bronze Star Medal. He has also been decorated for distinguished service from the Governments of Estonia, Poland and Romania.

Dr Paula Williams was awarded an interdisciplinary PhD in Resilience and Adaptive Management in complex adaptive systems from the University of Alaska in 2009. She works as a Research Scientist for the Center for Resilient Communities at the University of Idaho, and lives in Anchorage, Alaska. Williams is currently working on a project in the Magic Valley of Idaho to find practical and effective solutions to use of by-products from dairy and crop farming. Williams's speciality is transdisciplinary research from a systems perspective with an emphasis on the interaction between human perception and behaviours and the biophysical environment. Williams is fulfilled by working to find solutions to the issues facing Alaska, the Arctic region and their indigenous peoples, especially by helping residents envision plausible future scenarios.

Dr Adam Lajeunesse is the Irving Shipbuilding Chair in Canadian Arctic Marine Security and an Assistant Professor at the Mulroney Institute of Government, St Francis Xavier University (Nova Scotia, Canada). He is the author of *Lock, Stock, and Icebergs* (2016), a political history of the Northwest Passage, as well as co-author of the 2017 monograph *China's Arctic Ambitions and What They Mean for Canada*, and co-editor of *Canadian Arctic Operations, 1941–2015: Lessons Learned, Lost, and Relearned* (2017). Lajeunesse works on questions of Arctic sovereignty and security policy and has written extensively on CAF Arctic operations, maritime security, Canadian-American cooperation in the North, and Canadian Arctic history.

Dr P. Whitney Lackenbauer is the Canada Research Chair (Tier 1) in the Study of the Canadian North and a Professor in the School for the Study of Canada at Trent University, Peterborough, Ontario. His recent books include China's Arctic Ambitions and What They Mean for Canada (co-authored 2018); Canadian Armed Forces Arctic Operations, 1945–2015: Historical and Contemporary Lessons Learned (co-edited 2017); Roots of Entanglement: Essays in Native-Newcomer Relations (co-edited 2017); Two Years Below the Horn: A Canadian's Experiences in Antarctica, 1944–46 (co-edited 2017); The Networked North: Borders and Borderlands in the Canadian Arctic Region (co-edited 2017); One Arctic: The Arctic Council and Circumpolar Governance (co-edited 2017); and Whole of

Government through an Arctic Lens (co-edited 2017). Whitney is also co-editor of the Documents on Canadian Arctic Sovereignty and Security (DCASS) series, to which he has contributed 11 volumes. Whitney's research focuses on Arctic policy, sovereignty, security and governance issues; modern Canadian and circumpolar history; military history and contemporary defence.

Mead Treadwell was the 11th Lieutenant Governor of Alaska (2010–14) and Chair of the US Arctic Research Commission (2006-10) under Presidents George W. Bush and Barack Obama. He helped develop and implement the US Arctic policy adopted in 2009, and funded and advanced the Arctic Marine Shipping Assessment, which set a blueprint for marine safety and reliability in the newly-accessible Arctic Ocean. He chairs Iridium's Polar Advisory Board, co-chairs Woodrow Wilson Center's Polar Initiative, chairs Arctic Circle's Mission Council on Shipping and Ports, and sits on the Advisory Board of Polar Research and Policy Initiative. He was also Chair of the Aerospace States Association and a member of the World Economic Forum's Global Agenda Council on the Arctic that prepared the Arctic Investment Protocol: Guidelines for Responsible Investment in the Arctic. In business, he is principal at Treadwell Development, which helps establish Arctic infrastructure projects in energy and transportation, and Founder and CEO of Venture Ad Astra, which invests in and develops new geospatial and imaging technologies, including Immersive Media which pioneered StreetView for Google. He served as President of Pt Capital, the world's first Arctic-focused private equity fund, and is one of the founders of Digimarc, a NASDAQlisted firm whose digital watermarking system is used to provide anticounterfeiting protection on currencies and helps provide copyright protection on DVDs. Early in his civic career, Treadwell served as the city of Cordova's Director of Oil Spill Response in the wake of the 1989 Exxon Valdez oil spill. He also co-founded the Prince William Sound Science Center, served as Chair of the Deputy Commissioner of the Alaska Department of Environmental Conservation under Gov. Wally Hickel and established the Alaska State Chamber's Siberia Alaska Gateway Project, which worked to open the US-Russian border with the 1988 Friendship Flight and follow-on exchanges in 1988 and 1989. Treadwell received his BA from Yale University and MBA from Harvard Business School.

Taylor Drew Holshouser is a research analyst at Treadwell Development. He received his BA from Yale University, where he specialised in the history of Arctic exploration and development.

Karen Everett is a Fellow at Polar Research and Policy Initiative and a member of the UArctic Thematic Network on Geopolitics and Security, and was, until recently, a Research Scholar with the Arctic Futures Initiative at the International Institute for Applied Systems Analysis (IIASA). She completed her PhD at the Frost Centre for Canadian Studies and Indigenous Studies at Trent University. Her chapter in this book is, in part, based on her dissertation, *Securitization, Borders, and the Canadian North: A Regional Approach*, that examined security in the Canadian North, including emerging regional border management issues. Additionally, she explored how securitisation theory and the principles of multi-level governance can contribute to the policy-making process. Karen's research interests include Arctic security, governance and trade.

Dr Andrew Chater is the 2019 Fulbright Visiting Research Chair in Arctic Studies at the University of Washington in Seattle. He also is an assistant professor (limited term) in political science at Brescia University College in London, Ontario, and a Fellow at Polar Research and Policy Initiative. Recent publications have appeared in such journals as The Canadian Journal of Communication and The Northern Review. He completed his doctorate at the University of Western Ontario and was previously a graduate resident at the Rotman Institute of Philosophy. His dissertation, Explaining the Evolution of the Arctic Council, examines reasons for contemporary changes in the role of the Arctic Council. In 2013, he was part of the Arctic Athabaskan Council's delegation at Arctic Council meetings in Whitehorse, Yukon. He holds a Master's degree from the University of Waterloo. His research interests include Arctic governance, geopolitics and security, as well as Canadian foreign policy. Outside of academic life, Andrew plays music and has taught guitar in Iqaluit, Nunavut, as part of Iqaluit Music Camp.

Tony Penikett spent 25 years in public life, including two years at the Canadian House of Commons as Chief of Staff to federal New Democratic Party Leader Ed Broadbent; five terms in the Yukon Legislative Assembly; and two terms as Premier of Canada's Yukon Territory. His government negotiated settlements of Yukon First Nation land claims; passed pioneering legislation in the areas of education, health and language; and organised *Yukon 2000*, a unique bottom-up economic planning process. After serving as Premier of the Yukon, Penikett acted as Senior Aboriginal Policy Advisor for the Premier of Saskatchewan (1995–97) and Deputy Minister for Negotiations, and later Labour, for the Government of British Columbia (1997–2001). He is the author of three

books, Breaking Trail: A Northern Political Journey (Victoria, BC: Trafford, 2004); Reconciliation: First Nations Treaty Making in British Columbia (Vancouver, BC: Douglas & McIntyre, 2006) and Hunting the Northern Character (Vancouver, BC: UBC Press, 2017), and two films, The Mad Trapper (BBC TV/Time Life Films) and La Patrouille Perdue (ORTF. France). As a mediator and negotiator. Penikett has worked on devolution in the Northwest Territories, Nunavut and Yukon. He has lectured on the history of aboriginal treaty negotiations at Simon Fraser University, Queen's University and the University of Washington. In 2013, Penikett became Fulbright Visiting Research Chair in Arctic Studies at the Henry M. Jackson School of International Studies at the University of Washington. In September 2014, Simon Fraser University's Public Policy School appointed him visiting professor. Penikett serves as a Mentor for the Walter & Duncan Gordon Foundation's Jane Glassco Northern Fellows, Trudeau Mentor at The Pierre Elliott Trudeau Foundation and member of the Advisory Board at Polar Research and Policy Initiative.

Justin Barnes is a Fellow at Polar Research and Policy Initiative and the Assistant Editor of the *Arctic Yearbook 2019: Redefining Arctic Security*. Until recently, he was also pursuing an internship at the United Nations Department of Economic and Social Affairs (UN DESA) in the Division for Sustainable Development Goals. Justin holds an MA degree from the Sustainability Studies program at Trent University's School of the Environment, where his research focused on climate change adaptation and sustainable development in Canada's coastal communities on the Arctic Ocean. As part of this research, Justin explored the concept of environmental security, the role this form of security plays in shaping social, economic and environmental policies, and its influence on resource and infrastructure development in the Arctic. Justin is also actively involved in the sport of sailing and represented Canada internationally on the World Sailing circuit as an athlete on the Canadian Sailing Team for five years (2013–18).

Mike Perry is a lawyer and social worker by profession and holds a Master of Laws degree from Duke University School of Law. He is currently a PhD student at the School for the Study of Canada at Trent University, where his research focuses on modern slavery, unfree labour and the impact of climate change on human trafficking. Mr Perry has taught at Carleton University in Ottawa, and in 2017 received an award for his teaching at Trent. Mr Perry is a past senior program manager of the anti-crime program at the Department of Foreign Affairs in Ottawa and served as the Coordinator of Canada's Campaign for the International

Criminal Court. He has done work against human trafficking at the international, national and community levels, including presenting work at Yale University and Oxford University. He is a past member of the Canadian Armed Forces Reserves. Mike is presently Executive Director of the City of Kawartha Lakes Family Health Team and is completing the public leadership program at Harvard.

Nicholas Wilson was recently awarded a Master of Public Administration (MPA) from the Royal Military College of Canada and is employed by the Government of Canada. His contribution to this volume is an adaptation of his Major Research Project undertaken while completing his MPA. Prior to completing graduate studies, he earned a Bachelor of Arts from the University of Guelph, majoring in Political Science and Philosophy, in which the essential building blocks for his investigation were developed. His interest in Canadian-Indigenous relations was sparked at the commencement of his graduate studies when he simultaneously worked as an agent of the administrator for the Indian Residential Schools Settlement Agreement (IRSSA). In this capacity, he engaged with the socioeconomic struggles of survivors recovering from the Indian Residential Schools system, which inspired his investigation into developing innovative solutions to an enduring Canadian problem. As a public servant and recent MPA graduate, Nicholas plans to enter a policy-related role addressing Government of Canada priorities and wider public policy issues. In his spare time, he enjoys exploring Canada's many national and provincial parks, with a particular fondness for canoe tripping.

Patrizia Isabelle Duda is a PhD candidate at UCL, where her main research focuses on informal disaster governance in Svalbard and Dominica. With her background in international relations and security, economics, business consulting and disaster management, she has spent most of her life working, studying and living in Israel, Germany, Poland, New Zealand, Scotland and the US. Her other affiliations include the World Association for Emergency and Disaster Medicine (WADEM) and the UK Polar Network, and she is the founder of ADECA (Arctic Disaster Early Career Association).

Anuszka Mosurska is currently a PhD candidate at the Priestley International Centre for Climate, University of Leeds, focusing on the politics of community-based participatory research in Alaska. She holds a BSc in Geography from the University of Exeter and MRes in Risk and Disaster Reduction from University College London. She started working

in Arctic Alaska during her Master's degree and focused her postgraduate thesis on insider/outsider relations in disaster risk reduction in Utqiagʻvik, Alaska. She has since assisted in conducting research in Utqiagʻvik with Applied Research in Environmental Sciences Non-Profit, Inc. (ARIES).

Dr Anne Garland is Research Associate, Corporation Secretary and Vice-President at Applied Research in Environmental Sciences NonProfit, Inc. (ARIES). She is also a part-time faculty member (Distance Learning) at the University of Maryland, College Park, and University of Maryland University College; research associate at the US Department of Homeland Security CREATE-REOR Emeritus Center of Excellence at the University of Southern California in Los Angeles; and external affiliate at the Center for Risk, Resilience and Renewal at the University of Canterbury in Christchurch, New Zealand. She holds an MA in Anthropology from the College of William and Mary and a PhD in Anthropology from the University of Hawai'i at Mānoa. Her principal research interest is applying natural science and social science research to assist community-based decision-making in the areas of historical ecology, public archaeology, culture contact studies and applied anthropology for disaster preparedness. In her work, historical ecology is applied research that focuses on interactions of people and their environments in both time and space to learn the accumulated effects about changes that assist risk reduction. Her mission of research, education and outreach includes 1) bibliographic database of relevant historical resources, 2) examination of the shoreline to provide a time-series baseline, 3) simulations of socio-natural cycles of change, 4) interactive mapping and database as a web resource to assist academia, industry, regional government and communities about socio-natural management, 5) integrated team of researchers, businesses, government staff and community groups to provide mitigation tools for local and regional decisions, and 6) ecoheritage opportunities that include research, educational products, age level appropriate outreaches for community service learning. With diversified funding from donations, cost share and grant partners in Arctic research, most of these goals are gradually being achieved.

List of Abbreviations

AANDC Aboriginal Affairs and Northern Development Canada

ABC American Indians born in Canada ADAC Arctic Domain Awareness Center

ADS-B Automatic Dependent Surveillance-Broadcast

AES Arctic Encounter Symposium

AOE Airport of Entry

AIIA Australian Institute of International Affairs

AK Alaska

ARIES Applied Research in Environmental Sciences Nonprofit,

Inc.

ARMNet Arctic Risk Management Network

ASECC Arctic Shipping Electronic Commercial Clearances

Program

BC British Columbia

BGEPA Bald and Golden Eagle Protection Act

BIG Borders in Globalization CANUS Canada-United States

CBSA Canadian Border Services Agency

CITES Convention on International Trade in Endangered Species
COBCBM Coastal Observers of Barrow Community Based Monitors

C-TPAT Customs-Trade Partnership Against Terrorism

DEW Line Distant Early Warning Line

DFO Department of Fisheries and Oceans

DG Disaster Governance

DHS United States Department of Homeland Security

DND Department of National Defence (Canada)
DRDC Defence Research and Development Canada

DRR Disaster Risk Reduction

DRR/R Disaster Risk Reduction and Response

ECOSOC United Nations Economic and Social Council

ETA Electronic Travel Authorisation

FAST Free and Secure Trade program FDG Formal Disaster Governance

HERMYS Historical Ecology for Risk Management: Youth

Sustainability

ICC Inuit Circumpolar Council

ICCPR International Covenant on Civil and Political Rights

ICE-PPR International Cooperative Engagement Program for Polar

Research

IDG Informal Disaster Governance
 ILO International Labour Organization
 IMO International Maritime Organization
 INA Immigration and Nationality Act

INAC Indigenous and Northern Affairs Canada
IPCC International Panel on Climate Change

IRTPA Intelligence Reform and Terrorism Prevention Act
ISR Intelligence, Surveillance and Reconnaissance
IUCN International Union for Conservation of Nature

IWCInternational Whaling CommissionLOMALarge Ocean Management AreaMDAMaritime Domain AwarenessMMPAMarine Mammal Protection ActNATONorth Atlantic Treaty Organization

NEB National Economic Board

NARL Naval Arctic Research Laboratory

NORAD North American Aerospace Defense Command NTNP Northwest Territories Provincial Nominees Program

NWP Northwest Passage NWT Northwest Territories

NU Nunavut

OAS Organization of American States

ON Ontario

PERCIAS Perceptions of Risk, Communication, Interpretations, and

Actions in Social-Ecological Systems

PFII Permanent Forum on Indigenous Issues
PRPI Polar Research and Policy Initiative

QC Quebec

RCMP Royal Canadian Mounted Police RMC Royal Military College of Canada

SAR Search and Rescue

SCC Supreme Court of Canada

SCIS Secure Certificate of Indian Status

SGYFN Self-Governing Yukon First Nations

SSHRC Social Sciences and Humanities Research Council of

Canada

TK Traditional Knowledge

TNCs Transnational Energy Companies/Corporations

UCL University College London UFA Umbrella Final Agreement

UNDRIP United Nations Declaration on the Rights of Indigenous

Peoples

UNPFII United Nations Permanent Forum on Indigenous Issues

USAF United States Air Force USCG United States Coast Guard

USN United States Navy

WAMCATS Washington-Alaska Military Cable and Telegraph System

WGIP Working Group on Indigenous Populations
WHTI Western Hemisphere Travel Initiative

YT Yukon

Editorial Preface

This volume on North American Arctic security is the outcome of over two years of international, cross-disciplinary and multi-sectoral collaboration between partner institutions in Canada, the United States and the United Kingdom. It brings together long-established and early-career voices from fields as diverse as history, geography, anthropology, law, public policy, international relations, indigenous affairs, human rights, defence and security, and financial services, all of whom share an interest in the North American Arctic, border governance, cross-border mobility and cross-border cooperation. The multi-year project principally comprised two workshops, four dialogues and one conference, and the list of contributors to this volume reflects the international network that came together as a result.

The inaugural workshop, convened on the topic 'Regional Security in the North: Emerging Themes and Challenges', was held at Yukon College in Whitehorse, Yukon, between 19–22 June 2017 and included a day visit to Skagway, Alaska, to observe the workings of the Skagway-Fraser Border Crossing.¹ The workshop was hosted by Trent University, Yukon College, Polar Research and Policy Initiative, Royal Military College of Canada, St Jerome's University and Borders in Globalization, with significant financial support from Trent University, the US Embassy Ottawa, the US Consulate-General in Toronto and the Social Sciences and Humanities Research Council of Canada (SSHRC). It was at this workshop that many delegates stressed the need for a new volume focused on North American Arctic security.

Following the Whitehorse workshop, Polar Research and Policy Initiative and Trent University partnered with the UCL Global Governance Institute, UCL Institute for Risk and Disaster Reduction and UCL Institute for Global Health, with support also from SSHRC, to host a dialogue on 'Arctic Borders Governance: Emerging Themes and Challenges' at University College London (UCL) in London, UK, on 29 August 2017.² Four months later, on 7 December 2017, Trent University and Polar Research and Policy Initiative joined forces again at a second dialogue

on 'Arctic Borders', this time at the Lord Elgin Hotel in Ottawa, Ontario, under the auspices of the 2nd International Conference of Borders in Globalization, a Canadian-led international research programme co-funded by the Erasmus+ Programme of the European Union.³ The editors would like to thank the hosts, sponsors and participants of the workshop and follow-on dialogues in 2017, especially Karen Barnes, Clint Sawicki, Amanda Graham, Maureen Long and Norm Easton at Yukon College; Ilan Kelman at UCL; and Emmanuel Brunet-Jailly and Nicole Bates-Eamer at the University of Victoria for their support.

In 2018, the Arctic Domain Awareness Center (ADAC), a US Department of Homeland Security Center of Excellence hosted by the University of Alaska, partnered with Trent University and other organisations to host the 'North American Arctic Marine and Environmental Security Workshop: Assessing Concern, Advancing Collaboration' in Anchorage, Alaska, The workshop was hosted in the University of Alaska Anchorage, Gorsuch Commons, from 18-21 September 2018, and the workshop planning team included professionals from Trent University, ADAC, University of Alaska Anchorage, University of Waterloo, HQ US Coast Guard, US Coast Guard Academy's Center for Arctic Study and Policy (CASP), Royal Military College of Canada, Center for Resilient Communities (University of Idaho) and Polar Research and Policy Initiative. The workshop received financial support from the University of Alaska Anchorage, the US Department of Homeland Security, the National Science Foundation, Trent University, the Royal Military College of Canada and the Defence Research and Development Canada. The editors would like to thank Maj Gen Randy 'Church' Kee, USAF (ret), Executive Director of ADAC, and the other hosts and partners for their time, commitment and support.

On 26 October 2018, the Australian Institute of International Affairs (AIIA) joined Polar Research and Policy Initiative and Trent University in hosting a lunchtime roundtable on 'Arctic and Antarctic Security' at its Victoria Branch in Melbourne, Australia. The dialogue brought together speakers from Australia, Canada, the US and the UK, and allowed a free, frank and informal exchange of views between speakers from closely allied states about security relationships in the Arctic and Antarctic contexts. We are most grateful to AIIA, particularly to Melissa Conley Tyler and Alastair Roff, for their partnership in 2018 and to our wider community of colleagues and supporters in Australia for their engagement and support.

The next year began with Polar Research and Policy Initiative partnering with the Arctic Encounter – the convener of the largest annual

international conference in the US - to co-produce the first Arctic Encounter London in London, UK. Held on 17-18 January 2019, the conference was hosted at the Naval and Military Club and the Reform Club, with an evening reception at the Palace of Westminster. The high-level conference was attended by around 100 delegates from 20 countries, and focused on the historical and current extent of, and future scope for, trade and cooperation between the UK, US, Canada and their Nordic allies, particularly in the Arctic/Northern context. The need to reconcile state-oriented military security approaches with human security approaches that centred on people and communities emerged as a recurring theme, raised especially by the many indigenous delegates at the conference. Again, we would like to thank all our conference co-hosts and partners, including Polar Research and Policy Initiative, Arctic Encounter and Trent University, and especially Rachel Kallander, Thomas Bishop, Jackson Blackwell, Mead Treadwell, Anthony Marzi, Sarah Johnson, Casey Pape, Daniel Volland, Erin Willahan and Max Daniels, for their support.⁵

On 25 April 2019, Polar Research and Policy Initiative joined forces with the Canadian Studies Center and the International Policy Institute at the Henry M. Jackson School of International Studies, University of Washington, to co-host a breakout session on 'International Borders in the North American Arctic: Implications for Indigenous Communities' at the 6th Annual Arctic Encounter Symposium in Seattle, Washington.^{6,7} Held in the Bell Harbor International Conference Center, the session brought together Chief Dana Tizya-Tramm, Chief of the Vuntut Gwitchin First Nation Government; Mayor Merven Gruben, Mayor of the Hamlet of Tuktoyaktuk, Northwest Territories; and Nadine Fabbi, Managing Director of the Canadian Studies Center at the Henry M Jackson School of International Studies; along with contributors to this volume, such as Maj Gen Randy 'Church' Kee USAF (ret), Tony Penikett, Mike Perry, Greg Boos and Heather Fathali, as panellists. We are grateful to Nadine Fabbi for her support.

All of the authors contributing to this volume participated in one or more of the above mentioned events or collaborate closely with those who did, and each has come to form an integral part of the network or community that has emerged as a consequence. Both the editors are truly grateful for the time, energy and effort they have invested at various stages of this project. In addition to the contributing authors, the editors would like to acknowledge with gratitude the invaluable assistance rendered by the team at Polar Research and Policy Initiative – especially Justin Barnes, Karen Everett, Mariel Kieval, Erin Willahan,

Andrew Chater, Liz Bowman, Peter Sherwin and Richard Clifford – for assisting with reviewing chapters and checking references. Barnes, Everett and Kieval were also instrumental in bringing the volume into shape. The list will not be complete without mentioning Terzah Tippin Poe at Harvard University, Alice Rogoff at *Arctic Today*, Ilan Kelman at UCL and Brooks Kaiser at University of Southern Denmark for always providing a valuable sounding board.

Finally, the editors would like to thank Chris Penfold, the Commissioning Editor at UCL Press, for his steadfast guidance along the way in bringing the volume to fruition; and to our colleagues at University College London, Trent University, Institute of Commonwealth Studies and University of the Arctic for all the advice, feedback and encouragement they provided.

Notes

- 1 Polar Research and Policy Initiative, 'Regional Security in the North: Emerging Themes and Challenges', *The Polar Connection*, last modified 14 June 2017, http://polarconnection.org/regional-security-north-emerging-themes-challenges/.
- 2 Polar Research and Policy Initiative, 'Arctic Border Governance: Emerging Themes and Challenges', The Polar Connection, last modified 29 August 2017, http://polarconnection.org/event/ arctic-borders-governance/.
- 3 Borders in Globalization, 'Borders in Globalization: 2nd International Conference, Lord Elgin Hotel Ottawa, ON December 6–8, 2017. Detailed Programme', last modified 6 December 2017, https://biglobalization.org/sites/default/files/uploads/files/dec4big_international_conference_2017_final.pdf.

- 4 See Chapter 6 for further information about the workshop.
- 5 Polar Research and Policy Initiative, 'Delegates from 20 Nations Convene in the United Kingdom for Arctic Encounter London 2019', *The Polar Connection*, last modified 5 February 2019, http://polarconnection.org/ arctic-encounter-london-2019/.
- 6 Greg Scruggs, 'North American Indigenous Chafe at Restrictions Along U.S.-Canada border', Reuters, 27 April 2019, http://news.trust.org/ item/20190427021802-sqnk6
- 7 Greg Scruggs, 'Advice From the Arctic: 4 Key Development Challenges Facing the Far North', Devex, 1 May 2019, https://www.devex.com/news/ advice-from-the-arctic-4-keydevelopment-challenges-facingthe-far-north-94819.

Part 1

Introduction: Security Paradigms for the North American Arctic

1

Introduction

Dwayne Ryan Menezes and Heather N. Nicol

Over the past two-to-three decades, there has been a growing awareness that the safety and security of northern peoples and communities is changing, in terms of the nature of risks and challenges, as well as their magnitude. During the Cold War, for example, the threat of military activity and warfare within the circumpolar region was very real, as was the region's position as a buffer zone between the then superpowers of the Soviet Union and the United States. While the potential large-scale destruction of life and territory remained real, the North itself was caught in between. American troops were posted in parts of Canada, Greenland and Iceland, and a Distant Early Warning Line (DEW Line) was established to detect airborne missiles. Similarly, the Soviet armed forces occupied the area of northern Russia and parts of northern Europe. The potential for war, and the risk to circumpolar populations caught between conflicting sides, was very cogent.

By the 1980s, however, much had changed. Even before the Berlin Wall fell in 1989, and the Cold War officially drew to a close, the military threat slowly diminished. By the time of Perestroika, most of the world had come to believe that the threat of nuclear warfare had diminished and, as such, that a peaceful future was possible. Francis Fukuyama famously predicted 'the end of history' in his 1989 essay, with this view in mind. Many political pundits predicted a world in which identity politics, not civilisational conflicts, would prevail, while others looked toward globalisation to create a common future within a borderless world. However, even as these new futures were being conjured, a new type of threat captured the attention of global scientists and policymakers. The benchmark Brundtland Report *Our Common Future* (1987) suggested that population and environmental pressures would constitute

new risks for a world in which human populations continued to grow and consume natural resources.² Sustainable development became a key concern, and the degree to which human populations, through their governments, could manage growth would determine the future of global security.

The effect of these general trends was to stimulate a debate about the nature of security itself. Was security just to be understood as the need for national security (that is, protecting the sovereignty and power of the state), or was it also to be understood in new ways related to the ability of humans to be safe and secure in their day-to-day lives? The discourse of human security, thus, found a niche in the discussion of global security. The circumpolar region was not immune from these considerations, but because it was so sparsely populated and remote in relation to the main population centres of the world, these debates held little significance for this region. But there also was another development stemming from the recognition of the environmental contamination of the Arctic region, both from Cold War military activities and also from the fallout associated with widespread global industrial and agricultural production – ranging from the presence of DDT within the region's food webs to the deposition of long-range persistent organic pollutants.

By the late 20th century, in the North, it was clear that security had taken a different dimension – and this was only compounded by the discovery of the extent to which larger global processes like climate change were not just occurring, but having disproportionate impacts upon the Arctic and sub-Arctic region. By the early 21st century, it was increasingly evident that this region was unique in the way in which environmental change and accelerating globalisation were creating increasingly precarious conditions for human populations within the region. At risk were cultures, languages and traditional lifestyles, but also environments, infrastructure and health. The speed at which these changes unfolded, and the nature and scale of the new risks they posed, encouraged new ways of assessing what security means for northern peoples, environments, cultures and communities.

We are familiar with the degree to which the now indisputable evidence for climate change has allowed scientists to understand and predict massive environmental change in the northernmost regions of the world. The *Arctic Climate Impact Assessment* of 2004, for example, predicted massive changes to the extent of sea ice, glaciers, permafrost and oceans, the ecology of circumpolar regions, and ambient temperatures regionally and globally. The role of the Arctic Council in encouraging the recognition of these events, the development of policies to help

mitigate their impacts and the global effort against the effects of climate change, for example, is relatively well known. But even more than this, the Arctic Council and other organisations have contributed to the understanding of how environmental change represents a threat to the resilience of communities, human health and economic infrastructure within the Arctic and sub-Arctic regions of the world.

We now speak about the problem of human security, environmental security and even food security in relation to the massive potential for change that global warming may bring. This approach was pioneered in the *Arctic Human Development Report* of 2004, which brought together the world's leading experts of Arctic population, development, economics, polices, law and security.3 So, while it is true that scientists provided increasing evidence of the environmental nature of change, and in doing so focused much attention on the physical changes experienced by natural environments, social and health scientists were also busy defining new ways in which changing conditions will challenge resilience for northern communities. In doing so, they have identified the ways in which governance and community social structures may influence the degree to which communities can adapt to rapidly changing environments. Recognising the role of traditional societies and lifestyles, they identify threats to the latter as significant threats to regional security. This has shifted attention even further away from what we see as the traditional focus on military security which preoccupied many in previous years. At the same time, new research in resource extraction and its impacts on northern communities and environments questions the premise that the exploitation of resources can indeed be a sustainable endeavour. Similarly, questions have been raised about the extraction of hydrocarbons on land and in maritime environments, and about the degree to which renewable energy sources are needed to create a more sustainable and secure North.

Nonetheless, the concern with traditional security has not disappeared. Certainly, the media has highlighted the potential for a new Cold War over resources and territory as ice melts and the Arctic Ocean opens to shipping and a greater ease of resource extraction. Some pundits point to the importance of Russia and China and the threat posed by their increased presence in the Arctic.⁴ However, it would be wrong to assume that Arctic security is the product of an overactive media imagination and not really a concern of traditional security operators such as the Coast Guard, Navy, Army, Air Force, Canada's federal Public Safety Department, the US Department of Homeland Security or national policing organisations like the Federal Bureau of

Investigation (FBI) or the Royal Canadian Mounted Police (RCMP) in North America. Nothing could be further from the truth. That said, it is increasingly clear that the definition of what constitutes imminent threat and appropriate response is shifting. While terrorism, armed invasion, ballistic missile attack and espionage are on the list of potential 'threats', it also is true that human health and pandemics, shipping disasters and oil spills are on the list. The roster of potential threats to security that are increasingly related to events within 'civil' society are growing; yet, the responsibility for response to such widescale disasters rests squarely with traditional security providers. In other words, there is a change in the nature of traditional security and what it entails.

In the North American North, this means that a shift is underway through which security issues have become more diverse, complex and broadly defined. While differences exist regarding border walls, continental trade and international relations, North American governments today are in agreement that Arctic security is much more complex and requires cooperative effort at the operator and community levels, as well as in terms of broadly defined geopolitical and international ways. The recognition of the deep connections between traditional and non-traditional security within the North is currently reflected in thinking about the delivery of security in the circumpolar world - by security agencies as well as community organisations and scholars more generally. The referent objects of security and the role of non-military actors and agencies is more acutely regionalised. Climate change has raised the imperative not only of a new type of security challenge with environmental, social, economic and political consequences, but also about new ways of delivering 'security' to the local community.

Shifts in environmental conditions and overall changes to normative weather patterns create a host of new risks, ranging from loss of food species and food security challenges, to coastal slumping and loss of infrastructure, housing and cultural assets. On a larger scale, the effects of warming temperatures and decreasing albedo effects lead to the opening of new territories and the potential for new actors and agencies within the region. In other words, rapid environmental transformation of the North American Arctic and sub-Arctic region creates more general uncertainty about the future, whether this be in the form of food security, environmental security, protection of infrastructure, military security and cultural security, or human security more generally. To be effective, in North America today, traditional security must address and incorporate security in all its dimensions. The North American Arctic is characterised

by a shift in thinking about what security entails and what is to be 'secured'. Canadian and American strategic documents, for example, now indicate how environment is increasingly positioned as a factor of growing importance to security calculations. They also include discussion of sustainability and community economic health.

The addition of communities as security actors is telling in this new security environment. New studies and narratives position community actors as central to the story of Arctic security - as both subjects and objects of security. They also position communities as security experts in ways which were previously unimaginable. In North America, this speaks to the way in which the study of security itself, that is the 'who' in 'who identifies security concerns', is changing. Indeed, the ways in which security is understood by security agencies and operators continue to evolve, as this volume suggests. Rather than seeing traditional and environmental security as two different types of security, in North America, Arctic states are seeing environmental and military security as two sides of the same coin and increasingly co-constitutive. This has been made increasingly clear over the past decade or so, not only in the nature of national statements emanating from North American governments with regard to concerns about climate change and environmental security, but also in the fact that national strategy documents developed by both Canada and the US show an increasing propensity to consider traditional military and environmental security concepts in tandem when discussing the North American Arctic. The chapters in this volume are no exception. They cover a range of security considerations from human trafficking to indigenous rights, and from climate change to community well-being. Written by North American indigenous authors, researchers, security experts, community members, consultants, academics, lawyers and a range of others, they trace the meaning of security from the perspective of a wide lens.

Each chapter in this volume addresses this new security relationship within the North American North. They identify the degree to which 'domain awareness' has redefined the traditional military focus, while a new human rights discourse undercuts traditional ways of managing sovereignty and territory. Each author questions the foundations of normative security arrangements and speaks to the point that while security itself is not an outdated concept, our understanding of what constitutes real human-centred security has changed. They also tackle the very real difference between perception, policy and immediate on-the-ground security conundrums for northern residents and communities. Each author suggests that there are new and often overlooked implications

for security that are region-specific; that there are new threats originating from a wide spectre of events and possibilities; and that there are very different subjectivities that can be brought to understand the shape of Arctic security and security relationships in the 21st century.

These themes and definitions are reflected in the structure of the book. The book begins with an overview of the problem of defining security in the North American borderlands, and the issue of the relationship between the traditional management of security by the state and the more expansive understanding of security in broader and more contextual ways. It explores the ways in which an uncomfortable fit has evolved in the northern North American borderlands between broader structures of international law, indigenous rights and the enforcement of conventional security practice, in ways that are unique to the regional structure of the North American Arctic and the set of rules that govern border management therein. Traditional security has created an archaic structure that divides villages, erodes international conventions of rights and ignores treaties.

The next section examines what are currently the defining paradigms of security – beginning with an exploration of how maritime domain awareness has changed the nature of security threats – and has created a much more expansive roster of considerations. Such threats are now both conventional and unconventional in nature. No longer can 'military security' and 'human security' be understood as separate. Even conventional discussions of military security must address public safety and civilian threats, climate change and other non-conventional implications. Identifying threats is not enough, however. There are broader structural problems, too. How can new approaches to security be implemented given the rather archaic infrastructure of security in the regional borderlands? How could a regionally appropriate definition of security be achieved that recognises the uniqueness of the region? How does national security policy influence regional security policy in the North? These are neglected areas of study.

The next section looks at security policy, cooperation and institutional challenges. It focuses most particularly upon the relationship between policies, places, peoples and communities, both in the sense of communities as places and communities of interest within the North American North. A unique and changing set of security circumstances, policies and practices creates institutional challenges as well as challenges for meeting unique security issues across regions, from the bottom up. Security policies that have coherence in southern regions and resonate with stakeholders or communities of stakeholders are key. These policies

include those which encourage cooperative resolution of territorial disputes, self-determination and greater ease of transnational mobility among regional communities, peoples and stakeholders. To these ends, the development of global society in the North is exposing both long-standing and new vulnerability concerns for northern stakeholders in Canada. These are reflected as both institutional and policy challenges, not the least of which is the rise of new forms of stakeholder interdependence in the region and saliency for communities with specific security concerns.

The next section examines emerging trends, many of which might be considered to be non-conventional and discursive. These are the new ways in which security is being framed to include environmental policy; the possibility of using indigenous self-governance frameworks to create incentive models for First Nations to consent to transnational pipeline development; the human trafficking challenges relating to the recognition of missing and murdered aboriginal women; the limitations of Formal Disaster Governance (FGD) institutions and mechanisms to respond to situations where cross-border disaster risk reduction and response efforts are necessary, and the potential of Informal Disaster Governance (IGD) activities; and the applicability of the historical ecology model in the Arctic whereby Traditional Knowledge (TK) and Traditional Ecological Knowledge (TEK) – congruent to local contexts – can be combined with Western forms of knowledge for disaster risk reduction.

PART 1. Introduction: Security Paradigms for the North American Arctic

Chapter 1 provides an editorial introduction to this volume that brings together key actors who have been leading the global dialogue about North American Arctic security, particularly as it relates to borderlands, and that provides insights into the current and emerging trends that can be observed within the field. As a study, the volume recognises that the Arctic is not a single, monolithic, homogeneous region, but that considerable differences – historical, geographical, social, political and economic – can be observed between the North American, Nordic and Russian Arctic(s). While the North American Arctic is not in itself homogeneous, and the US and Canada clearly take different positions on some issues of mutual concern, the Arctic regions of the two countries are sufficiently bound together by various historical, cultural and geographic factors that, combined with the shared security interests and

INTRODUCTION

9

generally a close alliance between the two countries, warrant its categorisation as an Arctic sub-region. Recognising how perspectives and priorities relating to North American Arctic security may also vary based on one's vantage point, this chapter introduces a volume that intentionally brings together a diverse and interdisciplinary set of contributors, drawn from academia, policy and the security professions; indigenous and non-indigenous backgrounds; and with local, national and/or international approaches. The chapter provides a roadmap to a volume divided into four sections: the first providing an introduction, outlining the need for border management paradigms applicable to the North American Arctic, and looking at indigenous communities and international boundaries; the second, focusing on defining current trends in North American Arctic security; the third, looking at security policy, cooperation and institutional challenges; and the fourth and final section exploring emerging trends in regional security.

In Chapter 2, Christian Leuprecht recognises from the offset that much of the literature, policy and practice in managing borders and their integrity in North America is inherently dominated by paradigms from more southern parts of the continent, which is where most people live and most goods cross the border. The premise of this chapter is that one of the challenges for managing borders in northern North America is that most of these paradigms are either not applicable or ill-suited to the North: the type and amount of traffic in people and goods is quite different in both proportion and absolute numbers; the nature of security threats is quite different, and the way security and threats are conceptualised by local communities is also quite different; the costs of managing borders in the North are exponentially higher yet available resources and expertise disproportionately fewer; and the types of assets available are fewer and different from those that are commonly used to manage borders elsewhere. Many of the challenges, conflicts and vulnerabilities that are documented in other contributions in this volume are a function. in whole or in part, of the injudicious transfer and application of border management norms and practices that were and have developed elsewhere to the North. This chapter aims to demonstrate how and why northern borders and border integrity differ; the ineffectiveness, inefficiencies and misunderstandings associated with importing border management paradigms that are insensitive to needs, interests, priorities and values in the North; and the need to build on some of the observations across the contributions to this book to develop incipient border management paradigms for the North. In the process, the chapter endeavours to shift the approach to borders in the North from the

prevailing 'high' border management model that treats all borders the same and represents elite interests from elsewhere in the country to a 'low' border management model that recognises diversity and variation in borders across different regions in Canada and promotes a more asymmetric approach that is more sensitive and responsive to local cooperation and co-production of border management and integrity.

In Chapter 3, Greg Boos, Heather Fathali and Greg McLawsen explore the issue of communities that straddle international borders. Under the United Nations Declaration on the Rights of Indigenous Peoples, indigenous peoples have the right to have relationships and participate in cultural activities with their people who live in communities that span international borders. The United States and Canada are home to numerous groups of indigenous peoples, including those self-defining as Indian, Inuit, Métis and métis; however, these communities currently do not have equal border-crossing rights in the two states. Qualifying indigenous persons born in Canada are granted the right of free access to the US for any purpose, while Canada does not recognise a reciprocal right of free access for US-born indigenous persons to enter Canada. This has led to the incongruous result of members of the same community, or even the same family, having differing border-crossing rights depending on which side of the border they were born. This chapter delves into the legal definitions and border-crossing rights of indigenous peoples in the US and Canada, and demonstrates how the full adoption and implementation of the 1794 Jay Treaty by both the US and Canada would increase the security and continuance of the native populations dwelling there. Most importantly, the authors call for increased inclusion of indigenous communities in conversations on mobility to ensure their agency and unrestricted mobility.

In **Chapter 4**, Dalee Sambo Dorough discusses the challenges posed by the imposition of artificial borders and the nation-state notion of border security to the Inuit whose Arctic homeland and territory now span four countries. She argues that there is a need for coordination, coherence and collaboration due to the numerous challenges faced, and promotes the importance of uplifting Inuit cultural security through law and policy changes to effectively guarantee the multiple, interrelated rights and interests of Inuit. As a distinct people with a common culture and history, and based on rights affirmed by the United Nations Declaration on the Rights of Indigenous Peoples and other international human rights instruments, she notes that UN member states have a responsibility to take effective measures to implement the right of the Inuit to maintain and develop contacts amongst blood relations, and to

remove barriers that impact the interrelated dimensions of indigenous spiritual, social and cultural customs, practices and institutions. She argues that continuing practices of indigenous economies must be accommodated, recognised and respected – for example, the rights to use, possess and trade marine mammal byproducts that are an important element of Arctic indigenous economic activities. Another dimension includes the need for cross-border, collective management and comanagement of resources that present challenges for effective exercise of indigenous human rights where the communities and territories of indigenous peoples transcend international borders. Dorough's chapter provides a fascinating history of relevant international legislative and institutional developments. With shipping lanes opening and international attention turning quickly to the Arctic, she calls for greater urgency in accommodating the needs of the Inuit.

PART 2. Defining Trends in North American Arctic Security

In Chapter 5, Randy 'Church' Kee, Major General, USAF (Ret), explores the increased demands of urgent and emergency responses on Coast Guard and other maritime operator missions, including search and rescue, humanitarian assistance and disaster response in the context of significant environmental changes and increased human activity in the Arctic region. Throughout this chapter, he approaches security from a safety, law enforcement and defence perspective in order to characterise the major factors affecting the Arctic security landscape. Beginning with an overview of the issues facing the region, he lays out the complex array of features and factors that are greatly contributing to safety and security challenges in the Arctic. Kee contends that Arctic states are constrained by less than ideal security capabilities, and thus Arctic national borders and economic boundaries are being readily exploited and violated. Within this context, and with an increasingly dynamic physical environment, a desire to preserve the cultural heritage of the region, and a demand to understand economic pressures kept front of mind, he provides an extensive discussion on potential mechanisms for securing, protecting and defending the region to reduce the chance of conflict. Throughout this comprehensive chapter, Kee delivers a detailed analysis of the many relevant security issues and possible concerns for the future, and offers measured approaches for dealing with them that are both immediate and anticipatory in nature. As he

maintains, 'increasing the capabilities of cooperation and collaboration mechanisms, and creating new mechanisms to address current gaps and seams, could prove pivotal to fostering improved outcomes for the Arctic in the coming years'.

In Chapter 6, Randy Kee, Paula Williams and Heather Nicol deliver an in-depth report on the procedures and findings of The North American Arctic Marine and Environmental Security Workshop: Assessing Concern, Advancing Collaboration held at the University of Alaska Anchorage from 18-21 September 2018. The workshop was a collaborative effort among Canadian and US (CANUS) operators and experts that reflected the strategic importance of the North American Arctic and circumpolar North to CANUS national interests. The purpose of the workshop was to address the various changes to the environment, weather, human activity and geopolitical interests in the region that pose a number of concerns for Arctic security. The desired outcome of the workshop was a collaborative assessment of shared security concerns in order to determine recommendations and solutions to the security challenges Canada and the US share. To reach this goal, the workshop included plenary panels and breakout discussions comprised of deliberations about challenges regarding coastal and maritime security in the Canadian and US Arctic; emerging patterns of environmental security in maritime and coastal regions in the Canadian and US Arctic; discussions about outside perspectives of the North American Arctic; local perspectives of the North American Arctic; and a discussion about what to expect in the future. The authors effectively provide an extensive review of the several valuable recommendations that emerged from the workshop that take into account the limited infrastructure and resources, as well as enhanced communication and collaboration, in order to address public safety concerns, maritime threats and other various critical security issues.

In Chapter 7, Heather Nicol, Adam Lajeunesse, P. Whitney Lackenbauer and Karen Everett provide a detailed overview of the border management landscape in Northern Canada. They explain how the cross-border flows at the land, air and maritime borders differ from those in the South and stress that national border management structures are not as effective in the North as they are in the South. Moreover, the authors explain how border management infrastructure in the North is underserviced and underdeveloped, thus leaving management gaps that the federal government is starting to address through various pilot programmes. In the case of the land borders between Yukon-Alaska and British Columbia-Alaska, for instance, they note how border services are problematic for local travellers due to reduced hours of service and

limited infrastructure that can cause delays if there is a lot of traffic at a given point in time. Likewise, in the case of maritime borders and boundaries, the authors note that there are again limited border management facilities and services, which could be a problem if maritime traffic increases. Similarly, there is a significant impact on local indigenous communities that span the border. That being said, recent developments at the end of 2018 suggest the federal government is starting to work with Yukon First Nations to improve relations and facilitate easier border crossings. Finally, the authors note that illegal migration can be a concern in the North, although in different ways than in the South. The authors stress that because of these unique regional needs, a one-size-fits-all border management structure that is widely applied across Canada may not be nearly as effective in the North, nor may it capture the range of northern security issues that are of concern.

In Chapter 8, Mead Treadwell and Taylor Holshouser demonstrate that the greatest challenge to United States Arctic security has historically been and remains the lack of basic infrastructure in the region. The chapter reviews past infrastructure trends in Alaska, notably their cyclic improvements with the onset of conflict and, hence, military funding, and identifies the subsequent current reduced capacity of the US Arctic to offer required securities. These securities are both militaryand civilian-focused, and include law enforcement, human and environmental security, and economic control. These topics are addressed through consideration of three key Arctic infrastructure sectors, namely marine, aviation and telecommunications. This chapter highlights the need for military, civilian and private collaboration to leverage finance and resources in developing an integrated and actionable infrastructure network that works for all and maintains the position of the US Arctic on the global stage. Thus far, the calls made for investment in the US Arctic have been for large individual assets with little thought given to how they would initially be financed, subsequently turn a profit or how they fit into a pan-Arctic infrastructure network. It also considers how an integrated infrastructure provides security for US forces and trade services.

PART 3. Security: Policy, Cooperation and Institutional Challenges

Chapter 9 reiterates that border security and the threats it addresses are not necessarily the same across Canada, and this is especially true in the North. To better understand these differences and what they mean for

Canada's northern border management and regional security relationship with the United States, Karen Everett applies Securitisation Theory and the Copenhagen School's five security sectors (military, political, societal, environmental, economic) to key Canadian federal government documents on border management and northern security. 6 Her analysis shows that national level border management programmes, like Beyond the Border, do not account for the regional needs of the North, which is largely maritime based. Additionally, the interconnectedness between the five security sectors in the North demonstrates the complexity of regional border management that must be accounted for in future policy. To this end, Everett provides suggestions and policy alternatives in an effort to address this policy gap. In particular, she considers updating Beyond the Border to be more inclusive of maritime borders, creating a new regional policy with the United States that reflects the uniqueness of northern borders, the possibility of Canada creating its own policy, or Canada staying the course. Everett further suggests that regardless of what policy option is selected, stakeholder engagement during the development process is necessary to ensure the policy reflects the needs of those who cross regularly.

In Chapter 10, Andrew Chater examines the security relationship between Canada and Greenland, focusing on the key issues of territorial disputes, the continental shelf, oil development and borders. He argues that the governance of these issues is strong. Canada and Greenland dispute control of Hans Island, but the issue is minor and will be resolved peacefully. There is a question as to the extent of the outer continental shelves in the region, but both Canada and Greenland have worked to resolve the issue collaboratively within a framework of international law. Concerns exist over viable oil development, but it is still a way off and thus far Arctic states have worked together on the issue. Advocates call for open borders for Inuit between Canada and Greenland, but political will seems weak, as discussed elsewhere in this volume. He concludes that some alarmism has developed around these issues for political reasons, which represents a process of securitisation.

In Chapter 11, Tony Penikett asks how Arctic states such as Canada, with vast territories and relatively small populations, can best achieve both sovereignty and security. He urges us to move our security paradigms beyond pure military might, which relies on the state as a referent point for Arctic security, and to think more deeply about the human security approach, which may prioritise environmental, health and economic outcomes as well, but that treats the individual as the principal reference point for Arctic security. Suggesting that neither the state nor the individual

may be the best reference points for Arctic security, he recommends instead a 'bottom up', 'North First' or communitarian approach to security that sees the community as the cornerstone and that seeks also to secure the world's emerging Arctic 'community of communities'. Penikett's 'North First' framework hinges on deep conceptions of security, wide cooperation across the Arctic region, long-term infrastructural investments and two-way longitudinal cooperation amongst and between Arctic communities, indigenous leaders, nation-states, governments and international institutions. Penikett offers evidence that this strategy can secure Canada's Arctic communities without compromising sovereignty, meanwhile benefitting the nation-state as a whole. 'On the cornerstone of community', he notes, 'Canada could build Arctic security using the tools of cooperation, coordination and long-term investment.'

In Chapter 12, Justin Barnes discusses the growing role of cross-scale linkages in the governance of Canada's North. Barnes considers how changes to global society are exposing both long-standing and new vulnerability concerns for northern stakeholders in Canada. Through a discussion of the different types of vulnerability being experienced over time by the multiple different levels of northern governance, he argues that these vulnerabilities shape the responses to the various challenges that stakeholders face. The chapter also explores. however, how these vulnerabilities contribute to establishing a level of stakeholder interdependence in the region. Much like the interdependence that exists on the state level to minimise vulnerability, Barnes explains how similar relationships are being created that connect local governance structures to federal and global governance institutions. These are taking the form of cross-scale co-management organisations that have the potential to more effectively address regional issues than colonial structures of the recent past. Through an analysis of the Beaufort Sea Partnership, an overarching partnership that brings together a number of regional co-management bodies, Barnes discusses the role cross-scale linkages play in shaping change in the power relationships that have historically existed. The chapter concludes that due to the changing role of the state in the North, co-management organisations, such as the ones that make up the Beaufort Sea Partnership, are having an increased influence on domestic policy. Additionally, due to the level of interdependence that now exists between levels of governance, it argues that these domestic co-management organisations can influence international policy in the region and, therefore, will have an influence on the foreign and cross-border policy represented by the Canadian federal government on the international stage.

PART 4. Emerging Trends

In Chapter 13, Nicholas Wilson investigates how the responsibilities of Self-Governing Yukon First Nations (SGYFNs) regarding Settlement Land under the Umbrella Final Agreement, 1993, can be used to advance pipeline projects on indigenous land title in the Yukon. Recent literature on the topic of borders has pointed to an increasing degree of border porosity emerging from economic forces driving globalisation, where transnational energy corporations have had transformative effects in assisting developing governments to gain legitimacy. Absent from the literature, however, are the opportunities relating to such arrangements' validity for quasi-sovereign sub-state governments existing within countries - specifically, for Indigenous self-governments in Canada. Accordingly, the investigation employs contemporary border theory to examine how the responsibilities and obligations of SGYFNs, the Government of Yukon and the Government of Canada can solve Indigenous boundary issues to sustain a lucrative Arctic economy in the 21st century. In doing so, the research challenges the contemporary notion of the Westphalian state system that has come to define the modern nation-state entity. As such, the research models transnational pipeline projects in developing countries upon which to base an innovative trans-territorial policy for the northern Canadian context. Accordingly, the model incorporates both quantitative and qualitative research before concluding that it is equitable, lawful and fair to provide incentives to reluctant Yukon First Nations to consent to pipeline development projects on Settlement Land and, as a result, achieve the goals of Indigenous self-governance, thus offering pathways towards shared prosperity through cooperation.

Chapter 14 looks at human trafficking in the Arctic, with an emphasis on the North American Arctic, and examines the unique challenges to combatting human trafficking that the North presents. Mike Perry identifies a range of pre-existing Arctic issues, including climate change, increasing accessibility, oil and gas development, rising tourism and potential loss of traditional livelihoods, as links to the rise of human trafficking in the North and notes its especially disproportionate impact on indigenous peoples. He observes that while border controls are invariably proffered by public officials and policy-makers as solutions to addressing human trafficking, the focus on borders is misplaced as border crossings are inherently limited loci for impactful action against trafficking and caring for survivors, particularly in the North. He argues

that the dominant border paradigm of security, criminality and law enforcement needs to be replaced with a human security discourse in order for anti-trafficking efforts to be effective. He notes that more can be done to elevate the issue. The recommendations include both short- and long-term mitigation strategies, which range from greater engagement with local stakeholders and increased issue awareness in the public sphere to greater regulatory schemes for private enterprises. Perry lastly suggests that the most realistic approach for elevating and addressing human trafficking in the Arctic is a comprehensive, multilateral agreement with targeted goals for increasing human security in the region. This chapter is startling in that it reveals a side of the Arctic that is often disregarded for issues such as climate change or economic development. Those broader issues facing the Arctic are inextricably linked to human security and, in turn, human trafficking.

In Chapter 15, Patrizia Duda introduces the concept of Informal Disaster Governance (IDG) in the context of Arctic disaster risk reduction and response (DRR/R). To date, there has been little focus on this important aspect of DRR/R. Yet, IDG offers significant value at a time when formal institutions traditionally tasked with DRR/R face enormous challenges and have often disappointed on issues including swift response, reaching the most vulnerable populations, or cooperating across functional, hierarchical and geographical boundaries. This lack of response is especially evident in areas such as the Arctic, where existing DRR/R mechanisms are often constrained by the region's challenging climatic, geographical and geopolitical factors. Thus, when action is required, individuals, communities, businesses or other organisations and grassroots movements unrelated to the formal DRR/R realm may step in and cooperate, augment and sometimes bypass formal disaster governance (FDG). In the process of resorting to these informal modes of DRR/R, stakeholders may establish new rules and standards of behaviour, potentially chipping away at the mantle of formal institution's authority over DRR/R governance. While informality in DRR/R has been acknowledged by academics and practitioners alike for being both valuable but also potentially complicating effective DRR/R, disaster research has not yet comprehensively and systematically studied IDG. Thus, this chapter makes an important contribution by introducing this new concept in disaster research, using the Arctic as its case study.

In Chapter 16, Anuszka Mosurska and Anne Garland also grapple with the theme of disaster risk reduction, but in the light of historical ecology – an applied research programme that focuses on interactions between people and their environments to study long-term processes.

Historical Ecology for Risk Management: Youth Sustainability (HERMYS) looks to implement a historical ecology model for the North Slope Borough, Alaska, where decreased sea ice has exacerbated coastal hazards and affected subsistence. This is in conjunction with hazards that have always been present in the North Slope, such as tsunamis, blizzards and epidemics. With its relative distance from major population centres, such as Juneau and Anchorage, emergency management capabilities, services and resources across both national and international boundaries become paramount, particularly where poor weather conditions constrain air or barge travel. Traditional Knowledge (TK) and Traditional Ecological Knowledge (TEK), primarily of Inupiaq, is congruent to local contexts and can be combined with Western forms of knowledge for disaster risk reduction. Ultimately, the aim of this programme is to bring together various knowledge and stakeholders (from within and beyond the community) to reduce disaster risk. This chapter brings together various community-based projects of the North Slope Borough Risk Management and uses these to examine cross-border disaster risk reduction in two ways. Hard, international, physical borders will be addressed by considering the opportunities for cross-border collaboration between the North Slope Borough and the Canadian Arctic, as well as among North Slope Villages, which are all federally-recognised jurisdictions. The second part of this chapter looks at one communitybased project in Utqiagvik, the regional hub of the North Slope Borough and brings to light a more elusive boundary – that between those considered insiders, outsiders and those who straddle the insider/outsider boundary in the community. By looking at the links between disaster risk reduction and migration, the importance of soft borders is highlighted: something that is important for isolated, remote settlements such as Utqiagvik, yet overlooked in terms of border studies, due to the lack of a jurisdictional border. In combining these approaches, sustainable disaster risk reduction can be sought, which utilises the unique TK present, and accounts for fast-paced social and environmental changes.

In sum, this volume explores the current and emerging security issues that confront the North American Arctic and that shape relationships between and with neighbouring states (Alaska, Yukon, NWT, Nunavut, Greenland and Russia). Its focus is on understanding new threats, new approaches and new ways of analysing security within the region. The volume explores the theme of regional security, particularly in the context of Arctic and sub-Arctic borderlands. Its discussion of Arctic regional security takes a somewhat different approach than many views of security which are now current, if only because it does not see

security as dichotomous - that is, as either human-oriented (that is to say about food, health and other human needs) or about protecting sovereignty and military security. Rather, security is about all of this and more. It is an evolving framework or lens through which many new developments are assessed in order to understand their impact on a changing circumpolar region at different scales - from the level of community to the broader national and regional scale. Furthermore, security is also understanding the ways in which global challenges affect, or manifest themselves in, a region such as the Arctic. While climate change is indeed a major challenge with cascading effects (here the notion of 'resilience' has become useful in integrating potential human security threats with environmental and social consequences), this volume is also interested in the other types of security issues which evolve from attendant forces of globalisation and development – including the rising use of opioids, the potential for trafficking, terrorism, cultural survival, indigenous rights, unstable weather events, and the 'fit' of the North within larger scales of governance.

Security, after all, is about relationships and how societies and communities of interest construct relationships among themselves, with a changing environment and with the broader socio-economic world to which they are increasingly connected. Much as Jensen notes, in his book entitled International Relations in the Arctic, we are seeing a shift from the understanding of the Arctic from the perspective of political and international relations to a concept of the Arctic that is thematically expansive and discursive. 7 Security has also been affected by this shift. It is no longer possible to discuss human security and traditional security as if they are separate issues, nor is it possible to understand any of these without grounding them in larger structures of interdisciplinary scholarship and broad regional context. Moreover, for the purposes of this volume, understanding where and how borders are constructed through political, social, environmental and economic processes is key to understanding how security threats emerge. Borders provide context for management of security, and despite the rhetoric of borderlessness, it is in the borderlands where the notion of security and security threats are often perceived as most acute. But, in many cases, such definitions of 'security' are discursive or constructed, understood differently in relation to certain people or places. Our definition of security must make room for this as well – that is to say the cultural and identity implications of defining security in specific ways or with regard to the management of specific issues.

There is much that is new in this volume. Overall, its contributors have taken the challenge of revitalising discussions of security in the

North American Arctic very seriously. The collective work opens new avenues for investigation within this regional security landscape – from the introduction of a borderlands lens and the discussion of land border frameworks for security, to discussion of managing asymmetrical borders in the face of indigenous rights and access to Jay Treaty rights, to environmental security. Indeed, as the volume notes, security measures have now moved to the forefront of modern-day concerns that indigenous peoples face a variety of cross-border mobility challenges.

The inclusion of indigenous and community perspectives, as well as Inuit and Inupiat challenges to state-defined rights and sovereignty (one of these rights being cross-border collaboration), realigns what has largely been a state-centred and sovereignty/security focus in favour of one more nuanced and grounded in the devolution of governance across the North American region. In light of the evolving indigenous border dialogue in Canada, which has only recently turned its attention to northern borders, this discussion is both innovative and crucial. It is, for example, unique in its discussion of the continental border management framework – *Beyond the Border* – and the assessment of this framework's role in Northern border management and security practices.

Similarly, this volume integrates the perspective of non-conventional security threats such as human trafficking and environmental security into broader discussions of cross-border collaboration, community responsibility and innovative maritime domain awareness outcomes. Rather than discuss Canada and the US in isolation, it conjoins analysis of what are considered to be the main factors affecting the North American Arctic, both to understand the associated security challenges and to focus more sharply on 'security matters across North America', including the broader 'range of actors, the range of activities and the spectrum of endeavours, from collaboration to competition to confrontation', where 'security is intended to describe the framework of safety, law enforcement and defence' (Chapter 5). This is also true with respect to risk and disaster reduction. The focus in this volume moves us from a broader Arctic-wide paradigm to that of a more targeted North American DRR focus managed through the Inter-Agency Standing Committee (IASC) partnership.

Another innovative theme of this collection, as the contributors to this volume suggest, is that North American Arctic security is strongly tied to the evolution and distribution of sub-national populations and governments in ways which are distinct and perhaps even historic. While there is a strong social democratic basis to the development of governance systems that are themselves increasingly decolonised and reflective of indigenous and territorial governments, there are also questionable

social justice outcomes to this process. A unique and innovative analysis of the Beaufort Sea Partnership Agreement suggests that climate change and other environmental issues 'are producing an unequal distribution of environmental burdens that is increasing inequality among regions both on a global scale and within developed countries' (Chapter 12). Factors that drive such inequality include a different role of the state, privatisation, market-driven development and continentalised and globalised economic integration, and these are 'producing new forms of vulnerability, while also creating an institutional network that mitigates that vulnerability both on the national and international scale' (Chapter 12). This suggests that even as nation-states demarcate boundaries and border management policies in the North American Arctic, accommodations are increasingly necessary where their borders do not reflect traditional or cultural boundaries. This is as true for pipelines as it is for governance and rights.

Finally, this collection underscores the integrated military-civilian collaboration relationship, whether this be to improve marine, aviation and telecommunications infrastructure in the Arctic, or to ensure mitigation of environmental disaster. All of these themes are consistent in that they redirect us away from sole consideration of security in ways that speak only to the issue of sovereignty or national security – both time-worn and worn-thin memes common to analysis of North American Arctic security perspectives in the past.

Notes

- Francis Fukuyama, 'The End of History?', The National Interest 16 (1989): 3–18.
- World Commission on Environment and Development, Our Common Future (Oxford: Oxford University Press, 1987).
- 3 Niels Einarsson et al., Arctic Human Development Report (Akureyri: Stefansson Arctic Institute, 2004).
- 4 See Scott G. Borgerson, 'Arctic Meltdown: The Economic and Security Implications of Global Warming', Foreign Affairs 87, no. 2 (2008): 63–77; Rob Huebert, 'Welcome to a New Era of Arctic Security', The Globe and Mail, 24 August 2010, last modified 7 April 2018, https://www.theglobeandmail. com/opinion/welcome-to-a-new-era-ofarctic-security/article1377997/.
- See Gunhild Hoogensen Gjorv et al., 'Human Security in the Arctic – Yes it is Relevant!', Journal of Human Security 5, no. 2 (2009): 1–10; Heather N. Nicol and Lassi Heininen, 'Human Security, the Arctic Council and Climate Change: Competition or Co-existence?', Polar Record 50, no.1 (January 2014):
- 6 Barry Buzan, Ole Waever, and Jaap de Wilde, Security: A New Framework for Analysis (Boulder, CO: Lynne Rienner Publishers Inc., 1998), 22–23.
- 7 Leif Christian Jensen, International Relations in the Arctic: Norway and the Struggle for Power in the New North (London: I.B. Tauris, 2016).

2

North by Far Northwest: Indigenising Regional Policy Innovation in Border Management

Christian Leuprecht and Todd Hataley

2.1. Introduction

In late-June 1940, a Royal Canadian Mounted Police vessel left the Port of Vancouver on a mission to traverse the Northwest Passage. The ship reached Halifax in early-October 1942. The St. Roch became the second ship ever to sail the Northwest Passage and the first to cover the route travelling from west to east. On the return voyage in 1944, it covered the entire distance in a mere 86 days.1 The aim was to establish Canadian sovereignty across the North, stake a Canadian claim to the North and, by default, the enforcement of a Canadian Arctic or northern border. The geographic nature of borders in the Arctic in general, and the Far Northwest in particular, is quite different from the South, and subject to a greater rate of change due to rapidly evolving geopolitical futures. On the one hand, new technologies, environmental change, resource exploitation and even tourism are challenging how the Canadian government manages and controls the state border across Canada's North and Far Northwest. On the other hand, the quest to establish and manage sovereign Canadian territorial limits across the Arctic remains a challenge. Canadian strategy to establish managed borders in the North has not really evolved beyond the first sailing of the St. Roch: transpose a southern border management paradigm on the North. This chapter is about emancipating a more regionally-appropriate border paradigm.

In the process, the chapter makes an example of the northern border as both, foreshadowing the transformation that borders are undergoing in globalisation long before those effects became as apparent at more frequented borders, and a harbinger of anticipating changes to come and options to prepare and respond. As flows of people, goods, capital, data, pollution and the like become ever more global, the 21st century is shaped by connectivity. Hallmarks of this development include the border shifting beyond the border, both inwards and outwards, as well as greater bilateral cooperation between states. Fundamentally, however, the exponential growth in connectivity across borders means that conventional Westphalian international approaches between states are no longer sufficient to govern borders in general, let alone in the North where the state's control of borders has always been tenuous. The governance of borders is increasingly multi-player, involving states, the private sector and the third sector, including, for instance, aboriginal communities who insist on being treated not just as any other stakeholder but as equal sovereign bearers of collective rights and stewards of the environment as well as their people. The 670-kilometre GasLink pipeline, which is now being built across British Columbia to the terminal at Kitimat, is a good example. It succeeded where other pipeline projects had floundered because of an approach to governance that was transnational: it gave aboriginal communities ownership over the process and the outcome, rather than just reducing their position to mere stakeholders in Impact Benefit Agreements.

Governance of the northern border foreshadows the transnationalisation of the way borders are governed. The geospatial value of the North rose abruptly with the advent of nuclear weapons, which are characteristic of an incipient border flow: one that cannot be governed, stopped or mitigated well at the actual border whilst posing an existential threat to the North American continent as a whole, rather than just either the United States or Canada. This gave rise to an unprecedented functional arrangement that shapes the binational relationship to this day: America's only genuinely binational command, the North American Aerospace Defense Command, situated in Colorado Springs – far away from any physical borderline. While the bilateral defence arrangement remained firmly ensconced in international relations between two states, the deleterious effects for local communities across the North has become manifest and consequential: from contaminated military sites to the large-scale resettlement of entire communities; effects that are longlasting, which a more transnational approach to governance could have mitigated. Such transnational governance is exemplified by the Canadian Armed Forces enlisting local communities in northern defence by establishing, equipping and training aboriginal peoples as part of

the Canadian Rangers. The Rangers were a functional response to the challenges of border policy in the North: vast terrain, few resources and exponential costs made it indispensable to draw on local knowledge and non-state actors.²

Much of the literature, policy and practice in managing borders and their integrity in North America is inherently dominated by paradigms from southern parts of the continent, which is where most people live and most goods cross the border. Yet, southern paradigms are either not applicable or ill-suited to managing borders in the North: the type and amount of traffic in people and goods differs in both proportion and absolute numbers; the nature of security threats differs, and the way security and threats are conceptualised by local communities differs; the costs of managing borders in the North are exponentially higher, yet available resources and expertise disproportionately fewer; and the types of assets available fewer and different from those that are commonly used to manage borders elsewhere.3 Many of the challenges, conflicts and vulnerabilities that are documented in other contributions in this volume are, in whole or in part, a function of the indiscriminate importation and application to the North of border management norms and practices that developed elsewhere. The aim of the chapter is to demonstrate how and why northern borders and border integrity differ, and the ineffectiveness, inefficiencies and misunderstandings associated with importing border management paradigms that are insensitive to needs, interests, priorities and values in the North; as well as to build on some of the observations across the contributions to this volume to indigenise border management paradigms. In the process, the chapter endeavours to shift the approach to borders in the North: from the prevailing 'high' border management model that treats all borders alike and represents elite interests from elsewhere in the country to a 'low' border management model that recognises diversity and variation in borders across different regions in Canada and promotes an asymmetric approach that is more sensitive and responsive to local cooperation and co-production of border management and integrity.

The chapter concludes that the story of border building in the Canadian North is an ongoing process that does not follow contemporary bordering theory. In effect, the bordering process in Canada's Arctic is a unique border laboratory: a real-time natural experiment across multiple political, economic and cultural levels. The analysis in this chapter suggests that the push and pull of the bordering process is the story of exogenous and endogenous variables that frame the decision-making environment and constrain available options for building the

Arctic border. The chapter starts with the well-known realist military paradigm of asserting sovereignty in a quintessentially modern fashion to forge a security community. Since the end of the Cold War, however, that process has been undergoing a fundamental transformation incommensurate with what we know from the literature and previous research about border processes. As a result, we are witnessing a genuinely new development that attempts to reconcile 'high' policy priorities of conventional security and national interest with 'low' policy priorities of human and food security, local rights and shared sovereignty, and local economic development.

2.2. Canada's Cold War Border

As the *St. Roch* was pulling into Vancouver Harbour in October 1944, the war across Europe and the Pacific was drawing to a close. The end of the Second World War would soon launch upon the world a new type of war: the Cold War, marked by a strategy that delivered nuclear effects predominantly in the air domain by way of bombers, submarines and intercontinental ballistic missiles. Its proximity to Russia transformed the northern periphery into a military front. The geopolitics of the Canadian North cast the region in a new light and imposed on the Canadian government a need to assert territorial control across the North. With Operation Muskox in 1946, an 81-day joint exercise with the Americans travelling across the Canadian low Arctic on snowmobiles, the Canadian government sought to establish an operant military presence in the North.⁴

By modern standards, a small military operation using snowmobiles may seem minor enough, but in the context of the technology of the day and the new geopolitics of the Cold War, Operation Muskox was a deliberate effort to employ new technology to enhance Canada's presence in the North. The snowmobile had been developed not even 25 years earlier, purposefully for recreational and commercial applications, not as a military platform. Yet, realising the importance of being able to exercise control over the Arctic, in what will become a familiar pattern, the Canadian government coopted new technology, along with the military, to project territorial control. The other important piece to this puzzle, of course, was the geopolitical position of North America's allies post-1945. The desire or motivation to exercise control of the Arctic was exogenous to the region. In the absence of an external pressure – the Soviet threat – neither the Canadian government nor its allies would have invested much time or effort in a presence in the Arctic.

Early border literature is replete with examples of borders established for the purpose of ensuring territorial integrity. The Great Wall of China and Hadrian's Wall are good examples from a pre-Westphalian world. However, even in more modern times, states have demarcated and controlled territory through the use of military presence and fortifications. The literature on the early border between Canada and the United States describes the American border as a string of military fortifications supported by a series of military roads for the purpose of resupply and transport. As technology advanced, military roads that supplied those military outposts – such as the Alaska Highway – were replaced with railroads and fortifications along with norms, the rule of law and law enforcement agencies. This evolution of the border between Canada and the United States is not quite as linear as described and did not occur in a vacuum. The United States bordered on British North America. As a colony or set of colonies, the United States had fought a war for independence against the same British rulers. The divestment from military fortifications transpired in a less competitive or acrimonious environment, with the establishment of Canada and the slow evolution towards what Karl Deutsch (1957) famously termed a 'security community'.6

Relative to its northern borders, during the Cold War, Canada was confronted with the need to build the fortifications to deny, or at least to monitor, entry to Canadian territory by the Soviet adversary. Canada had to build its border fortifications, complete with military supply roads, in an inhospitable, sparsely-populated part of the world. For Canada, having to build a border for the purpose of territorial defence was new. The border between Canada and the United States did not evolve along similar lines. Canada, as an independent country, never had a fortified border along its southern position. Although the British military had occupied border positions during the British colonial period, this was not a posture that the newly-formed Canada was even remotely capable of holding. For the new Canadian government in 1867, the border would be a mechanism for revenue collection – an economic border.

As the Cold War progressed, Canada doubled down on efforts to develop a fortified northern border. One of the lessons of Operation Muskox was that a Soviet infantry invasion across the Canadian Arctic was unlikely. Regardless, there was a need for permanent human settlement to stake out Canada's sovereign claim, monitor and provide information on security developments in the Arctic. This became the job of the Canadian Rangers, a Canadian Armed Forces reserve programme, that began in 1947. At the outset, the Canadian Rangers were mandated

largely with observing and reporting. They were outfitted with minimal equipment and operated as self-sufficient units. Over time, they have adopted additional mandates, but their principal mission remains unchanged: to observe and report unusual sightings in remote regions of Canada, and to conduct patrols to assert Canadian sovereignty. The Canadian Rangers became the first *de facto* fortification along the northern Canadian frontier. Comparable to the series of military forts along the early Canada-United States border, Rangers and their communities would take on an analogous role along Canada's Arctic border.⁷

However, a few hundred local men, with rifles and some communication equipment from the era of the Second World War, were no match for a potential Soviet force spilling over the Arctic Circle into the North American theatre. Indeed, if Canada was unable or unwilling to build sufficient infrastructure in the North to control the Arctic border, then the job would have to pass to Canada's Cold War ally, the United States. In the mid-1950s, Canada and the United States set about an ambitious infrastructure project to build radar stations along the Arctic border for the purpose of detecting intrusions by enemy forces and deterring the air threat. The development of the Distant Early Warning Line once again adopted technology as the mechanism for monitoring and surveying the northern border. Unlike the southern border, which had evolved along with the post-war United States economy, the northern border remained relatively isolated and difficult to access. That inhospitable environment still required a system to ensure continental defence in the context of the Cold War.

The series of radars that made up the DEW Line and the subsequent creation of North American Aerospace Defense Command (NORAD) created a ring of continental fortifications complete with supply lines from the South to ensure not just the territorial integrity of Canada, but that of the entire continent. To be sure, the motivation for Canada to demarcate and survey its northern border differed only slightly from the original sailing of the St. Roch and its sovereignty patrol. As the Cold War ramped up, it was apparent that Canada had a role in continental defence; or the task would fall to the United States alone. The consequences for unilateral American action in the Canadian North would have had substantial consequences for the sovereignty of the Canadian North. For Canadians, playing a role in the military defence of the northern border was essential to maintain a sovereign claim over the region. A binational arrangement on the part of Canada and the United States gave Canada the opportunity to incorporate the newest military technology to support a physical border.

At the same time, as important as the material border was, permanent infrastructure along the border – infrastructure that had a Canadian component in terms of technology, manpower and monitoring – strengthened Canada's political claim to the North and the northern border as a Canadian border. In the 1950s, just as now, the Canadian claim to a northern border was not globally recognised. Not that many countries were overly concerned about Canada's northern claim; that issue would become more contentious as the environment and technology changed, creating a more accessible North in the late-1970s and early-1980s. In the mid-1950s, however, Canada did not have sovereignty concerns with regards to a presence of the United States in the Arctic, nor did it appear that the United States had any territorial interest in the North beyond the installation of military monitoring stations for continental defence.

2.3. Post-Cold War Border

The last decade of the 20th century allowed Canada to reconsider its Arctic policy and to continue with the bordering process in the absence of the threat of mutually assured destruction. With military concerns across the region in decline, coupled with new surveillance technology that allowed for a reduced military footprint in the region, Canada expanded its Arctic policy to include the environment, aboriginal peoples' rights and economic development. That refocused Arctic policy in the 1990s resulted in bordering processes that expanded the number of actors. This was to be a short-lived reprieve from the military activities that dominated Arctic policy after the Second World War. The 1994 United Nations Convention on the Law of the Sea (UNCLOS) defined new regulations for determining maritime borders, launching claims by five Arctic states over the Arctic territory. Canada, though never alone in its claim to the Arctic, was now faced with claims to the region that were backed by international convention.

2.4. The New Cold War Border

Arctic ice has been melting since the late-1970s, opening areas of the Arctic not previously amenable to commercial and pleasure craft. The melting in the Arctic Archipelago has launched a new round of challenges to Canada's historic claim to the region, a claim that many

states in the international community have chosen to ignore. In late-2017, the United States began taking proposals for oil drilling off the coast of Alaska where the Northwest Passage begins. Around the same time, the Chinese government sent a research vessel into the region, for the purpose, one can assume, of exploring shipping options through the Arctic region. In early-2018, China announced an official policy on Arctic shipping: it planned to create a new 'polar silk road' through the Arctic trading route. 12

Ignorance of Canada's claim over the Arctic is not new: American and Russian submarines are known to have been operating under the polar ice shelf for years without permission from Canada. However, the growing number of actors now engaged in an ever-expanding polar frontier, and the associated challenges, sets current circumstances apart. Increased traffic into the Arctic region for the purposes of trade, tourism, resource extraction and to stake a claim to the area engender pollution, environmental and cultural disruption and challenges to local populations that lay claim to the territories of the Arctic. This is over and above the disruption to which local populations have already been subject due to previous Canadian policy in the North. Canada's Arctic policy stresses a historic claim to a clearly demarcated region in the North and lays out a plan for stewardship and development, but with the primary objective of 'high' Arctic policy in the national interest, rather than 'low' Arctic policy to advance local well-being, prosperity and human rights.

In bordering the Arctic, Canada has endeavoured to establish material control over the region, initially by presence and then with permanent infrastructure. In the new Cold War era, Canada has added a second prong to its strategy that includes the indigenous peoples of the North and changing the Arctic narrative – 'Canadians' who have long traversed the region in their traditional ways of life. The Canadian government has long coopted local inhabitants in the sovereignty process. Recall the creation of the Rangers in 1947. However, the new Cold War narrative is different. The new narrative engages, perhaps for the first time, traditional indigenous peoples' culture and lifestyle, environmental stewardship and economic development. Canada's Arctic Foreign Policy clearly articulates this shift: 'The Arctic is fundamental to Canada's national identity.'¹³ To reset the global narrative on the Arctic, Canada is attempting to position itself as the traditional custodian of the Arctic, rather than merely its defender.

2.5. The Bordering Process in the Arctic

Canada's experience of the bordering process in the Arctic is unique insofar as this may be the only case study in the world where this process can be observed in real time. Analogous to Sack's work on the human endeavour to control space, the Canadian government endeavours to enforce territorial integrity over a vast and sparsely populated region of the world. 14 However, Sack's work does not account for the proliferation of actors. Territorial control or bordering is not a process that is being spearheaded by local populations who inhabit the land, but rather by a distant government whose motivations are ultimately political and not, as Sack suggests, part of local or regional human behaviour. This begs the question of an alternative narrative: how are borders conceived or imagined by the indigenous peoples in Canada's North? Is it appropriate for them to be coopted by the Canadian government as actors in the bordering processes? What we are able to observe in the case of building Canada's Arctic borders is a political process, a process that, contrary to Paasi, is not clearly institutional. ¹⁵ In fact, in the Canadian Arctic, borders are being asserted in the absence of a territorial population and institutional structures, but motivated largely by exogenous effects, whilst at the same time limited by endogenous constraints: scarce resources, exorbitant expense, sparsely populated and a rapidly changing environment, both physical and political.

The desire to control territory is part of the human conditions. But contrary to Sack, human territoriality in Canada's Arctic is driven by policy choices not determined by the populations living in the territory and most affected by the building of borders, but rather by political interests and elites far afield from the respective territory. And like any state leadership, the bordering choices made over the years by Ottawa were compelled fundamentally by a desire or need to establish a sovereignty claim to the region. This claim has been made politically in the international community and materially though the deployment of military assets into the region to act as Ottawa's surrogate 'eyes and ears' in the area. Only recently has that strategy changed to include a cultural claim to the area through the presence of Canada's indigenous peoples.

Yet, Canada's Arctic lacks an institutional backdrop to construct the border. Paasi's work on the bordering process suggests that borders are institutional structures that exhibit specific behaviours as they evolve and develop.¹⁷ The absence of an antecedent Arctic border means that its entire development is up for negotiation. So, why did Canadian policymakers initially opt for a single-pronged military bordering process strategy, followed later by the two-pronged approach that complemented the military border process with a cultural component? The answer may lie in the ideas of the realpolitik of territorial control and state building.

Policies are generated in context. As Pierson notes, they frequently are path-dependent institutional structures subject to external pressures for change.¹⁸ Absent the existence of previous institutions, ideas and discourse become the building blocks for new policy structures. 19 In the case of Canada's Arctic borders, sovereignty, in the Westphalian sense of exercising exclusive control over a specific territory, dominated the discourse of the early policymakers. Subsequent to the war period post-1945, territorial integrity, being able to defend one's borders and control access were the dominant ideas in asserting sovereignty. Materialism ruled the day. In their understanding of sovereignty, the early policymakers missed the need for a collective agreement amongst. in this case, state actors that accept sovereign control over the Arctic region and, therefore, are in agreement with the location of Canada's Arctic borders and Canada's northern border strategy. As more actors have emerged, challenging the Canadian claim to the Arctic, Canadian policymakers have simply raised the stakes by developing new arguments to legitimate the Canadian position on the North that incorporate the proliferation of political actors.

2.6. Conclusion

Canada's early forays into the Arctic were designed to stave off sovereignty challenges to its claim in the region. More recently, Canadian efforts in the Arctic continue to be, only in a more sophisticated manner, efforts to stave off sovereignty challenges to its claim in the region. The history of Canada's northern border is an ongoing multipronged strategy reacting to exogenous pressures to the region. In many respects, this border is no different than many other borders: it, too, has had to evolve to meet the demands of a changing globe. Post-war Europe, for example, has witnessed a transition from building walls to keep people in to building walls to keep people out. Yet, in other ways, this border is entirely unique insofar as it is not an established institution, evolving in a somewhat predictable manner, nor is it a border being established by a group of people asserting their territorial autonomy. Canada's Arctic border is being built in real time, subject to both endogenous and exogenous pressures as it develops.

The Canadian Arctic, like the Spratly Islands and the Taiwan Strait, will be subject to the realpolitik of state interests and power. For Canada. this simply means that without the capacity to enforce the border, claims to the North will remain just that - claims that are not backed by a capacity to enforce those claims. That history is one of a 'high' Arctic strategy forged by political and economic elites in the national interest. Yet, that is no longer a viable strategy on its own. On the one hand, the characteristics and magnitude of connectivity in the North differ from that of the South. First, the nature of flows in the Arctic is emblematic of border challenges more broadly: pollution, environmental change, aero-spatial military challenges, etc. None of these can be adequately addressed by the actual physical Westphalian border. Second, these flows differ qualitatively and quantitatively from movement at the southern border, where priorities include organised crime, migration and cross-border trade. On the other hand, the emancipation and proliferation of individual and collective rights-holders as political actors throughout Canada's North has meant the exponential growth of actors involved in the bordering process.

This combination of effects obviates a 'high' approach by Canada to its northern border: no longer is border policy merely the purview of a relationship between states. It has given rise to an incipient 'low' border strategy that has to reconcile the interests of realpolitik with local partners, not only because they are a vital part of that strategy, but also because the political, legal and economic environment necessitates their perspectives and interests to be factored in as equal partners in the bordering process. We are witnessing a genuinely new bordering process that does not confirm with the literature: from Sack's territorial claims to Paasi's border institutions. The culmination of that process is the genesis of a new form of 'security community': one where 'high' interests of realpolitik have to be reconciled with 'low' security processes that prioritise human and food security along with local economic development for the benefit of local communities.

Notes

- 1 Vancouver Maritime Museum, 'St. Roch National Historic Site' (2019), https:// www.vancouvermaritimemuseum.com/ permanent-exhibit/st-roch-nationalhistoric-site.
- 2 P. Whitney Lackenbauer, *The Canadian Rangers: A Living History* (Vancouver: UBC Press, 2013).
- 3 Heather N. Nicol and P. Whitney Lackenbauer, eds., *The Networked North:*

- Borders and Borderlands in the Canadian Arctic Region (Waterloo: Borders in Globalization/Centre on Foreign Policy and Federalism. 2018).
- 4 Kevin M. Thrasher, 'Exercise Musk Ox: Lost Opportunities' (MA thesis, Carleton University, 1998).
- 5 Robert Wooster, The American Military Frontiers: The United States Army in the West, 1783–1900 (Albuquerque: University of New Mexico Press, 2009).
- 6 Karl W. Deutsch et al., Political
 Community and the North Atlantic Area:
 International Organization in the Light of
 Historical Experience (Princeton:
 Princeton University Press, 1957).
- 7 Lackenbauer, The Canadian Rangers.
- 8 Shelagh D. Grant, Polar Imperative: A History of Arctic Sovereignty in North America (Vancouver: Douglas and McIntyre, 2010).
- 9 Joseph T. Jockel, No Boundaries Upstairs: Canada, the United States and the Origin of North American Air Defense, 1945–1958 (Vancouver: UBC Press, 1987).
- 10 Government of Canada, 'Law of the Sea: United Nations Convention', last modified 10 August 2017, https://www.canada.ca/ en/environment-climate-change/ corporate/international-affairs/ partnerships-organizations/law-seaunited-nations-convention.html.
- 11 Timothy Cama, 'Trump Administration Approves Arctic Offshore Oil Drilling Project Off Alaska's Coast', *The Hill*, 24 October 2018, https://thehill.com/policy/energy-environment/412996-trump-admin-approves-arctic-offshore-oil-drilling-project-off.

- 12 Jimmy Thompson, 'What Does China's New Arctic Policy Mean For Canada?', CBC News, 27 January 2018, last modified 27 January 2018, https://www.cbc.ca/ news/canada/north/what-does-china-snew-arctic-policy-mean-for-canada-1.4506754.
- 13 Government of Canada, Canada's Arctic Foreign Policy, last modified 12 May 2017, https://international.gc.ca/worldmonde/international_relations-relations_internationales/arctic-arctique/arctic_policy-canada-politique_arctique.aspx? lang=eng.
- 14 Robert Sack, Human Territoriality: Its Theory and History (Cambridge: Cambridge University Press, 1986).
- 15 Anssi Paasi, Territory, Boundaries and Consciousness: The Changing Geographies of the Finnish-Russian Border (Toronto: Wiley, 1996).
- 16 Sack, Human Territoriality.
- 17 Paasi, Territory, Boundaries and Consciousness.
- 18 Paul Pierson, Politics in Time: History, Institutions and Social Analysis (Princeton: Princeton University Press, 2004).
- 19 Vivien A. Schmidt, 'Discursive Institutionalism: The Explanatory Power of Ideas and Discourse', *The Annual Review of Political Science* 11 (2008): 303–26; Vivien A. Schmidt, 'Taking Ideas and Discourse Seriously: Explaining Change Through Discursive Institutionalism as the Fourth New Institutionalism', *European Political Science Review* 2, no. 1 (2010): 1–25.

3

The History of the Jay Treaty, and its Significance to Cross-Border Mobility and Security for Indigenous Peoples in the North American Northern Borderlands and Beyond

Greg Boos, Heather Fathali and Greg McLawsen¹

3.1. Introduction

US and Canadian border security measures all too often ignore the concerns of North American indigenous peoples. In borderlands regions, and especially for affected native populations, border security without cross-border stability and cultural continuity can mean no security at all. A broad observance of the letter and spirit of a little known, yet significant, treaty negotiated between the United States and Great Britain in 1794 could change this paradigm.

American Indians born in Canada² (ABCs) enjoy access to the United States unrestricted by the Immigration and Nationality Act (INA), a right stemming from the Jay Treaty (1794).³ An examination of this right, now codified at § 289 of the INA, reveals qualifying ABCs are entitled to privileges unparalleled by all but United States citizens to enter and remain in the US 'for the purpose of employment, study, retirement, investing, and/or immigration'⁴ or any other reason.

This chapter outlines the history and development of the Jay Treaty, the rights of ABCs today and the scope of ABC status. It analyses the lack of reciprocity in Canada and explores the issues of cross-border mobility and commerce. It provides illustrations of these issues through case law, and as applied in the Arctic region. It concludes by submitting that active engagement of indigenous communities on cross-border mobility issues is crucial to the ongoing development of sound border security and policy.

3.2. History

Long before European contact, travel across what is now the US/Canada border was an element of daily life for the people of numerous North American indigenous nations. The international boundary was established by Great Britain and the US in the Peace of Paris, which divided North America without regard for its indigenous nations. The indigenous peoples resented a boundary passing through territory that had been theirs since time immemorial and viewed the newly established border as an infringement on their sovereign rights.

In 1794, to address issues unresolved by the Peace of Paris or arising thereafter, Great Britain and the US negotiated the Jay Treaty. As part of this treaty, the parties sought to relieve tribal tensions arising from the imposition of the new boundary. In relevant part, Article III of the Treaty provides:

'It is agreed that it shall at all Times be free to His Majesty's Subjects, and to the Citizens of the United States, and also to the Indians dwelling on either side of the said Boundary Line freely to pass and repass by land or inland navigation, into the respective Territories and Countries of the Two Parties on the Continent of America (the Country within the Limits of the Hudson Bay Company only excepted)...'

The Jay Treaty did not create a new right for the continent's indigenous people; rather, it recognised their pre-existing right to move freely across the land.⁷ In 1796, an explanatory provision was added to the treaty providing that no further treaties should derogate from the rights guaranteed by Article III.⁸ During the War of 1812, Jay Treaty rights were suspended. The Supreme Court of the United States has held that the War of 1812 abrogated the Jay Treaty and that, following the war, the Treaty of Ghent revived the rights of native tribes predating that conflict.^{9,10}

The US continued to recognise the right of indigenous people to pass across the border freely until enactment of the Immigration Act of 1924 (Act of 1924), which provided for only those eligible for citizenship to enter the US.¹¹ Because indigenous people were ineligible

for citizenship as a result of race-restricted naturalisation laws dating to 1790,¹² the Act of 1924 barred their entry to the US.¹³ Shortly thereafter, the US government used this as a basis to deport ABCs who had not registered as aliens or obtained immigrant visas.¹⁴

In the 1927 McCandless case, an ABC named Paul Diabo was arrested and ordered deported for entering the US in violation of US immigration laws. He challenged his deportation, based on the Jay Treaty. 15 In defence of its position, the government argued that the War of 1812 abrogated the Jay Treaty, relying on the general principle that war between nations ends all prior treaty rights, and those rights are only reborn if a new treaty provides them. ^{16,17} On appeal, the Court found in favour of Diabo.¹⁸ It reasoned that treaties stipulating permanent rights, professing to aim at perpetuity, do not end upon occurrence of war, but are merely suspended until the war ends and revived when peace returns. 19 Because Article III of the Jay Treaty grants the right to freely cross the border in perpetuity, the right is permanent in character; thus, the War of 1812 did not abrogate the Jay Treaty. 20 Further, in 1815, the US and Great Britain signed the Treaty of Ghent, which again recognised the Indians' prerogative to move freely across the border, removing any doubt as to the existence of that right.²¹

3.3. Scope: A Determination based on Racial Considerations

Congress codified the Indians' right of free passage across the border with the Act of 2 April 1928 (Act of 1928):

'[T]he Immigration Act of 1924 shall not be construed to apply to the right of American Indians born in Canada to pass the borders of the United States: Provided, That this right shall not extend to persons whose membership in Indian tribes or families is created by adoption.'²²

This provision remained in effect until 1952, when Congress enacted the INA. INA § 289 modified the language of the Act of 1928 by replacing the adoption provision with a bloodline requirement – the only racial metric in US immigration law:

'Nothing in this title shall be construed to affect the right of American Indians born in Canada to pass the borders of the United States, but such right shall extend only to persons who possess at least 50 per centum of blood of the American Indian race.'23

With no legislative history on point, the basis for bloodline requirement is unclear, but it is reasonable to assume it stemmed from then recent case law and statutory definitions of 'Indian' outside of the immigration context. In the 1947 opinion *US ex rel. Goodwin v. Karnuth*, a federal district court analysed the term 'Indian'.²⁴ After noting the term was not defined in United States Code (USC) sections dealing with immigration, the Court looked to other sections of the Code defining the term. It noted the definition of 'Indian' used in 25 USC Chapter 14, which governs an array of issues pertaining to Indian peoples and land: 'The term "Indian" as used in [this Act] shall include all persons of Indian descent who are members of any recognized Indian tribe now under Federal jurisdiction... and *shall further include all other persons of one-half or more Indian blood*.'²⁵

The Court then cited the canon of statutory interpretation that 'Congress may well be supposed to have used language in accordance with the common understanding',²⁶ and that '[t]he popular or received import of words furnishes the general rule for the interpretation of public laws'.²⁷

Applying this canon, the court determined that 'the words "American Indians born in Canada", found in [the Act of 1928] must be given a racial [rather than political] connotation.'28 It then addressed the second clause, which read: 'Provided, That this right shall not extend to persons whose membership in Indian tribes or families is created by adoption.'29 The court reasoned that inclusion of the second clause 'means that such adoption does not make the adoptee an American Indian by "blood", entitling him to free entry under the first clause. One whom nature has not made an American Indian cannot be made one by adoption in some Indian tribe or family.'30

This opinion and the statutory definition of 'Indian' interpreted in *Goodwin* were published after the Act of 1928 (which did not contain a blood quantum requirement) and prior to the 1952 enactment of the INA (which did). Although there is no definitive legislative history on the matter, the drafters of INA § 289 likely knew of this reasoning when they removed the adoption language from the Act of 1928 and expressly replaced it with the blood quantum requirement. Beyond this, Congressional reasoning for retaining the racial basis for ABC classification remains unclear.³¹

3.4. Canada

3.4.1. Indigenous Groups in Canada: Indian, Inuit, Métis and métis

Section 35(1) of the Canadian Constitution names three separate indigenous cultural groups under the umbrella term 'Aboriginal' for the purposes of Canada's constitution:³² Indian,³³ Inuit and Métis.³⁴ In this context, the term 'Indian' is therefore used in a distinct way from Inuit and Métis. The question then remains whether the Inuit and Métis peoples are eligible for ABC status.

While the Inuit do not self-identify as Indians, and Canada expressly distinguishes Inuit from Indians, as far as the US is concerned, Canadianborn Inuit are eligible for rights under INA § 289 upon establishment of the requisite blood quantum. The US does not rely on Canadian definitions in determining which groups qualify for the benefits of INA § 289, and US courts have held that the term 'Indian' includes Inuit. An examination of the statutory language introduced both prior to and in the INA indicates a clear intent to broaden the applicability of Jay Treaty rights beyond only those individuals who are members of Indian tribes. Because Inuit are Indians as far as the US government is concerned, Inuit peoples born in Canada who possess the bloodline requirement may qualify for ABC status.

Like the Inuit, Métis do not self-identify as Indians and are distinguished as a separate indigenous group from Indians in Section 35 of Canada's Constitution.⁴⁰ The term 'métis' originates from a French word meaning 'mixed' and was historically used in Canadian French for persons of mixed ancestry.⁴¹ While 'métis' generically denotes mixed indigenous ancestry,⁴² when capitalised, the term refers to a specific population of indigenous and French-Canadian origin which emerged from the marriages which took place in the early 19th century between French-Canadian fur traders and local indigenous people.⁴³ The Métis maintain a strong and unique identity, with specific criteria dictating membership within the community.⁴⁴

Meanwhile, the question of whether Métis and non-status Indians⁴⁵ are 'Indians' under Section 91(24) of the Constitution Act, 1867, has long been the subject of legal debate. Section 91(24) is the provision of Canada's Constitution through which the federal government of Canada derives jurisdiction over the subject matter of 'Indians, and Lands reserved for the Indians'. ⁴⁶ In 2013, a Federal Court ruled in *Daniels v. Canada*

that both Métis and non-status Indians are included as Indians 'within the meaning of the expression "Indians and Lands reserved for the Indians" contained in s. 91(24) of the Constitution Act, 1867.'⁴⁷ On 17 April 2014, the Federal Court of Appeal upheld that decision in part: it ruled that only Métis, and not non-status Indians, are included as Indians within the meaning of the Canadian Constitution.⁴⁸ But on 14 April 2016, the Supreme Court of Canada (SCC) unanimously restored the ruling of the Federal trial court, which held both Métis *and* non-status Indians are 'Indians' for the purpose of section 91(24) of the Constitution Act, 1867.⁴⁹ In its decision, the Court clarified that the term 'Indian' or 'Indians' in Canada's constitutional context has two meanings: 'a broad meaning, as used in s. 91(24), that includes both Métis and Inuit and can be equated with the term "aboriginal peoples of Canada" used in s. 35, and a narrower meaning that distinguishes Indian bands from other Aboriginal peoples.'⁵⁰

The definition of ABC is contingent only on birth as a Canadian citizen and satisfaction of the requisite blood quantum. Métis identification alone is insufficient to qualify for ABC status; an individual must satisfy the bloodline requirement, a matter independent from Métis identity. The same rule applies to métis. For this reason, while the recent ruling of the SCC has significant implications for the rights of Métis and non-status Indians in Canada, it has no bearing on their qualifications for ABC status. Ultimately, for INA § 289, whether individuals are Indian, Inuit, Métis or métis, they will qualify for ABC status if they were born in Canada and can satisfy the bloodline requirement.

3.4.2. No Reciprocal Right to Enter Canada

The SCC decisions regarding the validity of Jay Treaty rights have been informed by the fact that the Canadian Parliament has never enacted enabling legislation required for the Jay Treaty to have force of law in Canada. ^{51,52} Thus, the Canadian government holds that the Jay Treaty does not affect the admissibility of US-born indigenous persons to Canada. ⁵³ Admissibility of all non-citizens to Canada is governed by the Immigration and Refugee Protection Act, ⁵⁴ which does not incorporate Jay Treaty rights. The Canadian Immigration Act states that 'every person registered as an Indian under the *Indian Act* has the right to enter and remain in Canada in accordance with this act, and an officer shall allow the person to enter Canada if satisfied following an examination on their entry that the person is a... registered Indian'. However, the registration requirements of the Indian Act have proven difficult, and

Canadian courts have declined to broaden its applicability; thus, US-born indigenous persons are not extended a reciprocal right of entry to Canada under the Jay Treaty.

In 1956, the SCC in *Francis v. The Queen*⁵⁵ unanimously held that a treaty such as the Jay Treaty is not enforceable in Canada without enabling legislation.⁵⁶ While Canada does not recognise a reciprocal right of entry for US-born indigenous persons, Canadian courts have recognised and protected an *aboriginal* right to freely pass the border.⁵⁷ This right is protected by Canada's Constitution in Part II of the Constitution Act, 1982 (Constitution Act).⁵⁸ Section 35(1) of the Constitution Act recognises and affirms 'the existing aboriginal and treaty rights of the aboriginal peoples of Canada'.⁵⁹ Section 35(2) defines 'aboriginal peoples of Canada' to include the Indian, Inuit and Métis peoples of Canada.⁶⁰ While Canadian courts have declined to recognise Jay Treaty rights as existing treaty rights under Section 35, it is within Section 35 that Canadian courts find authority to recognise existing aboriginal rights.

In 1990, the SCC decided *R. v. Sparrow*, analysing the rights of aboriginal peoples in light of Section 35.⁶¹ The Court held that Section 35(1) should be given a generous and liberal interpretation in favour of aboriginal peoples, that the government cannot extinguish an aboriginal right without a clear intention to do so, and that the government may regulate or infringe on such rights only if the interference meets the test for justification laid out by the Court.⁶² It established four factors to analysing a claim under Section 35(1): (1) 'whether an applicant has demonstrated that he or she was acting pursuant to an aboriginal right'; (2) 'whether that right was extinguished prior to the enactment of s. 35(1)'; (3) 'whether that right has been infringed'; and (4) 'whether that infringement was justified'.⁶³ This test continues to be employed by the SCC when analysing 35(1) claims.

In the 1996 case of *R. v. Van der Peet*, the SCC analysed the substantive rights recognised and affirmed by Section 35(1).⁶⁴ The Court described Section 35(1) as 'the constitutional framework through which the fact that aboriginals lived on the land in distinctive societies, with their own practices, customs and traditions, is acknowledged and reconciled with the sovereignty of the Crown.⁶⁵ The *Van der Peet* Court articulated a test for identifying aboriginal rights – the 'integral to a distinctive culture test'. It directs that 'in order to be an aboriginal right an activity must be an element of a practice, custom or tradition integral to the distinctive culture of the aboriginal group claiming the right'.⁶⁶ To qualify, the 'practice, custom or tradition must be of central

significance to the aboriginal society in question – one of the things which made the culture of the society distinctive'.⁶⁷ The Court concluded that aboriginal rights must be based on those that existed prior to contact with European society.⁶⁸

Watt v. Liebelt⁶⁹ raised the question of whether 'it could be contrary to an existing Aboriginal right of an Aboriginal people of Canada, as guaranteed in the Constitution, for an Aboriginal person who is [an American citizen], and neither a Canadian citizen nor registered under the Indian Act of Canada, to be ordered to depart from Canada for a crime committed [in Canada]'.⁷⁰ While the Court of Appeal did not ultimately reach a decision on the issue, it quashed the order of deportation and remanded the case for further fact-finding on the tests previously established in *Sparrow* and *Van der Peet*.

Recently, the case of *R. v. Desautel*⁷¹ again raised the issue of whether a US-born indigenous person not resident in Canada may assert an aboriginal right to enter Canada, and the court found they could. The appellant was Richard 'Rick' Desautel, a member of the US-based Lakes Tribe of the Colville Confederated Tribes ('Lakes Tribe') and a resident and citizen of the United States. The Lakes Tribe is a successor group of the Sinixt people, whose traditional territory extends both north and south of what is now the US-Canada border. In 2016, Desautel asserted an aboriginal right to hunt for ceremonial purposes by shooting and killing an elk in traditional Sinixt territory in Canada. He was charged with hunting without a licence, and hunting big game while not being a resident of British Columbia, contrary to the Province's Wildlife Act.⁷²

In his defence before the British Columbia Provincial Court, Desautel asserted his actions were protected by Section 35. In opposition to Desautel's claim, the Province argued 1) an aboriginal group must reside in Canada to be considered an aboriginal people protected by Section 35 in Canada, and 2) Desautel's claimed hunting right is incompatible with Canadian sovereignty. 73 The court acquitted Desautel of the charges. It found he was exercising an aboriginal right of the Sinixt/Lake People to which Section 35 protections applied, and that the relevant sections of the Wildlife Act unjustifiably infringe this right. 74 The Province appealed to the British Columbia Supreme Court, 75 which again found for Desautel. 76 The Province's subsequent request to appeal the matter to the British Columbia Court of Appeal (BCCA) was granted, and after considering the arguments of the parties, the court again sided with Desautel. 77 At the deadline for finalising this chapter and forwarding it to its publisher, it is unknown whether the Province will seek leave to appeal the BCCA decision to the Supreme Court of Canada.

Another recent case has drawn much-needed public attention to the issue of cross-border mobility for US-born indigenous persons seeking access to their traditional lands in what is now Canada. Dr Mique'l Dangeli is a US-born member of Tsimshian Nation. Her people's traditional territory spans the border between Alaska (US) and northern British Columbia (Canada). As one of the few remaining fluent speakers of Sm'algyax, the Tsimshian language, she moved to Canada to teach Sm'algyax in her community's traditional territory, but after ongoing complications with Canadian immigration, she was forced to leave Canada after her post-graduate work visa expired. While she was later able to secure the right to work in Canada through an employment visa based on her status as a professor, she continues her fight for her right to live and work in her traditional territory as an indigenous person. She has started a petition calling on the Canadian government to reciprocate the Jay Treaty, which eloquently states the issue:

'The colonial border between the US and Canada dissects Indigenous territories in ways that sever the lifelines between First Nation families, communities, languages and ceremonies. Every year thousands of US-born First Nations people who are Indigenous to Canada are denied the ability to live and work in Canada because the government refuses to recognize their ancestral rights to do so. Yet through the Jay Treaty, the relatives of these same people who are born in Canada and have Indian Status can live and work in the US. How is it possible that the US, with its extreme policies against immigration, honours the rights of Indigenous peoples regardless of citizenship and Canada does not?'⁷⁹

The rights of ABCs are firmly settled in the US under INA § 289, rooted in the Jay Treaty. As the foregoing discussion suggests, there is no reciprocal Jay Treaty right for US-born indigenous persons to enter Canada, and the rights of US-born indigenous persons under Canadian law are still evolving. The conclusion of this chapter includes a discussion of continuing developments in this regard.

3.5. An Exploration of the Jay Treaty in the Northern Borderlands

The Jay Treaty provisions drafted to relieve tribal tensions originally arose from the establishment of an international boundary along what is

now the mainland US-Canada border. As security measures have moved to the forefront of modern concern, the Jay Treaty has become diminished. In the 21st century, native populations face a variety of cross-border mobility challenges:

'[S]ecurity has meant increased difficulty in pursuing intertribal trade and exchange, greater obstacles to delivery of social and health services to tribal members who live across national borders and the attenuation of social and kinship networks... [B]arriers to border mobility undercut efforts to keep alive or re-create cultural traditions and practices that native leaders claim are critically important to the identities and well-being of their members.'80

These concerns transcend the 49th Parallel – they extend across the Northern Borderlands: along the Alaska (US)/Canada border and across the Arctic region.⁸¹

3.5.1. The Arctic

The Arctic region is home to over 500,000 indigenous peoples⁸² spanning 40 ethnic groups.⁸³ The Arctic settlement area is divided between eight countries: Canada, the United States, Russia, Finland, Sweden, Norway, Iceland and Denmark.⁸⁴ In 1996, the Arctic Council was created 'with the purpose of advancing circumpolar cooperation. The mandate of the Council is to protect the Arctic environment and promote the economies and the social and cultural well-being of northern peoples'.⁸⁵ The Council consists of the eight above-mentioned Arctic States, along with six Indigenous Peoples Organisations representing indigenous interests, the intent being 'to engage Arctic indigenous peoples in the cooperation in recognition of their right to be consulted in any issues concerning the stewardship of their ancestral homelands'.⁸⁶

Although those ancestral homelands are now divided by international boundaries, 'the indigenous peoples of the Arctic view themselves as having a historical existence and identity that is separate and independent of the states now enveloping them'⁸⁷ – a claim to sovereignty at the heart of the Jay Treaty's intent. While each distinctive cultural group in the Arctic has its own unique issues and experiences, one major common challenge faced across these communities is cross-border mobility and the Jay Treaty.

It is noted that a *Desautel* fact pattern could easily arise in the Arctic, where subsistence hunting remains a reality of daily life for many

communities. In the most remote areas, the border is still unmarked and a hunting trip across an unmonitored boundary line may only become known to the hunter upon review of their GPS coordinates at the end of the day. A US-born indigenous person engaged in hunting of migratory species such as caribou, whose migration routes crisscross the border, could easily trigger charges like those currently faced by Desautel should their hunting cross into Canada. Regardless of who prevails should the *Desautel* case reach the Supreme Court of Canada, as development in the Arctic continues to impact natural resources and animal populations, it is only a matter of time before both the US and Canada begin to monitor hunting and fishing in this region with heightened scrutiny.

For brevity, this chapter will focus on exploring the issue of cross-border mobility in the Arctic as applied to the Inuit, the most northerly of the Arctic peoples.

3.5.2. A Case Study: The Inuit

'We Eskimo are an international community sharing common language, culture, and a common land along the Arctic coast of Siberia, Alaska, Canada and Greenland. Although not a nation-state, as a people, we do constitute a nation.'88

As introduced in Section 3.4.1., the Inuit are not Indians; however, they may qualify for ABC status upon establishment of the requisite bloodline. There are nearly 60,000 individuals who identify as Inuit in Canada, ⁸⁹ and approximately 15,700 Inuit living in Alaska. ⁹⁰ A discussion regarding the right of free passage for Inuit is not confined by the borders of the US and Canada. Inuit traditional lands span across the circumpolar region in the US, Canada, Denmark, Greenland and Russia. ⁹¹ In 1977, the Inuit Circumpolar Council (ICC) was founded to 'speak with a united voice on issues of common concern and combine their energies and talents towards protecting and promoting their way of life'. ⁹²

In its first conference that same year, Inuit from Canada, Greenland and the US (Alaska) discussed this common vision, proposing the right of free travel across traditional Inuit lands of the circumpolar region. The conference presented Resolution 77–13, which 'call[ed] upon Canada, the United States and Denmark to provide for free and unrestricted movement for all Inuit across their Arctic homeland'. Resolution 77–13 was rooted in the rights bestowed by the Jay Treaty,

and also referenced the concept of aboriginal rights, then yet to be recognised by the Supreme Court of Canada:

WHEREAS, a treaty negotiated between the United States and England provides intercourse and commerce across the U.S./Canadian border; and

WHEREAS, we Inuit are the indigenous people of the Arctic and have freely visited and traded back and forth across our homeland for thousands of years, thus establishing *our aboriginal rights to free and unrestricted travel and trading* all across the Arctic; and

WHEREAS, the Jay Treaty between the United States and England clearly recognizes and protects our rights to unrestricted intercourse and trade across the U.S./Canadian border; and

WHEREAS, these guarantees have never been negotiated with Denmark, and have not been properly established in Canada, resulting in the fact that our circumpolar Inuit community does not enjoy the right of free travel and trade across the Canadian/Greenlandic border; and

WHEREAS, our aboriginal rights to travel and trade freely along the Arctic coast will be an important factor in the economic growth of our circumpolar community;

NOW, THEREFORE, BE IT RESOLVED that the delegates assembled at the first Inuit Circumpolar Conference call upon the Governments of Canada, the United States and Denmark to negotiate an agreement that will protect for all Inuit the right to unrestricted trade and travel as envisaged between Canada and the United States by the Jay Treaty. 95

While the Jay Treaty originally envisaged unrestricted trade and travel across the border, the provision relating to trade was never codified in § 289 – an array of customs and environmental laws govern the transport of goods across the border. The regulations and restrictions imposed by these laws often provide exceptions for the traditions of indigenous communities; however, these exceptions rarely contemplate cross-border cultures, and may only be asserted by communities on one side of the border. Without Jay Treaty protection in this regard, cross-border

indigenous cultures would be well-served with a strong proponent in international policy and legislative development. The ICC is not only a Permanent Participant of the Arctic Council, but it also holds Special Consultative Status with the United Nations, and has been involved with the World Summit on Sustainable Development, the Convention on the Trade of Endangered Species, the World Intellectual Property Organization, the Organization of American States, the International Whaling Commission, the Convention on Biological Diversity and the International Union for the Conservation of Nature (IUCN). These global connections make the organisation a strong player in developing the Arctic. As the Arctic continues to develop, the ICC is an ideal advocate for cross-border policies that recognise and respect the traditional practices of cross-border cultures.

3.6. Cross-Border Culture and Commerce

Article III of the Jay Treaty states in part '[n]o duty of entry shall ever be levied by either party on peltries brought by land, or inland navigation into the said territories respectively, nor shall the Indians passing or repassing with their own proper goods and effects of whatever nature, pay for the same any import or duty whatever'. However, the US government does not recognise the continued validity of this provision in the way it has Jay Treaty rights regarding free passage. ⁹⁸

In *US v. Garrow*, a 1937 US Court of Customs and Patent Appeals case, the court opined that the Jay Treaty, including its duties provision, was abrogated by the War of 1812.⁹⁹ The court maintained the Treaty of Ghent was not self-executing and was not enacted by legislation; therefore, no treaty right remained for the duties provision.¹⁰⁰ Although statutory exemptions from customs duties had been maintained in various iterations of the Tariff Act, the exemption was deleted in 1897.¹⁰¹ No legal basis remained for the Treaty's duties provision.

Nearly 30 years later, the federal district court in *Akins v. Saxbe* noted that language granting Indians the right to pass with their goods duty free 'was not included in the Tariff Act of 1897, ¹⁰² and it has not been included in any subsequent tariff act'. ¹⁰³ It maintained questions of customs duties and importation to be within the exclusive jurisdiction of the customs courts. ¹⁰⁴ Meanwhile, in 2001, the SCC held that there exists no aboriginal right to transport goods duty free across the US-Canada border. ¹⁰⁵

Despite restrictive policies in force today, traditional indigenous cross-border commerce and culture is well-documented: '[a]boriginal

economies were vibrant – they produced and traded, often over long distances and through elaborate trade coalitions. Trading relations evolved over millennia... It is a mistake to assume that Aboriginal peoples and their economies were local, static, subsistence-oriented or unresponsive to opportunities for wealth generation.'¹⁰⁶

Even if the communities cannot access one another to the extent they once did, their long-standing traditions of cross-border commerce and culture continue to survive despite the US-Canada border; a boundary line aptly described as a 'figment of someone else's imagination'. ¹⁰⁷ Indeed, '[f]rom the Indian viewpoint, he crosses no boundary line. For him this does not exist.' ¹⁰⁸

The Blackfeet (US) and Kainai (also known as the Blood or Kainaiwa) (Canada) provide an illustration of the many tribes whose lands were bifurcated by the drawing of this boundary line, and whose traditional practices are affected by its imposition. ¹⁰⁹ 'Today there is considerable intermarriage and contact [between the Blackfeet and Kainai] through social, recreational and religious events... These gatherings form the center of tribal cultural and religious life. Tribal members often trade animals, meat, berries, roots, herbs, handmade goods and medicine bundles at these events.' However, both 'Canadian and American customs laws... forbid the import and export of certain plants and animals that are significant in ceremonial life. In addition, these laws require a search of all goods, thereby inhibiting the exercise of tribal culture and religion.' While a customs search may seem a benign inconvenience to a non-indigenous person, it can be devastating to the integrity of certain sacred items. ¹¹²

The current debate over eagle feathers, which carry religious significance for many indigenous cultures, provides an illustration of the competing interests and policies at play. Under the Bald and Golden Eagle Protection Act (BGEPA), possession of eagles or eagle parts carries civil and criminal penalties. However, a religious exception to BGEPA allows enrolled members of federally-recognised Indian tribes to apply for a permit allowing them to possess or take bald or golden eagles or their parts. Policies exist to allow members of federally-recognised tribes to travel with eagle parts between the US and Canada or Mexico without a permit in certain circumstances, and Canadians presenting a Certificate of Indian Status may travel in and out of the US with eagle parts under similar circumstances. All items are still subject to customs declarations. Because the policy for Canadians is restricted to those carrying a Certificate of Indian Status, it necessarily excludes non-status Indians.

Outside of ceremonial implications, well-intentioned and important legislation aimed at protecting endangered or threatened wildlife has also created unanticipated economic difficulties for indigenous Canadian populations, the Marine Mammal Protection Act (MMPA) being one example. The MMPA bans the import of marine mammals and marine mammal products into the US. The practical effect is '[a]n American Indian or Eskimo living one mile west of the Alaskan-Yukon border can sell traditional handicrafts made from seal skin into the "lower 48", while a Canadian Aboriginal person living one mile east of the same border, cannot do so'. 120

Another challenge to cross-border mobility for ABCs is the Western Hemisphere Travel Initiative (WHTI) – a result of the Intelligence Reform and Terrorism Prevention Act of 2004 (IRTPA)¹²¹ – which requires US and Canadian travellers to present a passport or other approved document denoting identity and citizenship when entering the US.¹²² While WHTI-compliant tribal documents do exist, they are not common, and in their absence, the issue of passports serves as a barrier – particularly because ABC status is not dependent on tribal membership.¹²³ Significant numbers of indigenous people do not carry US or Canadian passports, either as a matter of sovereignty (they consider themselves to be members of their own indigenous nation, and may choose to carry a tribal passport rather than a US or Canadian passport) or for practical purposes (it may not be reasonable for a tribal elder living in a remote region to travel to a passport application centre).

If WHTI requirements are not modified for ABCs, their Jay Treaty right of free passage will remain limited. A non-expiring WHTI-compliant Jay Treaty Card would remedy this situation. The Jay Treaty Card could be issued by the Department of Homeland Security upon the applicant evidencing their identity and qualification for the status. The process of documenting as an ABC is outside the scope of this chapter, but in short, it involves presenting the Department of Homeland Security a host of documentation including long form birth certificates for the applicant, their parents and possibly their grandparents, as well as tribal records that indicate blood quantum.

Border security and species protection are the realities of the world we live in, and they will continue to impact indigenous cross-border commerce and culture. However, it is possible to mitigate adverse effects through recognition of Jay Treaty principles, encouragement of cross-border relationships and, most importantly, consulting with indigenous peoples in the development of laws and policies that affect their traditional ways of life.

3.7. Conclusion

The Jay Treaty's provision guarding indigenous cross-border mobility remains in effect in the US. Meanwhile, Canada has failed at implementing a workable solution to cross-border mobility for US-born indigenous peoples. Canada has not developed a workable Jay Treaty alternative, with the only possible option being the very narrow 'integral to a distinctive culture test' set out by the *Van der Peet* Court – which the government of British Columbia has been contesting relative to its applicability to US-born indigenous peoples residing in the US, in *Desautel*.

Canada's position puts it squarely at odds with Article 36 of the United Nations Declaration on the Rights of Indigenous Peoples, which reads:

- Indigenous peoples, in particular those divided by international borders, have the right to maintain and develop contacts, relations and cooperation, including activities for spiritual, cultural, political, economic and social purposes, with their own members as well as other peoples across borders.
- 2. States, in consultation and cooperation with indigenous peoples, shall take effective measures to facilitate the exercise and ensure the implementation of this right.¹²⁴

A recent development in Canada may suggest positive progress toward softening resistance to border crossing rights for indigenous peoples. In 2016, the Canadian Senate's Committee on Aboriginal Peoples heard from Canadian governmental and indigenous organisations regarding impediments to the maintenance of cultural and family ties between cross-border indigenous communities. The Committee recommended that the Minister of Indigenous and Northern Affairs Canada appoint a special representative to explore solutions to border crossing challenges faced by indigenous communities across Canada. ¹²⁵ The Minister appointed Fred Caron to this position. ¹²⁶ He was directed to engage with indigenous communities on border crossing issues and file a fact-finding report on the outcome of his engagement.

Caron filed his report, titled *Report on First Nation border crossing issues*, on 31 August 2017.¹²⁷ The report documents myriad cross-border issues experienced by indigenous communities across Canada and addresses potential solutions. Out of all the potential solutions raised in the report, Canadian ratification of the Jay Treaty constitutes the broadest and most thorough:

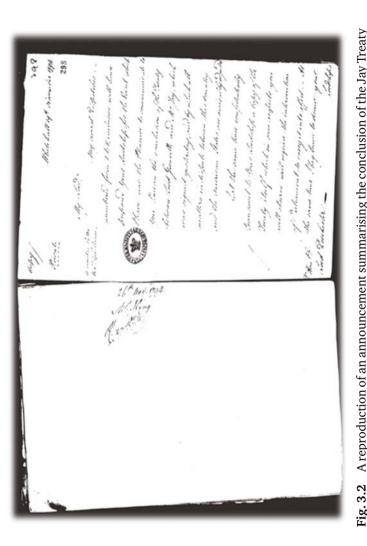
'[W]hile there was a belief on the part of some of the First Nation representatives I met with that the current issues would not exist

had Canada implemented the Jay Treaty, there was also a view that, in order to set the path forward, what is required is a mechanism to recognize inherent and Jay Treaty rights in a modern context. All who expressed themselves on the subject were of the view that recognition of these rights should be an integral part of the federal government's commitment to reconciliation and the recognition of a nation-to-nation relationship. Such recognition, in their view, would honour and respect their identity as North American Indians having long-standing historical relationships with Canada and the US based on historical alliances and treaties.'

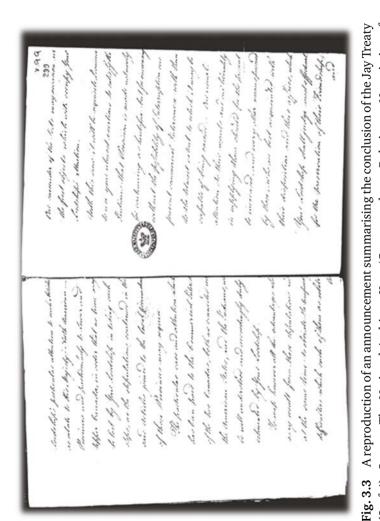
Whether the report results in government action remains to be seen. Ultimately, until Jay Treaty rights receive significant rehabilitation in the US and recognition in Canada, the Treaty's intent will be met in only a lukewarm fashion, if at all. Further incursions will rapidly diminish its usefulness to the indigenous peoples it was designed to serve. Ultimately, it is clear that active engagement of indigenous communities on this issue, by both the US and Canadian governments, is crucial.



Fig. 3.1 A reproduction of John Jay's diplomatic credential for presentation to British authorities. Source: The National Archives, Kew, 'Correspondence relating to negotiation of Treaty of Amity, Commerce and Navigation (1794)', Reference FO 95/512, *available at* http://discovery.nationalarchives.gov.uk/SearchUI/details/C3300313-details.

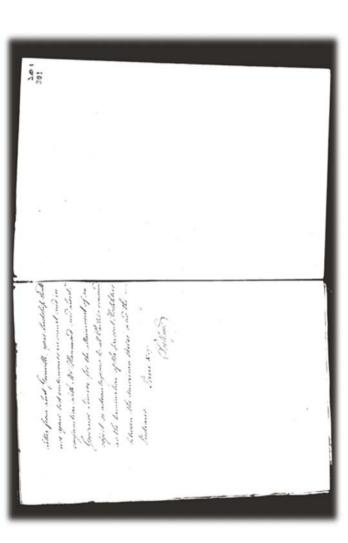


(1 of 4). Source: The National Archives, Kew, 'Correspondence Relating to Negotiation of Fig. 3.2 A reproduction of an announcement summarising the conclusion of the Jay Treaty Treaty of Amity, Commerce and Navigation (1794)', Reference FO 95/512, available at http://discovery.nationalarchives.gov.uk/SearchUI/details/C3300313-details.



(2 of 4). Source: The National Archives, Kew, 'Correspondence Relating to Negotiation of Treaty of Amity, Commerce and Navigation (1794)', Reference FO 95/512, available at http://discovery.nationalarchives.gov.uk/SearchUI/details/C3300313-details.

(3 of 4). Source: The National Archives, Kew, 'Correspondence Relating to Negotiation of Treaty of Amity, Commerce and Navigation (1794)', Reference FO 95/512, available at http://discovery.nationalarchives.gov.uk/SearchUI/details/C3300313-details



(4 of 4). Source: The National Archives, Kew, 'Correspondence Relating to Negotiation of Fig. 3.5 A reproduction of an announcement summarising the conclusion of the Jay Treaty Treaty of Amity, Commerce and Navigation (1794)', Reference FO 95/512, available at http://discovery.nationalarchives.gov.uk/SearchUI/details/C3300313-details.

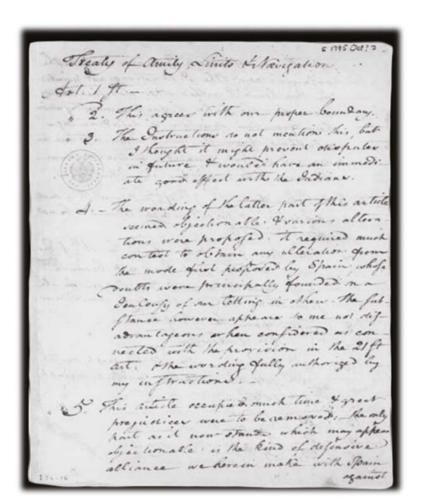
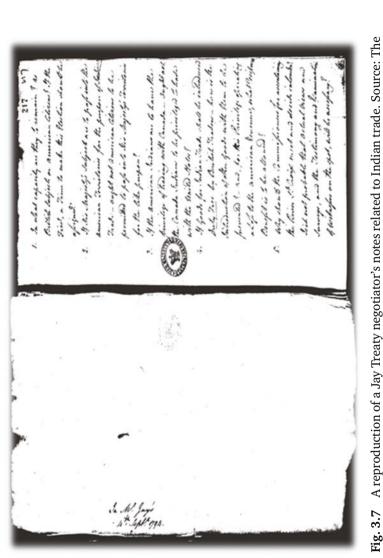


Fig. 3.6 A reproduction of George Washington's analysis of Article III of the Jay Treaty. Source: Library of Congress, 'George Washington Papers, Series 4, General Correspondence: 1697–1799, Treaty of Amity and Commerce with Great Britain, October 1795, Analysis of Articles', *available at* https://www.loc.gov/item/mgw439735/.



National Archives, Kew, 'Correspondence Relating to Negotiation of Treaty of Amity, Commerce and Navigation (1794), Reference FO 95/512, available at http://discovery.nationalarchives. gov.uk/SearchUI/details/C3300313-details.

idizens of the United States, or to take any Oath of to the Government though but they shall be as so to do, if they think proper, and they sha declar their election within one year after the aforesaid. all the other Sellers who shall es after the expiration of the said year, shall be a aving elected to become citizens of the United . Plates A shall at all limes be fue to the Indians dwelling the Boundaries of either of the parties, to papare up a their own proper goods and effects, and to carry on the whatever but goods in bales (Pollies of upter) shall not be considered as goods belonging bona fide to Indians . The however that this privile see shall be suspended wis to those Tribes, who may be at war and while they may ing Parties will form any political connextions, nor hold any Treates with Insians dwelling within the boundaries of the other . They will with good faith endeavour to withain respective . In dians from war, and the better to prevent . wed even by indian tradus to the belliguen

Fig. 3.8 A reproduction of a portion of an early draft of treaty provisions with particular reference to commerce between Indians, settlers and British subjects. Source: The National Archives, Kew, 'Correspondence Relating to Negotiation of Treaty of Amity, Commerce and Navigation (1794)', Reference FO 95/512, *available at* http://discovery.national archives.gov.uk/SearchUI/details/C3300313-details.

Notes

- 1 This chapter is updated and expanded from: Greg Boos, Greg McLawsen, and Heather Fathali, 'Canadian Indians, Inuit, Métis, and métis: An Exploration of the Unparalleled Rights Enjoyed by American Indians Born in Canada to Freely Access the United States', Seattle Journal of Environmental Law 4, no. 1(2014), 342-407; and Greg Boos and Greg McLawsen, American Indians Born in Canada and the Right of Free Access to the United States (1 October 2013), concurrently published: (1) 18 Bender's Immigration Bulletin 1 (1 October 2013); and (2) 20 Border Policy Research Institute (2013). Copyright 2018 Greg Boos, Greg McLawsen, and Heather Fathali. All rights reserved
- 'American Indians born in Canada' (ABC) is a term of art arising from US statute. This chapter will occasionally use the term 'Indian' to refer generally to indigenous peoples of North America, with the acknowledgment that certain indigenous groups who do not self-identify as Indian may still qualify for ABC status. See Section 3.4.1. This is done as needed for consistency with the statute or with historical narrative. However, this chapter will use the term 'indigenous' where possible to refer generally to the native peoples of North America. It is further noted that in Canada, the term 'Aboriginal' is a specific legal term used in the Canadian constitution and other legal contexts to refer to indigenous peoples. This chapter will only use the term 'Aboriginal' within direct quotes or when making reference to the specific legal meaning under Canada's Constitution. Other common terms such as 'American Indian', 'Native American', 'Native', 'Alaskan Native', 'First Nations' or other alternatives will also only be used within the context of direct quotes or where otherwise indicated.
- 3 Treaty of Amity, Commerce, and Navigation, Great Britain-United States, 19 November 1794, 8 Stat. 116, 130 [hereinafter 'Jay Treaty' after John Jay, its chief US negotiator]. A reproduction of John Jay's diplomatic credential as presented to British authorities is included as Figure 3.1.
- 4 US Embassy and Consulates in Canada, 'First Nations and Native Americans',

- accessed 7 August 2018, https://ca.usembassy.gov/visas/first-nations-and-native-americans/.
- 5 The Definitive Treaty Between Great Britain and the United States of America (Treaty of Paris), Great Britain-United States, 3 September 1783, accessed 7 August 2018, https://www.loc.gov/resource/rbpe.14601800. A reproduction of an announcement summarising the conclusion of the Jay Treaty is attached as Figures 3.2–3.5.
- 6 In his analysis of Article III of the Jay Treaty, George Washington noted, 'The instructions do not mention this, but I thought it might prevent disputes in future & would have an immediate good effect with the Indians.' Library of Congress, 'George Washington Papers, 1741–1799: Series 4, General Correspondence: 1697–1799, Treaty of Amity and Commerce with Great Britain, October 1795, Analysis of Articles', accessed 7 August 2018, https://www.loc.gov/item/mgw439735/. A reproduction of Washington's analysis is attached as Figure 3.6.
- McCandless v. United States *ex rel*. Diabo,
 25 F.2d 71, 72 (3d Cir. 1928) *aff'd* 25 F.2d
 71 (3d Cir. 1928); Akins v. Saxbe, 380 F.
 Supp. 1210, 1219 (D. Me. 1974).
- 8 McCandless v. United States at 74; Jay Treaty at 130–31 (Explanatory Article added 4 May 1796).
- 9 Treaty of Peace and Amity between His Britannic Majesty and the United States of America (Treaty of Ghent), Great Britain-United States, Art. 9, 24 December 1814, 8 Stat. 218, 22–23, accessed 7 August 2018, http://avalon.law.yale.edu/19th_century/ghent.asp.
- 10 Karnuth v. United States ex rel. Albro, 279 US 231 (1929) (holding the War of 1812 abrogated the Jay Treaty passage right).
- Immigration Act of 1924 ch. 190, § 13(c), Pub. L. 68–139, 43 Stat. 153 [hereinafter Act of 1924]. The Immigration Act of 1917 had exempted Indians from tariffs applicable to 'aliens', but had not provided for free passage. 39 Stat. 874.
- 12 Act of March 26, 1790, ch. III, § 1, Stat.103 (restricting citizenship to 'free white person[s]'); Act of 1924, ('No alien ineligible to citizenship shall be admitted to the United States...'). Although the

Act of 1790 was repealed by subsequent naturalisation acts in 1795 and 1798, no relevant change was made regarding this restriction until the Fourteenth Amendment in 1868, See United States Constitution, amendment XIV, § 1 ('All persons born or naturalized in the United States, and subject to the jurisdiction thereof, are citizens of the United States and of the state wherein they reside') (emphasis added). However, '[t]he specific meaning of the language of the clause was not immediately obvious. In 1884 the United States Supreme Court in Elk v. Wilkins held that children born to members of Indian tribes governed by tribal legal systems were not US citizens.' 112 US 94, 102 (1884) ('Indians born within the territorial limits of the United States, members of, and owing immediate allegiance to, one of the Indiana tribes, (an alien though dependent power,) although in a geographical sense born in the United States, are no more "born in the United States and subject to the jurisdiction thereof", within the meaning of the first section of the fourteenth amendment, than the children of subjects of any foreign government born within the domain of that government, or the children born within the United States, of ambassadors or other public ministers of foreign nations'.). It was not until '1924 [that] Congress extended citizenship to all Indians by passing the Indian Citizenship Act, 43 Stat. 253, ch. 233.' See Library of Congress, 'Fourteenth Amendment and Citizenship', accessed 7 August 2018, http://www.loc.gov/ law/help/citizenship/fourteenth_ amendment_citizenship.php.

- 13 Act of 1924, ch. 190, § 13(c) ('No alien ineligible to citizenship shall be admitted to the United States...').
- 14 Akins v. Saxbe, 1214.
- 15 United States ex rel. Diabo v. McCandless, 18 F.2d 282, 283 (E.D. Pa. 1927); McCandless v. United States, 72.
- 16 United States ex rel. Diabo v. McCandless, 18 F.2d 282, 283 (E.D. Pa. 1927); McCandless v. United States, 72.
- 17 McCandless v. United States, 72.
- 18 McCandless v. United States, 73.
- 19 McCandless v. United States, 73.
- 20 McCandless v. United States, 73.
- 21 McCandless v. United States, 72-3.
- 22 Act of 2 April 1928, ch. 308, 45 Stat. 401, 8 U.S.C. § 226a (2006) [hereinafter Act of 1928].

- 23 Immigration and Nationality Act of 1952, ch. 477, § 289, 66 Stat. 234, 8 U.S.C. § 1359 (2006) [hereinafter INA].
- 4 Goodwin v. Karnuth, 661.
- 25 Goodwin v. Karnuth, 661 (emphasis added) (citing 25 U.S.C. § 479). The court further quoted the definition: 'For the purposes of said sections, Eskimos and other aboriginal peoples of Alaska shall be considered Indians.' The court also looked to 48 U.S.C. § 206, dealing with territories and insular possessions, which provided a short and simple definition: 'Indians: Natives with one-half or more Indian blood.' Although there is no definitive legislative or regulatory history on the matter, it is reasonable to assume that the drafters of § 289 relied on this definition.
- 26 Goodwin v. Karnuth, 663 (quoting Union Pacific Railroad Company v. Hall, 91 US 343, 347 (1875), citing United States v. Wurts, 303 US 414, 417 (1938)).
- 27 Goodwin v. Karnuth, 663 (quoting Maillard v. Lawrence, 57 US 251 (1853), citing Woolford Realty Company v. Rose, 286 US 319, 327 (1932), and Old Colony Railroad Company v. Commissioner, 284 US 552, 560 (1932)).
- 28 Goodwin v. Karnuth, 663.
- 29 Goodwin v. Karnuth, 663.
- 30 Goodwin v. Karnuth, 663.
- Spruhan, 'Canadian Indian Free Passage Right', 314-15. One possibility for retention of the bloodline requirement may be the then national policy of Indian termination, which began in the 1940s and was embraced by the Eisenhower administration from 1953-60. See Ralph W. Johnson, 'Fragile Gains: Two Centuries of Canadian and United States Policy Toward Indians', Washington Law Review 66 (1991): 643, 662. 'The United States identified assimilation and integration as the official rationale for the termination policy, but there is evidence that the desire to reduce federal expenditures for Indian nations was a major motivation for the termination acts'. Robert T. Coulter, Termination, Native Land Law § 8:2 (2012 ed.). The bloodline requirement serves to disqualify many from status as ABCs.
- 32 Generally, the Canadian constitution is understood to comprise two statutes: The Constitution Act, 1867 (British North America Act or BNAA) and the Constitution Act, 1982. Part II of the Constitution Act, 1982 sets out the rights of Aboriginal peoples. The Third Schedule:

- Provincial Public Works and Property to be the Property of Canada, Government of Canada: Justice Laws Website (last modified Aug. 30, 2013), accessed 7 August 2018, http://lois.justice.gc.ca/ eng/const/page-11.html#docCont.
- 33 While 'Indian' is used in the Canadian constitution, it is now wide practice in Canada when referring to the specific 'Indian' cultural group to use the term 'First Nation(s)'. Inuit Tapiriit Kanatami, 'A Note on Terminology: Inuit, Métis, First Nations, and Aboriginal', accessed 7 August 2018, https://www. bowmanvillerotaryclub.org/sitepage/ a-note-on-terminology-for-indigenouspeoples. For consistency with the statutory term of art 'American Indians born in Canada', this chapter will continue to use the term 'Indian' or 'indigenous' except within the context of direct quotes. See also discussion at note 2.
- Rights of the Aboriginal Peoples of Canada, § 35(2); see Government of Canada Aboriginal Affairs and Northern Development, 'Frequently Asked Questions About Inuit Relations', accessed 7 August 2018, https://www.aadnc-aandc.gc.ca/eng/1303147522487/1303147669999.
- 35 Inuulitsivik, 'Who Are the Inuit?', accessed 7 August 2018, http://www.inuulitsivik.ca/northern-life-and-inuit-culture/who-are-the-inuits. ('Inuit are a distinct Aboriginal group... The confusion about Inuit being Indians and Aboriginal peoples being all the same continues to reign among many members of the general public. For Inuit, to be recognised as an Indian rather than an Inuk is frustrating as it denies the unique culture of Inuit.').
- 36 See e.g. Pence v. Kleppe, 529 F.2d 135, 138 n.5 (9th Cir. 1976) (noting that 'Indian' includes Aleut and Eskimos); Goodwin v. Karnuth, 662 ('For the purposes of said sections, Eskimos and other aboriginal peoples of Alaska shall be considered Indians'); Goodwin v. Karnuth, 662 (distinguishing the earlier treaty language of 'tribes or nations of Indians' from the later-in-time and broader statutory language 'American Indians born in Canada'); Jack Utter, American Indians: Answers to Today's Questions (Oklahoma: University of Oklahoma Press, 1993), 105-106 ('[t]he Alaskan people who are still commonly referred to by Natives and non-Natives as "Eskimos" are now also called "Inuit". In 1977, at the Inuit

Circumpolar Conference held in Barrow,

- Alaska, the term Inuit ("the people") was officially adopted as a preferred designation when collectively referring to Eskimos... "Eskimo" has long been considered to have come from an eastern Canadian Algonquian term which means "raw meat eaters". Some, but not all, Inuit would rather it not be used.') (internal citation omitted).
- 37 US Embassy, 'First Nations and Native Americans.' ('The only relevant factor is whether the individual has at least 50% American Indian blood.').
- 38 See discussion at note 36.
- 39 See Goodwin v. Karnuth, 662 (distinguishing the earlier treaty language of 'tribes or nations of Indians' from the later-in-time statutory language 'American Indians born in Canada').
- 40 Mitchell v. Minister of National Revenue.
- 41 Gerlad Hallowell, ed., *The Oxford Companion to Canadian History* (Oxford:
 Oxford Univ. Press, 2004), 401.
- 42 Oxford Companion to Canadian History, 401.
- 43 Oxford Companion to Canadian History, 401.
- 44 The two major organisations representing Métis maintain different criteria for qualification: The Congress of Aboriginal Peoples [http://www.abo-peoples.org] defines Métis as 'individuals who have Aboriginal and non-Aboriginal ancestry, self-identify themselves as Métis and are accepted by a Métis community as Métis.' The Métis National Council [http://www. metisnation.ca] defines Métis as 'a person who self-identifies as Métis, is of historic Métis Nation ancestry, is distinct from other Aboriginal peoples and is accepted by the Métis Nation.' Library and Archives Canada, 'Métis Genealogy', accessed 7 August 2018, https://www.bac-lac. gc.ca/eng/discover/aboriginal-heritage/ metis/Pages/metis-genealogy.aspx.
- 45 'The definitional contours of 'non-status Indian' are also imprecise. Status Indians are those who are recognised by the federal government as registered under the Indian Act, R.S.C. 1985, c. I-5.

 Non-status Indians, on the other hand, can refer to Indians who no longer have status under the Indian Act, or to members of mixed communities who have never been recognised as Indians by the federal government.' Daniels v. Canada, 2016 SCC 12, [2016] 1 S.C.R. 99.
- 46 Daniels v. Canada, 2016 SCC 12, [2016] 1 S.C.R. 99.

- 47 Daniels v. Canada, 2013 FC 6, [2013] F.C.R. 268 (Can.).
- 48 R. v. Daniels, 2014 FCA 101 (Can.).
- 49 Daniels v. Canada, 2016 SCC 12, [2016] 1 S.C.R. 99.
- 50 Daniels v. Canada, 2016 SCC 12, [2016] 1 S.C.R. 99.
- 51 See e.g., Francis v. The Queen, [1956] S.C.R. 618 (Can.).
- 52 In order for a treaty to have force in Canada, implementing legislation is required. Canada's status as a dualist state and the effect that status has on the Jay Treaty was made clear in Francis v. The Queen. The terms 'monism' and 'dualism' have been used to describe different types of domestic legal systems. Oxford University, The Oxford Guide to Treaties, 368 (Duncan B. Hollis ed., Oxford University Press, 2012). In dualist States, which include Canada and almost all other British Commonwealth States, 'no treaties have the status of law in the domestic legal system;... all treaties require implementing legislation to have domestic legal force'. By contrast '[In] [m]onist States... some treaties have the status of law in the domestic legal system, even in the absence of implementing legislation.' Oxford Guide to Treaties, 369. The Supremacy Clause of the US Constitution establishes the Constitution. federal statutes, and US Treaties as 'the supreme law of the land'. United States Constitution article VI, clause 2.
- 53 See Mitchell v. Minister of National Revenue, 2001 SCC 33, [2001] 1 S.C.R. 911 (Can.).
- 54 Immigration and Refugee Protection Act, 2001 S.C. ch. 27, (Division 3, Entering and Remaining, § 19(1) (Can.)).
- 55 Francis v. The Queen. While the case involved customs issues rather than the right of US-born Indians to cross in to Canada, both issues fall under the Jay Treaty; therefore, its language is important and relevant to the admissibility of US-born Indians into Canada.
- 56 In an interesting side-note, the US/ Canada border itself was created by treaty but never codified by legislation in Canada. See Phil Bellfy, 'The Anishnaabeg of Bawating: Indigenous People Look at the Canada-US Border', in Beyond the Border: Tensions Across the Forty-Ninth Parallel in the Great Plains and Prairies 7, ed. Kyle Conway and Timothy Pasch (McGill-Queens University Press, 2013) (internal citation omitted).

- 57 See e.g., R. v. Sparrow, [1990] 1 S.C.R. 1075 (Can.); R. v. Van der Peet, [1996] 2 S.C.R. 507 (Can.).
- 58 Rights of the Aboriginal Peoples of Canada, Part II of the Constitution Act, 1982, being Schedule B to the Canada Act 1982, c. 11 (UK).
- 59 Rights of the Aboriginal Peoples of Canada.
- 60 Rights of the Aboriginal Peoples of Canada.
- 61 R. v. Sparrow.
- 62 R. v. Sparrow, 1106.
- 63 R. v. Gladstone, [1996] 2 S.C.R. 723, 742 (Can.) (providing a summary of the 4-part *Sparrow* analysis).
- 64 R. v. Van der Peet, [1996] 2 S.C.R. 507.
- 65 R. v. Van der Peet, 508.
- 66 R. v. Van der Peet, 527. The Court employed this test as the starting point for the tests laid out by the Court in Sparrow.
- 67 R. v. Van der Peet, 509 ('A court cannot look at those aspects of the aboriginal society that are true of every human society (e.g., eating to survive) or at those aspects of the aboriginal society that are only incidental or occasional to that society').
- 68 R. v. Van der Peet, 550–62. The Court outlined ten factors to consider when applying the integral to a distinctive culture test:
 - Courts must take into account the perspective of aboriginal peoples themselves... Courts must identify precisely the nature of the claim being made in determining whether an aboriginal claimant has demonstrated the existence of an aboriginal right... In order to be integral a practice, custom or tradition must be of central significance to the aboriginal society in question [it was one of the things that truly made the society what it was]... The practices, customs and traditions which constitute aboriginal rights are those which have continuity with the practices, customs and traditions that existed prior to contact [prior to the arrival of Europeans in North America]... Courts must approach the rules of evidence in light of the evidentiary difficulties inherent in adjudicating aboriginal claims... Claims to aboriginal rights must be adjudicated on a specific rather than general basis [must be specific to the particular aboriginal community claiming the right]... For a practice, custom or tradition to constitute an aboriginal right it must be of

independent significance to the aboriginal culture in which it exists... The integral to a distinctive culture test requires that a practice, custom or tradition be distinctive; it does not require that that practice, custom or tradition be distinct... The influence of European culture will only be relevant to the inquiry if it is demonstrated that the practice, custom or tradition is only integral because of that influence... Courts must take into account both the relationship of aboriginal peoples to the land and the distinctive societies and cultures of aboriginal peoples.

- 69 Watt v. Liebelt, [1999] 2 F.C. 455 (Can.).
- 70 Watt v. Liebelt.
- 71 R. v. Desautel, 2017 BCPC 84, Nelson Registry No. 23646.
- 72 R. v. Desautel, 2017 BCPC 84, Nelson Registry No. 23646.
- 73 R. v. Desautel, 2017 BCPC 84, Nelson Registry No. 23646.
- Registry No. 23646.

 74 R. v. Desautel, 2017 BCPC 84, Nelson Registry No. 23646.
- 75 The British Columbia Supreme Court is a trial-level court that hears civil and criminal cases, as well as appeals from the British Columbia Provincial Court.
- 76 R. v. Desautel, 2017 BCSC 2389, Nelson Registry No. 23646.
- 77 R. v. Desautel, 2019 BCCA 151.
- 78 Chantelle Bellrichard, 'U.S.-born Tsimshian Woman Fighting to Stay in her First Nation's Traditional Territory in Canada', CBC News, 13 June 2018, accessed 31 August 2018, https://www.cbc.ca/news/ indigenous/u-s-born-tsimshian-womanfighting-to-stay-in-her-first-nation-straditional-territory-in-canada-1.4704477.
- 79 Mique'l Dangeli, 'Demand that the Canadian government reciprocate the Jay Treaty!', Care2 Petitions, accessed 31 August 2018, https://www.thepetitionsite. com/takeaction/340/032/152/. It is noted that while Canada's Immigration and Refugee Protection Act provides a right to enter, remain in, and work in Canada for individuals who are registered Indians under the Indian Act, this right only serves a small subset of US-born indigenous persons. As developed at Sections 3.3. and 3.4. of this chapter, the Jay Treaty is not contingent on registration or membership in any federally-recognised tribe or band. See e.g. 'Regulations Amending the Immigration and Refugee Protection Regulations (Work Permit Exemption):

- SOR/2018-249', accessed 10 June 2019, http://www.gazette.gc.ca/rp-pr/p2/2018/2018-12-12/html/sor-dors249-eng.html; 'International Mobility Program: Authorization to work without a work permit', accessed 10 June 2019, https://www.canada.ca/en/immigration-refugeescitizenship/corporate/publications-manuals/operational-bulletins-manuals/temporary-residents/foreign-workers/work-without-permit.html.
- 80 Sara Singleton, 'Not Our Borders: Indigenous People and the Struggle to Maintain Shared Lives and Cultures in Post 9/11 North America', Border Policy Research Institute 1 (2004), accessed 7 August 2018, https://cedar.wwu.edu/ bpri_publications/106/.
- The term '49th Parallel' is a common synonym for the border between the mainland US and Canada. The authors are cognisant of the fact that the border between the mainland US and Canada deviates from the 49th parallel east of Lake of the Woods. A&E Television Networks, 'This Day in History: June 15', History.com, accessed 7 August 2018, https://www.history.com/this-day-inhistory/u-s-canadian-border-established. Moreover, the United States and Great Britain did not sign a treaty specifically establishing the 49th Parallel as the boundary between their lands west of the Rocky Mountains until 1846.
- 82 Arctic Council, 'Permanent Participants' (27 April 2011), accessed 7 August 2018, https://www.arctic-council.org/index. php/en/about-us/permanent-participants.
- 83 Arctic Centre, 'Arctic Indigenous Peoples', accessed 7 August 2018, https://www. arcticcentre.org/EN/communications/ arcticregion/Arctic-Indigenous-Peoples.
- 84 Arctic Centre, 'Arctic Indigenous Peoples'.
- 85 Gwich'in Council International, 'Board of Directors', accessed 7 August 2018, https://gwichincouncil.com/boarddirectors.
- 86 Arctic Council, 'History of the Arctic Council Permanent Participants', last modified 28 August 2015, accessed 7 August 2018, https://www.arctic-council.org/index.php/en/our-work2/8-news-and-events/313-history-of-the-arctic-council-permanent-participants.
- 87 Arctic Centre, 'Definition of Indigenous Peoples', accessed 7 August 2018, https://www.arcticcentre.org/EN/communications/arcticregion/Arctic-Indigenous-Peoples/Definitions.

- 88 Eben Hopson: An American Story, 'Request for Lilly Endowment Grant Support (Sept. 9, 1975)', http:// ebenhopson.com/request-for-lillyendowment-grant-support-firstinternational-inuit-conference/ (accessed 7 August 2018).
- 89 Statistics Canada, 'Aboriginal Peoples in Canada: First Nations People, Métis and Inuit', last modified 25 July 2018, accessed 7 August 2018, https://www. history.com/this-day-in-history/u-scanadian-border-established.
- 90 Louis-Jacques Dorais, Language of the Inuit: Syntax, Semantics, and Society in the Arctic (McGill-Queen's University Press, 2010), 235–36.
- 91 Arctic Council, 'Inuit Circumpolar Council', last modified 30 September 2015, accessed 7 August 2018, https://www.arctic-council.org/index.php/en/about-us/permanent-participants.
- 92 Arctic Council, 'Inuit Circumpolar Council'.
- 93 Inuit Circumpolar Council (Canada), 'About ICC', accessed 7 August 2018, http://www.inuitcircumpolar.com/.
- 94 Eben Hopson: An American Story,
 'Inuit Circumpolar Conference (June
 1977)', accessed 7 August 2018, http://
 ebenhopson.com/586-2/. Presumably
 USSR-born Inuit could not participate for
 political reasons; and Greenland is not
 mentioned because Denmark controls its
 foreign affairs.
- 95 Hopson, 'Inuit Circumpolar Conference' (emphasis added).
- 96 Inuit Circumpolar Council (Canada), 'Activities and Initiatives', accessed 7 August 2018, https://www. inuitcircumpolar.com/icc-activities/.
- 97 Article III of the Jay Treaty, 8 Stat. 116 (excepting that 'goods in bales, or other large packages, unusual among Indians, shall not be considered as goods belonging bona fide to Indians'.). See Exhibit IV (in part, 'If the American Indians are to have the privilege of trading with Canada - ought not the Canada Indians to be privileged to trade with the United States?'), and Exhibit V (in part, 'It shall at all times be free to the Indians dwelling within the boundaries of either of the parties to pass and repass with their own proper goods and effects, and to carry on their commerce within or without the jurisdiction of either of the same parties.').
- 98 Akins v. Saxbe.

- 99 United States v. Garrow, 88 F.2d 318, 323 (Court of Customs and Patent Appeals 1937).
- 100 United States v. Garrow, 320-21.
- 101 United States v. Garrow, 321.
- 102 30 Stat. 151.
- 103 Akins v. Saxbe.
- 104 Atkins v. Saxbe, 1215.
- 105 Mitchell v. Minister of National Revenue. As with the Supreme Court of Canada's other decisions regarding aboriginal rights, Mitchell was restricted to the specific facts of the case.
- 106 National Chief Dwight Dorey of the Congress of Aboriginal Peoples, Development Unreserved: Aboriginal Economic Development for the 21st Century, in Legal Aspects of Aboriginal Business Development, ed. Joseph Eliot Magnet and Dwight Dorey (Markham: Butterworths, 2005), 9, 10. Cited in Charles M. Gastle, Bennett Gastle Prof'l Corp., The Importance of Sustainable Aboriginal Cultures: Defining Aboriginal Trade Issues in the Context of International Trade Relation (27 November 2006), 6.
- 107 Miner, 'Transgression and Sovereignty'.
- 108 United States ex rel. Diabo.
- 109 Sharon O'Brien, 'The Medicine Line: A Border Dividing Tribal Sovereignty, Economies and Families', Fordham Law Review 53 (1984): 315, 322 (citations omitted).
- 110 O'Brien, 'The Medicine Line'.
- 111 O'Brien, 'The Medicine Line'; 'Native American Reservations are Subject to Customs and Duties Regulations', United States Department Of Homeland Security Customs And Border Protection, https://help.cbp.gov/app/answers/detail/a_id/756/kw/%22American%20Indians%20Born%20in%20Canada%22. ('goods imported into reservations are subject to all US laws concerning admissibility and payment of duty').
- 112 Homeland Security, 'Native American Reservations' ('[F]or many tribes, the medicine bundle is the most sacred of all articles. Its search and mishandling by outsiders destroys its spiritual and ceremonial use.'). In a distressing twist, smugglers intending to transport drugs across the border have begun 'to hide drugs in objects that are then claimed to be materials associated with religious practices', knowing that some customs inspectors, in a bid to become more culturally-sensitive, have 'become more respectful (and perhaps less rigorous) in

- their inspection of sacred objects'. See Singleton, 'Not Our Borders', 10.
- 113 16 U.S.C. § 668 (2006).
- 114 Jessica L. Fjerstad, 'The First Amendment and Eagle Feathers: An Analysis of RFRA, BGEPA, and the Regulation of Indian Religious Practices', South Dakota Law Review 55 (2010): 528, 529. The regulations state that the permit allows transport of dead eagles and their parts into and out of the United States, but such transportation is restricted to Indians 'authorized to participate in bona fide tribal religious ceremonies'. 50 C.F.R. § 22.22 (2012). While the religious exception might initially appear a good compromise, many have claimed that the permitting requirement and process burdens their free exercise rights. 'The majority of claimants rely on the Religious Freedom Restoration Act (RFRA) for relief. These cases often reach the federal courts of appeals, but the United States Supreme Court has not yet determined whether the religious exception to BGEPA and its permit system violates RFRA'. Fjerstad, 'First Amendment', 529.
- 115 These circumstances include that the parts were lawfully acquired, are personally owned, and that the same person travels in and out of the country with the same parts. United States Fish and Wildlife Service, 'Notice to the Wildlife Import/Export Community re: Transport of Eagle Items Within North America', last updated 14 February 2013, accessed 7 August 2018, https://www.fws.gov/le/public-bulletin-transport-eagle-items.html. Mexican law requires permits for all wildlife items entering or leaving the country.
- 116 United States Department of Justice,
 Office of the Attorney General,
 'Memorandum on Possession or Use
 of the Feathers or Other Parts of Federally
 Protected Birds for Tribal Cultural or
 Religious Purposes' (12 October 2012),
 accessed 7 August 2018, https://www.
 justice.gov/sites/default/files/ag/
 legacy/2012/10/22/ef-policy.pdf.;
 United States Fish and Wildlife Service,
 'Notice to the Wildlife Import/Export
 Community'.
- 117 United States Fish and Wildlife Service, 'Notice to the Wildlife Import/Export Community'.
- 118 Gastle, 'Marine Mammal Protection Act' in Sustainable Aboriginal Cultures, 16 U.S.C. §§ 1361–1421h (1972).

- 119 Gastle, Sustainable Aboriginal Cultures,
- 120 Gastle, Sustainable Aboriginal Cultures. 21 (further noting that 'Alaskan Inuit are also allowed to kill fifty bowhead whales a year, but Canadian Inuit are prohibited from trading in whale products of any kind. If the objective of the legislation is to protect marine mammals, there is no logical basis to distinguish exemptions given to US and Canadian Aboriginals with respect to personal consumption, subsistence and traditional handicrafts.'). Gastle goes on to assert that '[w]ith respect to this kind of legislation, there should be a general presumption that Canadian and American Aboriginal peoples should be treated equally'.
- 121 Pub. L. 108–488, 118 Stat. 3638 (2004).
- 122 United States Department of Homeland Security Customs and Border Protection, 'Western Hemisphere Travel Initiative, Document Requirements for Land and Sea Travel', accessed 7 August 2018, https://www.cbp.gov/travel/us-citizens/western-hemisphere-travel-initiative.
- 123 The Department of Homeland Security took the view the ABC right of free passage was not denigrated by WHTI's documentation requirements. Department of Homeland Security, Final Rule and Notice, Vol. 73 No. 65 Fed. Reg. 18384, 18397 (Apr. 3, 2008) ('[INA] Section 289... benefits individuals who establish their identity, their Canadian citizenship, and that they are "American Indians").
- 124 'United Nations Declaration on the Rights of Indigenous People' (March 2008), accessed on 29 August 2018, https://www.un.org/esa/socdev/unpfii/documents/DRIPS_en.pdf.
- 125 Indigenous and Northern Affairs
 Canada was the department of the
 government of Canada with responsibility
 for policies relating to Aboriginal peoples
 in Canada. In August 2017, the Prime
 Minister announced the dissolution
 of Indigenous and Northern Affairs
 Canada and the creation of two new
 departments: Indigenous Services
 Canada and Crown-Indigenous
 Relations and Northern Affairs Canada.
 This transformation will take time
 and includes engagement with
 indigenous peoples and others.

- See 'Crown-Indigenous Relations and Northern Affairs Canada', accessed 29 August 2018, https://www.canada.ca/ en/crown-indigenous-relations-northernaffairs.html.
- 126 Indigenous and Northern Affairs Canada, 'Government of Canada appoints new Chief Federal Negotiator for Nunavut Devolution', Newswire, 9 July 2016,
- https://www.newswire.ca/news-releases/government-of-canada-appoints-new-chief-federal-negotiator-for-nunavut-devolution-586146271.html.
- 127 Fred Caron, Report on First Nation border crossing issues, last modified 20 October 2017, accessed 29 August 2018, http://www.aadnc-aandc.gc.ca/eng/ 1506622719017/1506622893512.

4

A Land Without Borders – Inuit Cultural Integrity

Dalee Sambo Dorough

We Eskimo are an international community sharing common language, culture, and a common land along the Arctic coast of Siberia, Alaska, Canada and Greenland. Although not a nation-state, as a people, we do constitute a nation. This is important not because nationalism solves problems, but because our common nationality is the basis of our present attempt to find solutions to our common age-old problem of survival. Our communities are old. Point Hope, for instance, is a village in which our people have lived for over 3,000 years. But national boundaries imply concepts which have had no place in our society where sharing is a large part of our secret of survival in the Arctic.

For thousands of years we were people without national boundaries. Rather, we were people of our land, cold and dark most of the time, and other people did not covet our land.²¹

Grant request to Lilly Endowment to organise ICC, 9 September 1975

We Inupiat live under four of the five flags of the Arctic coast. One of those four flags is badly missed here today. But at least in Denmark, Canada and the United States, it is generally agreed that we enjoy certain aboriginal legal rights as indigenous people of the Arctic. It is important that our governments agree about the status of these rights if they are to be *uniformly respected*.

To secure this agreement, we must organise to negotiate for it. This will take circumpolar community organisation, for the status of our rights as Inupiat is necessarily the core of any *successful protection* of our mutual Arctic environmental security.'2

Eben Hopson, Sr., Welcoming Address, 13 June 1977

4.1. Introduction

Since first contact, Inuit of the Arctic circumpolar region have faced numerous impacts to their overall cultural security and integrity. Significantly, one area that has stifled their security is the imposition of artificial borders across Inuit Nunaat. The right to determine and freely travel where hunting may be most advantageous or to visit relations has been severely affected throughout Inuit Nunaat. Gone are the days of freedom to travel, to trade and to maintain other spiritual, cultural, political, economic and social engagements throughout Inuit Nunaat. The nation-state notion of border security has threatened and undermined the cultural security of Inuit throughout their Arctic homeland and territory. This chapter introduces the issue in the context of the Inuit and argues that there is a need for coordination, coherence and collaboration due to the numerous challenges faced by Arctic indigenous peoples whose territory and membership span international borders. It also emphasises the need to ensure and uplift Inuit cultural security through law and policy changes that effectively guarantee the multiple, interrelated rights and interests of Inuit.

There is an urgent need for local, regional and national governments across the Arctic to provide coherence in this regard. Directly relevant is the need for UN member states to collaborate with indigenous peoples, based on rights affirmed by the United Nations Declaration on the Rights of Indigenous Peoples and other international human rights instruments, to overcome these challenges. Inuit have had a long-standing tradition of placing their footprints throughout the Arctic, travelling on both land and the ice paths that have allowed them to survive as a specie within the Arctic. Today, Inuit are keen not only to maintain and develop contacts amongst blood relations, but also to remove barriers in order to develop in all realms of social, cultural, economic and spiritual dimensions. It is their view that, as a distinct people with a common culture and history, UN member states have a responsibility to take effective measures to implement this multidimensional right.

In addition to familial and direct blood relations, specific areas where these measures would apply include the interrelated dimensions of spiritual, social and cultural customs, practices and institutions. For instance, indigenous ceremonies, such as burials, have been hindered due to international borders. The continuing practices of indigenous economies must be accommodated, recognised and respected: for

example, the rights to use, possess and trade marine mammal byproducts are an important element of Arctic indigenous economic activities and include use of seal skin, walrus ivory and other byproducts. Another dimension includes the need for cross-border collective management and co-management of resources that present challenges for effective exercise of indigenous human rights, which fall within this sphere of concern, to indigenous peoples whose communities and territory transcend international borders.

Seemingly elementary issues to many have emerged as barriers for Inuit as well. For example, since 9/11, the need for passports and other government identification is often difficult for Inuit in remote, rural communities to comply with, due to lack of such government offices being present or within reach. In addition, the four respective countries of the Inuit – Russian Federation, United States, Canada and Denmark/ Greenland – have distinct requirements that many Inuit are not cognisant of nor compliant with. For those in the Russian Federation and specifically Chukotka, regardless of the familial relations and direct cultural tie to the Siberian Yupik of St. Lawrence Island of Alaska, to apply for and gain a visa for international travel is onerous, costly and reflects a process where there is no guarantee that it will be responsive, timely or possible. Another distinct example is Canada's requirements for those from Kalaallit Nunaat to have Electronic Travel Authorisation (eTA) to enter Canada. Inequitable treatment of indigenous peoples, in contrast to others that choose to emigrate between Canada and the USA, is objectionable as well.

4.2. Background

Inuit number approximately 165,000 across Inuit Nunaat. We are a people or, more importantly, a quasi-nation that spans four countries – countries that grew up around our territory. One might argue that those states that did grow up around us have impaired our territorial integrity, and indeed they have certainly impaired our cultural integrity. Yet, our expansive territory, both the land and sea, is a cold, foreboding and harsh region of the world that we have adapted to and reflects the most highly developed understanding of cold climate survival and sustainability on earth.

Regarding the assertion that we are a people, clearly, we share a common history, a history of migration that led us from deep within

Mongolia and the harsh Siberian region of the Russian Federation. The Inupiat legends of Tikiagaq recall the hunting of mastodon and scarcity of food, which triggered conflicts that forced expansion of territory across the Canadian Arctic and eventually to what is the world's largest island, Greenland or Kalaallit Nunaat. The challenges for survival were at the root of a nomadic lifestyle: people migrating with the animals and throughout the distinct seasons. Our language is distinct and attaches only to Inuit. Despite the extensive coverage of Inuit Nunaat – approximately 40 per cent of the circumpolar Arctic – the root language of the Inuit remains the same. Certainly, adaptation and various dialects have emerged. However, it is a shared language across this vast region. Our shared customs, practices and values are all united in the same way that we are united as a people. Our hunting traditions, both terrestrial and marine, were all developed over time and have been retained despite thousands of miles of snow, ice, sea ice and the migration of the animals upon which we sustain ourselves.

We have successfully demonstrated our inherent right to self-determination for centuries and indeed long before first contact with outsiders – the stray non-Inuit explorers – from the Vikings to the British to the modern-day thrill seekers keen to be the first to reach the North Pole by hot air balloon, helicopter or freestyle swimming. And more often than not, Inuit are the ones that save such thrill seekers when all goes awry. More importantly, we have developed and maintained highly sophisticated measures for social control in our societies and communities. We have honed important interrelated, interdependent, indivisible ways of life that reflect not only our relations with one another as a people, but also in the context of our profound relationship with the environment. In sum, we are a people with all the attributes of what one would call a nation-state.

4.3. Major Events

4.3.1. Inuit and International Political Development

Since first contact, we have learned that noteworthy international developments have taken place that are specifically related to our current plight to gain recognition of cross-border rights. Largely based on violation of rights and understandings, it is extraordinary to know that the Haudenosaunee leader Deskaheh made important visits to

Geneva to gain an international hearing at the League of Nations on their understanding of the Two Row Wampum, which represents a treaty relationship between their nation(s) and Europeans. In addition, a Maori religious leader, T. W. Ratana, likewise, made a visit to the League of Nations due to serious, self-serving abrogation of the Treaty of Waitangi. More recently, recognising the artificial borders separating northern indigenous peoples, an Arctic peoples' conference was organised in 1973, in collaboration with a group of anthropologists based in Copenhagen and concerned about human rights violations. The International Work Group for Indigenous Affairs continues to this day, assisting indigenous peoples facing violations and atrocities across the globe.

In the face of numerous challenges, including the discovery of oil on the North Slope of Alaska, Inuit began organising to safeguard their rights and interests in a united fashion. Eben Hopson, then Mayor of the North Slope Borough, a public government chartered under State of Alaska law, determined to unite the Inuit across our circumpolar homelands. In 1977, he and colleagues organised and hosted the first Inuit Circumpolar Conference that brought together delegates from Alaska, Canada and Greenland. Amidst the Cold War, as well as uncertainty about Inuit intentions, the Soviet Union disallowed the Siberian Yupik of Chukotka, in the Russian Far East, from attending. Two empty seats were symbolically placed at the head table to underscore this early political as well as national border issue.

Directly related to the Inuit and their pre-existing rights and activities of a border-free life, the need for continuing contact and 'exchange' prompted the delegates gathering in 1977 to adopt *Resolution 77–12 – A Resolution calling upon the Governments of the United States, Canada and Denmark to Negotiate a Special Arctic Mutual Exchange Program* 'as an expression of our solidarity and strength' and the need for enhancement of our 'community strength'.³ The resolution emphasised the need for mutual exchange programmes in fields such as 'education, communications, language, game management, municipal administration, health care, the arts and economic trade', and the need for a comprehensive plan to support Inuit community organisation.

Considering their absence, as well as multiple dimensions of the need for cross-border 'intercourse', an additional resolution was adopted at the 1977 organising conference that explicitly underscored the need to resolve this issue. Resolution 77–13 – A Resolution calling upon Canada, the United States and Denmark to Provide for Free and Unrestricted Movement for all Inuit across their Arctic Homeland affirmed:⁴

WHEREAS, a treaty negotiated between the United States and Great Britain provides intercourse and commerce across the US/Canadian border; and

WHEREAS, we Inuit are the indigenous people of the Arctic and have freely visited and traded back and forth across our homeland for thousands of years, thus establishing our aboriginal rights to free and unrestricted travel and trading all across the Arctic; and

WHEREAS, the Jay Treaty between the United States and Great Britain clearly recognises and protects our right to unrestricted intercourse and trade across the US/Canadian border; and

WHEREAS, these guarantees have never been negotiated with Denmark, and have not been properly established by Canada, resulting in the fact that our circumpolar Inuit community does not enjoy the right of free travel and trade across the Canadian/Greenlandic border; and

WHEREAS, our Aboriginal rights to travel and trade freely along the Arctic Coast will be an important factor in the economic growth of our circumpolar community;

NOW, THEREFORE, BE IT RESOLVED that the delegates assembled at the first Inuit Circumpolar Conference call upon the governments of Canada, the United States and Denmark to negotiate an agreement that will protect for all Inuit the right to unrestricted trade and travel as envisaged between Canada and the United States by the Jay Treaty.

Finally, in 1986, after much cajoling and advocacy, our Siberian Yupik relations were able to join us, and gleeful celebrations were held solely based on real unity. Once organised across all four borders, the ICC set about engaging in its international work to advance our rights and interests.

4.3.2. Developments within the United Nations

Interestingly, indigenous peoples elsewhere were doing the same, largely in response to horrific human rights violations and acts of racial discrimination being perpetrated against indigenous peoples. Representatives

of the American Indian Movement were travelling to the seat of human rights within the United Nations and, along with international human rights advocates, eventually triggered adoption of a resolution that authorised the establishment of an Economic and Social Council Working Group on Indigenous Populations in 1982 (WGIP)⁵ to devise standards relating to indigenous peoples' rights.⁶ Within a few years, the WGIP began working on a 'draft declaration on indigenous rights'.⁷ The WGIP was comprised of five independent human rights experts appointed from the then Sub-Commission on the Prevention of Discrimination and Protection of Minorities.

This development prompted the ICC to undertake a major initiative to gain accreditation as a non-governmental organisation (NGO) in consultative status with the UN Economic and Social Council (ECOSOC) to ensure that its voice would also be heard within the important mandate of the WGIP, to review the status and conditions of indigenous peoples, as well as to begin the drafting of a United Nations Declaration on the Rights of Indigenous Peoples. The ICC gained ECOSOC Consultative Status II in 1983 and became active in this work on a consistent priority basis. In addition, ICC representatives became involved with the International Union for Conservation of Nature (IUCN) and their effort to revise the World Conservation Strategy. A key objective was to ensure that the Strategy embraced the hunting, gathering and harvesting practices of the Inuit. We felt strongly that if anything needed to be conserved, it was our way of life and our relationship to the lands, territories and animals that we depend upon. This objective also has many diverse cross-border and security issues for Inuit, which will be discussed below.

After nearly 25 years of dialogue, debate and heated negotiations, the United Nations General Assembly (UNGA) adopted the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP) on 13 September 2007. The vote in the UNGA was 144 in favour, 4 against and 11 abstentions. The four opposing States – Canada, Australia, New Zealand and United States – have all since reversed their positions. Canada declared in its November 2010 endorsement: 'We are now confident that Canada can interpret the principles expressed in the Declaration in a manner that is consistent with our Constitution and legal framework.'8 On 16 December 2010, the last objecting State – the United States – reversed its position.9 Thus, the UN Declaration is now a consensus international human rights instrument.

The UN Declaration is the longest discussed and negotiated human rights instrument in UN history. It also was the first time that the subjects of the instrument – in this case, indigenous peoples – participated

extensively along with States in its formulation. This process set an important benchmark for indigenous peoples' democratic participation in UN standard-setting. The UN Declaration continues to grow in significance. Regional and domestic courts and commissions are increasingly relying on the Declaration.^{10,11} Also, a 'system-wide action plan' has recently been devised within the UN with international and national dimensions.¹² The action plan has the goal of implementing, with the effective participation of indigenous peoples, the Declaration at all levels.

The UN Declaration affirms interrelated, interdependent and indivisible human rights that flow from inherent, pre-existing rights of indigenous peoples, from the affirmation of the right to self-determination; rights to lands, territories and resources; the right to free, prior and informed consent; the right to participation in decision-making; protection from destruction of their culture; and the right to security, including food security, cultural security, and integrity as a people. Article 3, regarded as a pre-requisite for the exercise and enjoyment of all other human rights, affirms that:

'Indigenous peoples have the right to self-determination. By virtue of that right they freely determine their political status and freely pursue their economic, social and cultural development.' ¹³

Indeed, our overall economic, social and cultural development depends upon our relationship to our environment and all that surrounds us. To illustrate the intimate relationship that we have to our Arctic environment, the late Charles 'Etok' Edwardsen, at the 1977 organising meeting of the ICC, urging support for a resolution defending the right of Inuit to maintain their cultural integrity and explicitly their relationship with the whale, stated:

'... the people who have called themselves conservationists have chosen not to conserve the Eskimos. We are further compelled to tell the world who we are... the total depth of our environment, and our association with the whale... is dependent upon the survival of both communities: the whale as a specie and Inuit as a specie.'

Accordingly, in relation to the UN Declaration, Article 20 affirms that:

'Indigenous peoples have the right to maintain and develop their political, economic and social systems or institutions, to be secure in the enjoyment of their own means of subsistence and development,

and to engage freely in all their traditional and other economic activities '14

This language directly intersects with all border issues because of the dependence upon both terrestrial and marine animals that are not subject to border control in the way that Inuit are as human beings. For Inuit to be secure in our own means of subsistence, we must be able to travel across borders in the same way that the polar bear, caribou, beluga, bowhead, Arctic char, migratory birds and other species cross borders. And, specific to our relationship to our environment, Article 25 of the UN Declaration affirms:

'Indigenous peoples have the right to maintain and strengthen their distinctive spiritual relationship with their traditionally owned or otherwise occupied and used lands, territories, waters and coastal seas and other resources and to uphold their responsibilities to future generations in this regard.'15

Article 26 of the UN Declaration expands upon this relationship by further illustrating how it is manifested across many dimensions of right to lands, territories and resources, use and control of traditional homelands as well as land tenure systems:

- '1. Indigenous peoples have the right to the lands, territories and resources which they have *traditionally owned*, *occupied or otherwise used* or acquired.
- 2. Indigenous peoples have the right to *own*, *use*, *develop* and *control* the lands, territories and resources that they possess by reason of traditional ownership or other traditional occupation or use, as well as those which they have otherwise acquired.
- 3. States shall give legal recognition and protection to these lands, territories and resources. Such recognition shall be conducted with due respect to the customs, traditions and *land tenure systems* of the indigenous peoples concerned.'16

Finally, and directly relevant to borders and Inuit is Article 36 of the UN Declaration, which states:

'1. Indigenous peoples, in particular those divided by international borders, have the right to maintain and develop contacts, relations

and cooperation, including activities for spiritual, cultural, political, economic and social purposes, with their own members as well as other peoples across borders.

2. States, in consultation and cooperation with indigenous peoples, shall take effective measures to facilitate the exercise and ensure the implementation of this right.¹⁷

It is important to underscore that the UN Declaration builds upon human rights affirmed in the often referred to International Bill of Rights, which includes the Universal Declaration of Human Rights, the International Covenant on Civil and Political Rights (ICCPR) and the International Covenant on Economic, Social and Cultural Rights. It is important to draw attention to common Article 1 of the Covenants:

- '1. All peoples have the right of self-determination. By virtue of that right they freely determine their political status and freely pursue their economic, social and cultural development.
- 2. All peoples may, for their own ends, freely dispose of their natural wealth and resources without prejudice to any obligations arising out of international economic co-operation, based upon the principle of mutual benefit, and international law. In no case may a people be deprived of its own means of subsistence.'18

Regarding mobility and freedom of movement, it is important to highlight Article 12 of the ICCPR and to consider this human right in relation to indigenous conceptions of their traditional homelands:

- '1. Everyone lawfully within the territory of a State shall, within that territory, have the right to liberty of movement and freedom to choose his residence.
- 2. Everyone shall be free to leave any country, including his own.
- 3. The above-mentioned rights shall not be subject to any restrictions except those which are provided by law, are necessary to protect national security, public order (ordre public), public health or morals or the rights and freedoms of others, and are consistent with the other rights recognized in the present Covenant.

4. No one shall be arbitrarily deprived of the right to enter his own country. 19

In addition, because of the distinct status of Inuit as indigenous peoples that occupy territory beyond a single border, it is critical to underscore Article 27 of the ICCPR:

'In those States in which ethnic, religious or linguistic minorities exist, persons belonging to such minorities shall not be denied the right, *in community with the other members* of their group, to enjoy their own culture, to profess and practice their own religion, or to use their own language.'²⁰

In addition to the UN Declaration, the human rights standard-setting exercise triggered the International Labor Organization (ILO) to revise its C107 – Indigenous and Tribal Populations Convention, 1957 (No. 107) in a two-year process in 1988 and 1989, whereafter it was renamed the Indigenous and Tribal Peoples Convention, 1989 (No. 169). The ILO Convention 169 (C169), which emerged from this process, affirms important provisions explicitly related to indigenous peoples that transcend international borders. Article 32, for instance, clearly states:

'Governments shall take appropriate measures, including by means of international agreements, to facilitate contacts and cooperation between indigenous and tribal peoples across *borders*, including activities in the economic, social, cultural, spiritual and environmental fields.'²¹

In 2009, the Programme to Promote ILO Convention No. 169 at the ILO produced a guide as a 'practical tool' for the implementation of C169. It expounded Article 32 thus:²²

'Indigenous peoples' right to maintain and develop contacts and cooperation across national boundaries is by its nature different from other internationally recognized rights of indigenous peoples, as its implementation requires political, administrative and/or legal measures from more than one state. A precondition for the implementation of this right is thus that the states concerned have a friendly and cooperative relationship upon which specific arrangements for the implementation of this right can be established.'23

ILO C169 has been ratified by 22 states, including Denmark, and is, therefore, significant to Inuit in Greenland. However, more important – when it comes to the rights affirmed in the UN Declaration, ILO C169 and the recently-adopted OAS American Declaration on the Rights of Indigenous Peoples – is the fact that these indigenous-specific human rights norms are legally-binding obligations under international law and, moreover, they must now be read as mutually reinforcing and complementary to the UN Declaration. Also, the ILO C169 is crucial to understanding indigenous perspectives on the term *territory*, to be discussed below.

4.3.3. Organisation of American States

The American Declaration on the Rights of Indigenous Peoples is based on not only Inuit in the circumpolar region, but indigenous peoples that transcend several borders throughout Latin America. Article XX of the American Declaration affirms 'Rights of association, assembly, and freedom of expression and thought':

- '1. Indigenous peoples have the rights of association, assembly, organisation and expression, and to exercise them without interference and in accordance with their worldview, inter alia, values, usages, customs, ancestral traditions, beliefs, spirituality, and other cultural practices.
- 2. Indigenous peoples have the right to assemble on their sacred and ceremonial sites and areas. For this purpose they shall have free access and use to these sites and areas.
- 3. Indigenous peoples, in particular those who are divided by *international borders*, shall have the right to travel and to maintain and develop contacts, relations, and direct cooperation, including activities for spiritual, cultural, political, economic, and social purposes, with their members and other peoples.
- 4. These states shall adopt, in consultation and cooperation with the indigenous peoples, effective measures to ensure the exercise and application of these rights.'

4.3.4. Present-Day Considerations

In order to address the multiple aspects of cross-border issues, the following categories may be helpful. However, it is crucial to recognise

that all the distinct elements of transboundary issues are interrelated, indivisible and interdependent with all others. For example, economic issues are directly related to food security, which are both related to environmental protection and important social and cultural protocols and matters.

In the context of Inuit, as indigenous peoples, the term 'economic' must be understood in both the historical and contemporary reality. Historical conceptions have been articulated by many indigenous peoples and most frequently in relation to 'trade routes... representing a network of interaction that traditionally linked many differently oriented cultural and language groups.'²⁴ As noted in the PFII cross-border study, the Jay Treaty is of relevance as it addressed indigenous nations and their members involved in trade, specifically Article 3:

'It is agreed that it shall at all times be free to His Majesty's subjects, and to the citizens of the United States, and also to the Indians dwelling on either side of the said boundary line, freely to pass and repass by land or inland navigation, into the respective territories and countries of the two parties, on the continent of America (the country within the limits of the Hudson's Bay Company only excepted)'.²⁵

For Inuit, to this day, community-based economies continue to rely upon our harvesting rights and activities. These practices remain a vital part of our identity and are essential for our cultural integrity as Arctic indigenous peoples. Many of the migratory species that we depend upon are significant to all Inuit from Chukotka to Eastern Greenland. Yet, there are numerous barriers and prohibitions triggered by States that have disrupted use and control of Inuit lands, territories and resources, including 'established trading links'. One recent example is the fur seal ban within the European Union that is the focus of the recent film *Angry Inuk*. ²⁶

In addition, due to consistent contact with the outside world, we have incrementally engaged in the market economies of the western world, including profit-making corporations that function similar to non-indigenous entities. However, there is a fundamental distinction. Many of our institutions and corresponding Inuit leadership feel an intimate affinity to their families, their people and Inuit values and roots. This cultural link remains strong and is consistently calling on them to ensure that there is a balance between profit, success and their cultural identity and collective responsibilities. Inuit-owned corporate entities

struggle with providing gains and their 'family' relations and responsibilities as Inuit. It is difficult to behave in a consistent way with both worlds and to maintain one's unique identity, and, in all likelihood, it creates personal angst for many, especially for those difficult decisions about the potential future impacts if all goes out of balance or if disaster strikes.

During the 12th General Assembly of the Inuit Circumpolar Council, the delegates identified the need for 'ICC leadership to plan and convene a Circumpolar Inuit Economic Summit' to facilitate sharing of business and economic development experiences and to explore potential collaboration between and amongst Inuit businesses in all spheres. The concrete follow-up was the hosting of an Inuit Economic Summit in 2017 by the ICC Alaska Office. An extraordinary gathering of gifted and capable Inuit business leaders and representatives of their respective economic development leaders came together in Anchorage, Alaska.

This 2017 gathering revisited the issues of the need for cross-border relations among Inuit in the context of an ICC-hosted Inuit Economic Summit. The Inuit present at this gathering agreed that they remain:

'Concerned about the multiple national and international laws and policies including traditional and cultural diversity that have presented barriers that stifle cross border business relations and Inuit driven economic development as well as the corresponding need to identify and work to remove such barriers;

Recognizing the tremendous and growing interest in the Arctic and more important, the increasing need to unify and collectively focus on our options and opportunities for Inuit businesses throughout the Arctic and beyond, and especially development on Inuit owned or controlled lands and waters:

We further recognize that Inuit businesses have been actively developing Arctic economies with positive results and that we have arrived at a threshold to advance our aspirations both at home and more significantly across international borders'.²⁷

They also decided to establish an Implementation Task Force to form a 'business alliance' – an International Inuit Business Council (IIBC) – that would be 'financially self-sustaining and an economically independent organisation' from the ICC.²⁸ At present, preparations are ongoing for this alliance to come into fruition in the coming four years, and, in order to be consistent with the overall work of the ICC, the Declaration adopted

in 2017 affirms the objective to 'genuinely improve the economic climate and related conditions facing Inuit throughout the circumpolar region and to mutually reinforce and complement the work of the ICC to realise, safeguard, promote and protect the political, economic, social and cultural rights of Inuit throughout Inuit Nunaat'.²⁹

Among other objectives related to sustainable development throughout Inuit Nunaat and the efforts to organise for enhanced economic development, the intent of the alliance was restated and underscored in the Utqiagvik Declaration in July 2018 by the 13th ICC General Assembly. Delegates directed the ICC to review and operationalise the draft Terms of Reference for the alliance and agreed to:

'44. Direct ICC to advocate for policies that facilitate cross-boundary Inuit trade, employment, and travel, across our circumpolar homeland;

45. Urge ICC to promote sustainable economic and business development through the Arctic Council and its working groups, the United Nations agencies, and collaborate with other economic development fora and networks focusing on the Arctic, including the Arctic Economic Council (AEC)...³⁰

In the context of economic development, like in all other societies, a broad spectrum of views exist. Here, too, tensions have arisen across borders. One current example is that of potential oil and gas development versus the continuing harvest of substantial caribou herds whose lives and migrations transcend international borders.

Socially, Inuit leaders are also working to create a better life for the elders that face hardship, the middle-aged Inuk that desires the best for their child, and the youth that are debating how to advance in a world that is increasingly more complex every day. In addition, the need for improved socioeconomic conditions is a daunting challenge. Again, a balance between traditional and contemporary lives creates a pressure that is rarely experienced by others seeking to improve conditions for their family and community.

Culture is comprised of many dimensions: ceremony, funerals, feasts, messenger feast, socialisation and the like. Maintenance of social connections and activities, ranging from visiting family in communities across borders to trade to ceremonial events such as feasts, funerals and family-related festivities, are important to maintaining social ties and relations. The Arctic Winter Games is another activity that encourages

cultural exchange and, as noted on their website, 'brings our Circumpolar World closer together' while at the same time showcasing unique Inuit and other sport, promoting culture and 'sharing cultural values from northern regions around the world'. These gatherings, initiated in 1969, have been ongoing and are another dimension of important cross-border development for young people throughout the Arctic and sub-Arctic region.

Significantly, at the 13th General Assembly of the ICC and memorialised in the Utqiagvik Declaration, Inuit referred to the historical and contemporary dimensions of the challenges they face due to international borders. The Utqiagvik Declaration makes no less than 12 references to such challenges, including the social and cultural dimensions of transboundary issues. One of the primary issues is food security and governance or management of our lands, territories and resources in a fashion that guarantees our food security – essentially food sovereignty.

The circumpolar Arctic region that we depend upon to sustain our communities must be understood in an expansive fashion. Article 13 of ILO Convention No. 169 has a clear articulation of what Inuit and other indigenous peoples mean when referring to their homelands and 'territory':

- '1. In applying the provisions of this Part of the Convention governments shall respect the special importance for the cultures and spiritual values of the peoples concerned of their relationship with the lands or territories, or both as applicable, which they occupy or otherwise use, and in particular the collective aspects of this relationship.
- 2. The use of the term *lands* in Articles 15 and 16 shall include the concept of *territories*, *which covers the total environment of the areas* which the peoples concerned occupy or otherwise use.⁷³²

When understood through this unique indigenous-specific lens, one can imagine the multiple intersections with significant political and legal effects and considerations. Specifically, the numerous international treaties concerning marine mammals, migratory birds, polar bears, whales and now fisheries in the Central Arctic Ocean, and how they each relate to the food security and food sovereignty of Inuit triggers manifold implications. The sole dynamic of the Convention on International Trade in Endangered Species (CITES) presents inconsistencies and political considerations, and UN member state obligations related to consultation,

collaboration and cooperation between governments. Treatment of Inuit in this regard has been solely punitive despite the significant cultural dimensions of the resources upon which they depend. Many Inuit have experienced confiscation of property, harassment, denial of identity and abusive regulation. Ivory is but one example that has resulted in punitive approaches, including confiscation of often significant and sacred items.

Careful, comprehensive review for purposes of coherence and coordination is essential. Yet, few are even concerned with such an approach and necessity to effectively ensure food security in favour of Inuit across borders. To be sure, consultation, collaboration and cooperation and the corresponding obligations of governments should not stop at the borders. Even the interrelated issues of food security and health conditions accentuate the need for coordination and coherence in the way of health care and corresponding facilities. And this cluster of issues conjures up the need to have greater collective response by Arctic-rim governments and Inuit in the way of basic infrastructure. Indeed, if the Arctic Council, as the premier regional intergovernmental institution, were serious about playing a leadership role, they would pursue a bottom line assessment of infrastructure needs and identify a path forward that puts in place the basic infrastructure to address the needs of Arctic indigenous peoples, environmental protection, safety, monitoring, research, shipping regulations and a host of other interconnected issues.

An additional political and legal issue that intersects with borders is that of territorial integrity. The discussion of the Arctic Five littoral states suggests the need for the Arctic Council to demonstrate leadership to safeguard their territorial integrity, which is intimately related to the unique dimensions of Inuit territorial integrity. In fact, when Eben Hopson, founder of the ICC, and his staff made the pivotal grant request to Lilly Endowment, he was speaking of Inuit territorial integrity.

We Eskimo are an international community sharing common language, culture, and a common land along the Arctic coast of Siberia, Alaska, Canada and Greenland. Although not a nation-state, as a people, we do constitute a nation. This is important not because nationalism solves problems, but because our common nationality is the basis of our present attempt to find solutions to our common age-old problem of survival. Our communities are old. Point Hope, for instance, is a village in which our people have lived for over 3,000 years. But national boundaries imply concepts which have had no place in our society where sharing is a large part of our secret of survival in the Arctic...

For thousands of years we were people without national boundaries. Rather, we were people of our land, cold and dark most of the time, and other people did not covet our land.'33

Though the ICC's A Circumpolar Inuit Declaration on Sovereignty in the Arctic, adopted in 2009, makes the linkage between the right to self-determination and sovereignty, the crucial element of territorial integrity is not addressed:

'1.3. *Inuit are a people.* Though Inuit live across a far-reaching circumpolar region, we are united as a single people...

Inuit as Active Partners

3.3. The inextricable linkages between issues of sovereignty and sovereign rights in the Arctic and Inuit self-determination and other rights require states to accept the presence and role of Inuit as partners in the conduct of international relations in the Arctic.²³⁴

However, the logical conclusion is that territorial integrity and political independence are core elements of sovereignty, which is no longer solely within the purview of states and states alone. Like the oneness and wholeness that Inuit have identified, this oneness and wholeness also attaches to their lands, territories and resources, as well as the profound relationship that Inuit hold with Inuit Nunaat. This is especially relevant in the context of the pre-existing, inherent rights of indigenous peoples to self-determination. Indeed, the UN Declaration makes explicit reference to the Charter of the United Nations and the equality of all peoples, including indigenous peoples. It is logical that an indigenous worldview, as Marc Weller has stated, encompasses the idea of autonomy as 'self-governance of a demographically distinct territorial unit within the state'³⁵ and specifically the notion of an indigenous perception of 'territorial integrity' comes to mind.

When one takes into account 'the special significance of the land for indigenous peoples [...] [which] entails that any denial of the enjoyment or exercise of their territorial rights is detrimental to values that are very representative for the members of said peoples, who are at risk of losing or suffering irreparable damage to their cultural identity and life and to the cultural heritage to be passed on to future generations', ³⁶ it is clear that indigenous territorial integrity is essential to their survival as distinct

peoples. As noted by a July 2013 study of the UN Expert Mechanism on the Rights of Indigenous Peoples:

In the promotion of peace, justice and harmonious and cooperative relations between States and Indigenous peoples, the Declaration affirms the *right to the integrity of their lands and territories* (arts. 25–32). Indigenous peoples have the collective right to live in freedom, peace and security as distinct peoples (art 7(2)). Such security includes, inter alia, cultural, environmental and *territorial aspects*.'³⁷

Finally, like all interconnected elements of the environment, in relation to impacts of climate change, there are a number of cross-border issues. The monitoring of changing ice conditions and disappearance of sea ice, coastal erosion, weather, reduced biodiversity and invasive species all require cross-border contacts, communication, research and exchange. In addition, the impacts of vessel traffic and disruption of marine mammal habitat and migration routes, contaminants and pollution, militarisation, vessel collisions, accidents, and search and rescue may all require coordination, cooperation and collaboration between not only Inuit community members, but also their respective knowledge, hardware and infrastructure.

Enforcement of relevant local, regional, national and international laws and policies, such as the IMO Polar Code, may trigger prompt cross-border action and response. And these are just a few of the potential needs for erasing the borders to ensure environmental protection and safety of lives at sea. Oil spill and other emergency response measures will likely require cross-border cooperation and should in no way be stymied by the existence of borders. All of these concerns are central to safeguarding and preserving the delicate Arctic marine and terrestrial environment upon which Inuit depend.

And it is highly significant that the recently concluded Pikialasorsuaq Commission³⁸ of the Inuit Circumpolar Council seized upon the essential element of cross-border Inuit relations in their conclusions and recommendations. This North Water polynya is regarded as the 'most biologically productive region north of the Arctic Circle', and Inuit have set their sights on the control and management of the region because of its central role in the way of life of the humans that inhabit the region. Specifically, the Commission affirmed that Inuit management is necessary to regulate and safeguard the health of the region, the need for a distinct status of this area, and establishment of a 'free travel zone' across the Pikialasorsuaq region.³⁹

4.4. Conclusion

Because of dramatic changes spurred by climate change and increased Arctic shipping activity, there is a greater urgency to include Arctic indigenous peoples and to implement robust standards to promote and protect their cultural integrity and security across international borders. Overall, Inuit food security, cultural security, economic security, political security and environmental security are at stake. Not only in the context of national governmental laws and policies, but also in relation to powerful economic forces and industrial activities that may overtake us as the realisation of climate change emerges in the everyday lives of Inuit.

There is an urgent need to accommodate the status, rights and interests of the Inuit across international boundaries and borders. To do so requires the direct participation of Inuit from across our homelands. The rights of Inuit to free travel and trade must be recognised and respected in all spheres. In this way, the Arctic-rim states and others will help to ensure the cultural integrity and the self-sufficient future of Inuit across their homelands.

Given the constructive work of Inuit themselves, as well as the international human rights norms and respective government obligations, the real potential for an Arctic-specific 'free travel zone' or comprehensive regional border agreement across Inuit Nunaat is not merely a dream. Rather, it is possible for an agreement or constructive arrangement that respects and recognises Inuit self-determination, our collective responsibilities to our future generations, and the desire to secure our cultural and environmental integrity through Inuit and State diplomacy directly, to emerge. Inuit welcome the 'pledge' by the government of Canada to review border policy and to remove the barriers that have stifled Inuit self-determination and self-sufficiency for decades. However, all respective Arctic-rim States should undertake a review of laws, policies and regulations in order to create the coherence and coordination necessary to respond to their obligations and to genuinely respect and recognise Inuit self-determination and Inuit cultural integrity. The family of nations in the Arctic and across the globe deserve no less.

Notes

- Request for Lilly Endowment Grant Support for First International Inuit Community Conference, http://ebenhopson.com/requestfor-lilly-endowment-grant-support-firstinternational-inuit-conference/.
- 2 Mayor Eben Hopson, Welcoming Address, Inuit Circumpolar Conference, Utkeagvikmi, 13 June 1977, http://ebenhopson.com/mayoreben-hopsons-welcoming-addressfirst-inuit-circumpolar-conferenceutkeagvikmi-barrow-ak/.
- 3 Resolutions 77–12 A Resolution calling upon the Governments of the United States, Canada and Denmark to Negotiate a Special Arctic Mutual Exchange Program, introduced and adopted 17 June 1977, Barrow, Alaska, Inuit Circumpolar Conference 13–18 June 1977, http://publications.gc.ca/collections/collection_2018/aanc-inac/R74-42-1977-eng.pdf.
- 4 Resolution 77–13 Calling upon Canada, the United States and Denmark to Provide for Free and Unrestricted Movement for all Inuit across their Arctic Homeland, introduced and adopted 17 June 1977, Barrow, Alaska, Inuit Circumpolar Conference, http://publications.gc.ca/collections/collection_2018/aanc-inac/R74-42-1977-eng.pdf.
- 5 The creation of the Working Group on Indigenous Populations was proposed by the Sub-Commission on Prevention of Discrimination and Protection of Minorities in its resolution 2 (XXXIV) of 8 September 1981. The establishment of WGIP was endorsed by the Commission on Human Rights in its resolution 1982/19 of 10 March 1982 and authorised by the Economic and Social Council in its resolution 1982/34 of 7 May 1982.
- 6 In its resolution 1982/34 of 7 May 1982, the Economic and Social Council authorised the Sub-Commission to establish annually a Working Group to meet in order to:
 - (a) Review developments pertaining to the promotion and protection of human rights and fundamental freedoms of indigenous populations, including information requested by the Secretary-General annually from

- Governments, specialised agencies. regional intergovernmental organisations and non-governmental organisations in consultative status, particularly those of indigenous peoples, to analyse such materials, and to submit its conclusions and recommendations to the Sub-Commission, bearing in mind inter alia the conclusions and recommendations contained in the report of the Special Rapporteur of the Sub-Commission, Mr. José R. Martínez Cobo, entitled 'Study of the problem of discrimination against indigenous populations' (UN Doc. E/CN.4/Sub.2/1986/7 and Add.1-5);
- (b) Give special attention to the evolution of standards concerning the rights of indigenous populations, taking into account both the similarities and the differences in the situations and aspirations of indigenous populations throughout the world.
- 7 See UN Doc. E/CN.4/Sub.2/1985/2, Ann II
- 8 Aboriginal Affairs and Northern Development Canada (AANDC), 'Canada's Statement of Support on the United Nations Declaration on the Rights of Indigenous Peoples', 12 November 2010, last modified 30 July 2012, http://www.aadnc-aandc.gc.ca/eng/ 1309374239861.
- 9 '...in April, we announced that we were reviewing our position on the U.N. Declaration on the Rights of Indigenous Peoples. And today I can announce that the United States is lending its support to this declaration.' The White House Office of the Press Secretary, 'Remarks by the President at the White House Tribal Nations Conference', 16 December 2010, http://www.whitehouse.gov/the-pressoffice/2010/12/16/remarks-presidentwhite-house-tribal-nations-conference.
- 10 In the Inter-American human rights system, see e.g., Case of the Kaliña and Lokono Peoples v. Suriname (Merits, Reparations and Costs), I/A Court H.R., Series C No. 309 (Judgment) 25 November 2015, para. 122; Case of the Community Garifuna Triunfo de la Cruz & its members v. Honduras (Merits,

- Reparations and Costs), I/A Court H.R., Series C No. 305 (Judgment) 8 October 2015, para. 51; Case of the Kuna Indigenous People of Madungandí and the Emberá Indigenous People of Bayano and their Members v. Panama, I/A Court H.R. Series C No. 284, Preliminary objections, merits, reparations and costs (Judgment) 14 October 2014, para. 118. In Africa, see e.g., African Commission on Human and Peoples' Rights v. Republic of Kenya, Application No. 006/2012, African Court on Human and Peoples' Rights, Judgment, 26 May 2017, paras. 131, 181, no. 53, and 209; Centre for Minority Rights Development (Kenya) and Minority Rights Group International on behalf of Endorois Welfare Council v. Kenya, African Commission on Human and Peoples' Rights, Communication No. 276/2003, Twenty-Seventh Activity Report, 2009, Annex 5, para. 204.
- 11 In Belize, see Cal et al. v. Attorney General of Belize and Minister of Natural Resources and Environment, Claim No. 171, and Coy et al. v. Attorney General of Belize and Minister of Natural Resources and Environment, Claim No. 172, Consolidated Claims, Supreme Court of Belize, judgment rendered on 18 October 2007 by the Hon. Abdulai Conteh, Chief Justice. Affirmed on appeal in Attorney-General of Belize et al. v. Maya Leaders Alliance et al., Belize Court of Appeal, Civil Appeal No. 27 of 2010, judgment rendered on 25 July 2013. See also Sarstoon Temash Institute for Indigenous Management [SATIIM] v. Attorney General of Belize, Claim No. 394 of 2013, Supreme Court of Belize, decision rendered by the Hon. Michelle Arana, 3 April 2014. In New Zealand, see Paki and other v. Attorney-General, [2014] NZSC 118; Takamore v. Clarke, [2011] NZCA 587, per Glazebrook and Wild JJ, (appeal denied [2012] NZSC 116), para. 250, n. 259. In Australia, see Aurukun Shire Council & Anor v. CEO Office of Liquor Gaming and Racing in the Department of Treasury, [2010] QCA 37, Supreme Ct. Queensland, paras. 33-35.
- 12 UN Permanent Forum on Indigenous Issues, System-wide action plan for ensuring a coherent approach to achieving the ends of the United Nations Declaration on the Rights of Indigenous Peoples, UN Doc. E/C.19/2016/5 (19 February 2016), https://digitallibrary.un.org/record/821872/files/E_C.19_2016_5-EN.pdf.

- 13 UN General Assembly, United Nations Declaration on the Rights of Indigenous Peoples: Resolution / Adopted by the General Assembly, 2 October 2007, A/RES/61/295, https://www.refworld. org/docid/471355a82.html [accessed 23 February 2019].
- 14 UN General Assembly, United Nations Declaration on the Rights of Indigenous Peoples.
- 15 UN General Assembly, United Nations Declaration on the Rights of Indigenous Peoples.
- 16 UN General Assembly, United Nations Declaration on the Rights of Indigenous Peoples.
- 17 UN General Assembly, United Nations Declaration on the Rights of Indigenous Peoples.
- 18 UN General Assembly, International Covenant on Economic, Social and Cultural Rights, 16 December 1966, United Nations, Treaty Series, vol. 993, 5, https://www.refworld.org/docid/3ae6b36c0.html [accessed 23 February 2019].

UN General Assembly, International Covenant on Civil and Political Rights, 16 December 1966, United Nations, Treaty Series, vol. 999, 173, https:// www.refworld.org/docid/3ae6b3aa0. html [accessed 23 February 2019].

- 19 UN General Assembly, International Covenant on Civil and Political Rights, 176.
- 20 UN General Assembly, International Covenant on Civil and Political Rights, 179.
- 21 International Labour Organization (ILO), Indigenous and Tribal Peoples Convention, C169, 27 June 1989, C169, https://www.refworld.org/docid/3ddb6d514.html [accessed 23 February 2019].
- 22 ILO, Indigenous & Tribal Peoples' Rights in Practice – A Guide to ILO Convention No. 169 (ILO, 2009), 5.
- 23 ILO, Indigenous & Tribal Peoples' Rights in Practice, 165.
- 24 UN Permanent Forum on Indigenous Issues, Cross-border issues, including recognition of the right of indigenous peoples to trade in goods and services across borders and militarized areas, Study by Forum member Megan Davis, UN Doc. E/C.19/2015/9 (17 February 2015), p.4, http://www.un.org/en/ga/search/view_doc.asp?symbol=E/C.19/2015/9.
- 25 Treaty of Amity, Commerce and Navigation, between His Britannick Majesty; and The United States of America, by Their President, with the advice and consent of Their Senate, 19 November 1794,

- http://avalon.law.yale.edu/18th_century/jay.asp.
- 26 'Even though the legislation targeted only one kind of sealskin, the campaigners ruined the reputation for all types of sealskin. At the time, little thought was given to the impact the ban would have on the Inuit. Although the Inuit were exempt from the ban, the market for sealskin evaporated. A year later, the average income of an Inuit seal hunter in Resolute Bay fell from 53 thousand dollars to one thousand dollars. Suicide rates were already climbing in Inuit communities and spiked to become the highest in the world.' CBC, 'Inuit Defend Canada's Seal Hunt', CBC Docs POV, 7 January 2018, https://www.cbc.ca/cbcdocspoy/ features/inuit-defend-canadas-seal-hunt.
- 27 ICC Alaska, Final Outcome Document: Circumpolar Inuit Economic Summit (ICC, 2017), https://iccalaska.org/ wp-icc/wp-content/uploads/2017/04/ FINAL-OUTCOME-DOCUMENT-3-30-17. pdf.
- 28 ICC Alaska, Final Outcome Document: Circumpolar Inuit Economic Summit.
- 29 ICC Alaska, Final Outcome Document: Circumpolar Inuit Economic Summit.
- 30 ICC, Utqiagvik Declaration 2018 (ICC, 2018), https://www.arctictoday.com/ wp-content/uploads/2018/07/2018-Utigavik-Declaration.pdf.
- 31 Arctic Winter Games, https://www.arcticwintergames.org/ [last accessed 11 June 2019].
- 32 ILO, Indigenous and Tribal Peoples Convention, C169, 27 June 1989, C169.
- 33 Request for Lilly Endowment Grant Support.
- 34 ICC, A Circumpolar Inuit Declaration on Sovereignty in the Arctic (ICC, 2009), https://iccalaska.org/wp-icc/wp-content/uploads/2016/01/Signed-Inuit-Sovereignty-Declaration-11x17.pdf.
- 35 Marc Weller, Towards a general comment on self-determination and autonomy, Working Paper submitted to the Commission on

- Human Rights, Sub-commission on the Promotion and Protection of Human Rights, Working Group on Minorities, 11th Session, UN Doc. E/CN.4/Sub.2/AC.5/2005/WP.5 (25 May 2005), 5.
- 36 Case of the Yakye Axa Indigenous Community v. Paraguay, Merits, Reparations and Costs, Judgment of 17 June 2005, Inter-American Court of Human Rights, Series C No.125, para.203.
- 37 UN Human Rights Council, Access to justice in the promotion and protection of the right of indigenous peoples, Study by the Expert Mechanism on the Rights of Indigenous Peoples, UN Doc. A/HRC/24/50 (30 July 2013), Annex Expert Mechanism Advice No. 5 (2013): Access to justice in the promotion and protection of the right of indigenous peoples, para 2.
- 38 As noted on the website for the Pikialasorsuaq Commission, 'Pikialasorsuag (The North Water Polynya) or "The Great Upwelling" is the largest Arctic polynya - an area of open water surrounded by sea ice – and the most biologically productive region north of the Arctic Circle... In January 2016, the Pikialasorsuag Commission was established by the Inuit Circumpolar Council – Greenland (ICC-Greenland) and the Inuit Circumpolar Council – Canada (ICC-Canada) in a project funded for 3 years. The Pikialasorsuag Commission consists of the following three members: Okalik Eegeesiak, International Commissioner; Kuupik Vandersee Kleist, Greenlandic Commissioner; Eva Aariak, Canadian Commissioner.' ICC Pikialasorsuaq Commission, 'About the Commission', http://pikialasorsuaq.org/ en/About/the-commission.
- 39 ICC Pikialasorsuaq Commission, People of the Ice Bridge: The Future of the Pikialasorsuaq, Executive Summary: Report of the Pikialasorsuaq Commission, November 2017 (ICC, 2017).

Part 2 **Defining Trends in North American Arctic Security**

5

Key Issues to Arctic Security

Randy 'Church' Kee, Maj Gen, USAF (Ret.)

This material is partly based on work supported by the US Department of Homeland Security under Grant Award Number 2014-ST-061-ML0002-03. The views and conclusions contained in this document are those of the author and should not be interpreted as necessarily representing the official policies, either expressed or implied, of the US Department of Homeland Security.

5.1. Introduction

The Arctic physical environment is increasingly dynamic due to warming trends. Current weather analysis from multiple accredited sources indicate that, across the Arctic maritime region, sea ice melt is increasing, and associated ice pack contraction in terms of area and volume is decreasing. Accordingly, for at least the summer season, the historical barriers of ice in the Arctic maritime region continues to shrink, affording improved access to human activity. This seasonal opening of the Arctic is affording new interest in Arctic maritime tourism, including cruise ship passages of the fabled Northwest Passage. Seasonally ice-reduced and ice-free Arctic Ocean spaces provide improved access to sea floors for rare earth and other mineral extraction. Reduced sea ice thickness (in particular, multi-year sea ice) will likely reduce challenges in future oil extraction. Reduced sea ice also affords increased access to throughput shipping – in particular, Russia's Northern Sea Route and, eventually, transpolar shipping. Due to shallow and narrow routes, Canada's Northwest Passage remains a less desired route for polar transshipping traffic. As human activity increases though, so does the potential of increased security threats from both symmetrical and asymmetrical sources. Maritime security and safety issues that exist in lower latitudes are likely to manifest in the opening of the Arctic maritime spaces, which currently receive a minimal amount of Coast Guard and other law enforcement presence.

Patrolling and policing for illicit trafficking, illegal fishing, unregulated mineral extraction and unsafe tourism practices are already difficult and will likely worsen as criminals see opportunity in the High North. As the Arctic continues a warming trajectory, ground frozen for centuries is thawing. This newly thawed terrain is proving to be vulnerable to erosion, which is of particular impact in coastal Arctic Alaska and the people who live across this fragile region. Arctic warming is also reducing the amount of shore-fast ice that has historically served as a protective barrier from the sea for native villages along the coastal Arctic. Increased weather severity and coastal storm surges have been attributed to warming in the Arctic. An increasingly dynamic environment in the Arctic, thus, is affecting populations whose ancestors have inhabited the region for generations. Many of these people strive to retain culture and traditional ways of life and live close to coastal shorelines that are eroding rapidly due to increased storm surges, lack of protective shore ice and thawing permafrost. Costly village infrastructure is failing. Arctic communities are less prepared to cope with seasonal increases in traffic and are virtually unable to cope with supporting a major emergency such as hosting tourists fleeing from a disabled cruise ship. These communities are also ill prepared to cope with increased law enforcement challenges.

The changing environmental factors of reduced sea ice and thawing permafrost, coupled with increased storm frequency and severity, united with increased human activity, equates to increased demands of urgent and emergency response on Coast Guard and other maritime operator missions, particularly for search and rescue (SAR), humanitarian assistance (HA) and disaster response (DR). US and Canada Coast Guard missions across the North American Arctic region are complex, operationally risky and logistically straining. The US Navy and the US Coast Guard have described the Arctic as a 'new ocean'. With the bulk of permanently assigned forces stationed in South Central Alaska, US Coast Guard faces a 'time and distance' problem in anticipating and responding to SAR, HA and DR crises in the Alaskan Arctic and supporting any joint missions with Canadian first responders. Accordingly, the ability to gain advanced domain awareness in the Arctic region and to leverage such awareness to increase decision agility is needed to reduce mission risk and risk of mission failure. However, achieving awareness of the Arctic domain for the Coast Guard and other government operators is quite literally challenged due to lack of Arctic maritime domain knowledge. In particular, resilient infrastructure, imagery, information, environmental data, communications and inputs from an array of sensors monitoring the domain currently is insufficient to gain needed understanding and to orient appropriate responses. Through appropriate work in science and technology, these factors can be addressed to produce good and practical results through skillful and well-networked research and development.

The purpose of this chapter is to characterise the major factors affecting the Arctic landscape in order to understand the associated security challenges, based on historical context compared with current concerns and opportunities. Included in the discussion is a sharper focus on Arctic security matters across North America. In a real sense, this includes describing the range of actors, the range of activities and the spectrum of endeavours, from collaboration to competition to confrontation. 'Security' is intended to describe the framework of safety, law enforcement and defence, assessing current challenges and providing solutions to advance improved security, oriented to US, Canada and associated defence allies and security partners in the Arctic region. As this chapter is intended to describe major trends and sketch the strategic landscape, the author will use generalisations suitable to familiarise the reader with the 'big picture'.

5.2. Defining the Arctic: The Big Picture

There are several approaches to defining what constitutes the Arctic. The classic mathematical definition of 66.33 degrees north is but one description. The multi-national Arctic Council (established by the Ottawa Declaration in 1996) defines the Arctic at 60 degrees north. Further descriptions include establishing the Arctic congruent with temperature climes associated with summers' high temperatures principally remaining below 50 degrees F/10 degrees C. In 1984, the United States Congress defined the US Arctic as 66.33 degrees north, west to the Yukon River, including the terrain north and west of the Yukon to the Yukon-Kuskokwim delta region, then extending along the shorelines facing the Bering Sea all the way to the end of the Aleutian Islands.

Commensurate with the variation of Arctic regional definition is a congruent understanding of the current numbers of Arctic residents. Based on the classic definition, the Arctic is roughly populated at

4 million people, with approximately 50 per cent of these residents living in the Russian Federation, with a large circumpolar plurality of Asiatic/indigenous Arctic heritage. Extending the definition down to 60 degrees north more than triples the number of people who can claim status as 'Arctic residents', but maintains approximately the same ratio of Russian versus non-Russian citizens living in the Arctic.

Overall, the Arctic region is one of the most fascinating areas on the planet (see Figure 5.1); it is an expanse remotely populated with enormous distances and renowned through the centuries for its harsh and unforgiving climate. The Arctic is starkly beautiful – a place where cold, ice, rock, snow and sea, coupled with an ever-changing sense of light, captivate the human senses and imagination. This sense of light and the Arctic's physical environment can make it difficult for many to find suitable vocabulary to describe it, but to be sure, it is a place where the geography and dynamic sense of physical environment create a memorable and lasting impact to those who visit and to those who live in the region. With few exceptions, the Arctic has a habit of capturing the interests and enthusiasm of people who take the time to come, study and understand this land and ocean space of extremes.

Much of the Arctic is a maritime environment. The Arctic Ocean is in the centre of a basin of surrounding seas and sparsely populated littorals with limited marine access from lower latitudes. Marine access to the Arctic basin from the North Pacific is constrained to a narrow 51 nautical mile channel at the Bering Straits separating Northeast Asia and North America. While the Atlantic access to the Arctic is considerably wider (comprising access via the Greenland, Norwegian and Barents Seas), Arctic Ocean access remains constrained (and quite opposite to the wide marine access surrounding the Antarctic continent). As a maritime expanse, the Arctic is remarkably challenging to mariners. While the Arctic is facing ever diminished sea ice per annum, many littoral regions (particularly in Canada's High North) remain ice-choked with sea ice for most of the year, effectively limiting any vessel that is not at least ice-hardened. Due to remoteness and difficulties imposed by persistent sea ice, Arctic bathymetry remains poorly understood and poorly charted: in late 2018, the pan-Arctic region remains approximately 10 per cent charted to modern standards. Accordingly, the risks to safe navigation remain high and provide valid reason for caution to prudent mariners.

Much of the region, moreover, remains wilderness, and much of this wildness remains, in its truest sense, a trackless expanse. Catalysed by the changes in the physical environment, human activity is in transition.

An Arctic Littoral "Big" Picture?

Distinct communities of stakeholders of Arctic...and non Arctic States. Within those communities:

A wide range of activities:

Subsistence

Tourism Mining Fishing

- Policy and governance
- Operators...Defense, Security and

Law Enforcement

- Residents...in particular, indigenous peoples
- Researchers Industry
- Illicit actors
- Technology developers
- ARCTIC DOMAIN AWARENESS CENTER

Arctic. © Author, Arctic Domain Awareness Center.

Collaboration...to...Competition...to Contested:

- Russia: Assertive/Competitive Most Arctic States: Generally China: Leverage economic collaborative
- Industry: leverage the Arctic for gain Other non-Arctic states: seeking economic opportunity sovereign footprint

advantage to establish a quasi

Research: Understand Arctic change Communities: Seeking stability and llicit actors: exploit under-governed improved economy

Military exercises and operations

Law enforcement and border

Research Shipping

region security

preserve/gain military advantage capabilities to improve domain Technology: offering improved awareness, safely operate and regions

Fig. 5.1 The complex array of features and factors that contribute to the 'big picture' with regard to security in the

For the coming decades, it is projected and likely that more people will come north, but the region is unlikely to realise large-scale population growth within the coming decades. However, as human activity increases, so does the potential of increased security threats, from both symmetrical and asymmetrical sources. In sum, the Arctic is warming at twice the rate of lower latitudes, terrain frozen for millennia is thawing, sea ice pack is seasonally diminishing and weather dynamics are increasing, with rising storm violence and more. While most Arctic nations seek to preserve the region as a zone of collaboration and peace, economic opportunity of an opening Arctic encourages competition among great powers and among institutions seeking economic advantage.

Accessing this wild and remarkable region to study and research is a significant community of multi-national researchers who see the Arctic as a laboratory that holds insights awaiting discovery that impact not only the region, but affect the planet as a whole. Arctic research collaboration and cooperation between nations and institutions remain among the more effective tools to counter rising competition across the High North. The community of science researchers informs the changes underway in the physical environment of the Arctic. But the Arctic is equally a place of unique human culture. Indigenous communities across the region still exercise subsistence-based lifestyles, largely unchanged through centuries. Millennia ago, tribal communities migrated to the Arctic from lower latitudes and adapted to the harsh environment, creating subsistence-based regimes that depend on the flora and fauna of the land in part and, in larger part, subsistence from the sea. The culture of these indigenous communities continues to pass between generations by oral and written traditions. Maintaining culture and language of Arctic indigenous communities are considered critical to ensuring traditions are communicated with purpose to succeeding generations.

Most of the Arctic has limited transportation infrastructure. Road networks across the region range from meagre to non-existent; airports are austere (with runways often ill-suited to jet aircraft); seaports are sparse, offer limited refuge, have challenging operating conditions (due to currents, tides and scant pilot vessels) and are often too shallow for many of today's ocean-going vessels. As a result of these limitations, the price of logistics in the Arctic remains approximately four-to-five times the cost above logistics costs in lower latitudes, with a corresponding drain on government and industry investment, which otherwise could parlay into improved regional economic gain. Yet, while the region persists in remoteness and presents challenges, interests are rising in and about the Arctic due to the overall impacts of a real and expanding

diminished sea ice environment. It is largely agreed among those who study the region that the Arctic is increasing in its appeal to a large and growing community of nations, organisations and people groups who see the Arctic much less a zone of unique geographic and cultural identity and much more as an economic opportunity. As interest in the Arctic increases from lower latitudes, it is no longer a region where those who live there, claiming national or tribal sovereignty, are the exclusive decision makers exercising control or leveraging the region for economic gain.

Due to the inherent costs, nations with existing sovereign claims to the Arctic maintain constrained security capabilities that largely under-govern and under-secure their sovereignty. As a result, Arctic national borders are readily exploited, and maritime extended economic zones are easily violated for those who are determined to so exploit and violate. As a result, while many who come north are there with good intentions, others come with malign and illegal objectives and find opportunity. With reduced cost associated with access, the malign people groups find an Arctic largely accessible and ready for their advantage.

Maritime security and safety issues that exist in lower latitudes are likely to manifest in the opening of the Arctic maritime spaces, which currently receive a minimal amount of Coast Guard and other law enforcement presence. Patrolling and policing for illicit trafficking, illegal fishing, unregulated mineral extraction and unsafe tourism practices, as stated earlier, are already difficult and will likely worsen as criminals see opportunity in the High North. If addressed in a timely manner, with improved mechanisms and capabilities, better securing the Arctic from illicit activity is strategically manageable.

On the other hand, rising great power competition in the Arctic has the potential for greater concern and, without soberly assessing threat, risk and strategies and means to reduce risks, could result in confrontation and conflict. Such conflict can possibly range from low-intensity skirmishes to armed combat among militaries comprised of enormous destructive means. With the preceding sections as backdrop, the remainder of this chapter will seek to develop the intertwining details of the characteristics of the Arctic and suggest approaches to reduce negative factors and, in particular, seek to understand and offer mechanisms for securing, protecting and defending the region. This includes exploring approaches to cope with the changes of an increasingly dynamic physical environment, to preserve the cultural heritage of the region, to improve the future for Arctic residents and to understand demands of economic pressures, while comprehending rising competition

and malign activity and seeking methods to better secure, protect and reduce the chance of conflict.

5.3. The History of Arctic Security Interests

From examining the convergence of the physical environment, indigenous oral traditions and the known historical record, analysts suggest the Arctic has been both colder and warmer than it is today. For humankind. the Arctic is a place where to survive can be supremely difficult. The earliest settlers - Asiatic and Northern European indigenous peoples who immigrated to the far North over a millennium ago – found ways to adapt and to endure, to establish unique cultures, and spent less time fighting each other (compared to lower latitude experiences), perhaps because the Arctic itself proved to be enough of a combatant to survival. In subsequent centuries, explorers from Europe, Asia and North America ventured north, principally to find ease of direct marine transportation and to discover retrievable riches and wealth. For later adventurers of the 18th and 19th centuries, the pursuit of transportation access and wealth was eventually overtaken by a desire simply to claim 'furthest North'. The price of exploration was high in casualties and in committed treasure, especially for those who did not take the time to prepare and, more importantly, learn from indigenous people who had successfully adapted to the Arctic. Even for the well prepared, the Arctic extracted a high mortality rate, unforgiving, relentlessly finding unanticipated ways to deny explorations ease of discovery and littering the region with the remains of failed attempts in exploration.

The Arctic has been exploited for its wealth for centuries. From sea otters and fur seals to whales and walrus, industrialised nations have harvested and largely decimated Arctic marine wildlife that only in recent decades have begun to recover. Throughout the centuries, as great powers discovered what indigenous peoples had already discovered, they claimed territory already inhabited and harvested resources, with little regard for sustainment (and the association between those resources and subsistence-based lifestyles). The relationship between the peoples of the Arctic with nations and business enterprises from lower latitudes has been difficult, though generally mostly resilient. In particular, Russian fur harvests, along with European and American whaling, in Arctic waters in the 18th and 19th centuries harvested marine mammals with overly effective industrial efficiency. The impacts of those early commercial activities powered wealth for Russia, Europe and the

United States, but had a correspondingly negative impact on indigenous peoples who had previously drawn their livelihood from the sea for centuries.

For most of history, the Arctic has not seen open/unrestrained warfare. In fact, history has plenty of references where combatants avoided warfare in the region, which suggests, at least from a historical vantage, that the Arctic environment can often be the deciding factor in the test of arms. Armed conflict has been largely avoided in the Arctic, although fighting has occurred along the fringes of the region, such as the combat operations for control of the Aleutians in the Second World War. While at the periphery of the Arctic, the Aleutian Islands Campaign of the Second World War demonstrated that the difficult and at times extreme weather of the region compromised the fighting ability of both Imperial Japan and the United States.

During the Cold War, the Arctic became a theatre of operations between the United States, Canada and their European Allies via the North Atlantic Treaty Organization (NATO) on the one hand, against the Union of Soviet Socialist Republics (USSR) on the other. Factors such as the proximity between the US and the USSR (in the Bering Straits, a mere 51 nautical miles) and the reality of the geography of the Arctic (due to shorter distances between continents via polar routes) made the region's overflight zones conducive to missile and bomber strikes. On 12 September 1957, North American Aerospace Defense Command (NORAD) was established to provide aerospace warning, air sovereignty and protection, resulting in successfully defending Canada and the US for decades. Created in response to the Cold War, NORAD has evolved roles and missions to address current aerospace threats. While the defence of North America from sophisticated and complex aerospace attack has justified the significant resourcing of NORAD and corresponding Air Forces in Canada and the US, the creation of an integrated system to support observation in the maritime approaches to the North American Arctic, in contrast, can be substantially less costly and yet very effective to counter the likely security concerns (particularly, asymmetrical threats) in the near- and mid-term timeframe.

Another facet of the Cold War was establishing the Arctic Ocean as a zone of submarine operations by the nations in confrontation. Additionally, submarine operations and posturing for submarine warfare continued in the North Atlantic, where NATO sought to prevent the Soviet fleet's access from ports in Murmansk on Russia's Kola Peninsula to threaten North America and Western Europe via the access routes in the 'Greenland-Iceland-United Kingdom gap'. The consequence of

geography placed the dismal, but thankfully unrealised, aspect of nuclear warfare being waged across the Arctic throughout the decades of confrontation between NATO and the USSR.

Following the collapse of the USSR in 1989, the prospect of armed conflict between great powers across and in the Arctic subsided, while the Soviet Union fractured into a loose confederation known as the Commonwealth of Independent States that collectively endured more than a decade of economic malaise and internal security challenges. Largely due to Western petrochemical corporation investments rebuilding and revitalising Russia's vast natural gas and petroleum resources, the Russian Federation's economy rebounded. With the rebound came a national desire to return to great power status and reassert a muscular approach to contest and confront nations and entities that Russia deemed challenging their national interests. Early stages of Russia's militarised return in the Arctic saw the introduction of what was deemed 'Long Range Aviation' of Russian bomber fleets, resembling tactics used in the Cold War, in 2007.

While the confrontation between great powers leveraged the Arctic for the region's geographic advantages for much of latter decades of the 20th century, the region also witnessed a new effort in harvesting accessible resources, through oil and natural gas development largely focused on Norway, the Russian Federation and the United States, and mineral wealth in Canada's High North. Contrasting nation-state geopolitical contest and resource development through the late 20th century and accelerating in the early 21st century was the community of science that focused attention on the Arctic. This community discerned and began concerted analysis of the changing physical environment, discovering warming trends and a diminishing Arctic sea ice pack regime.

Lastly, in a timeframe similar to the discernment and discoveries of the community of science has been the development of new mechanisms of political and economic controls for the indigenous peoples of the Arctic (particularly in the North American continent and Greenland) that have advocated and gained greater self-determination and regional political power from their respective national governments. While refinement and further adjustment are likely to occur in the coming decades, it is important to note that indigenous peoples of the Arctic have a recognised and respected voice on Arctic matters within their national governments and multi-nationally in organisations such as the Arctic Council.

While the preceding sections provide a summary outline of the major factors of the historical context of the Arctic, such a brief discussion also demonstrates the inherent weakness of a highly condensed summary.

Accordingly, in order to fully understand the uniqueness of the historic physical and human terrain of the Arctic, the author recommends that interested readers consult the considerable array of written resources to advance knowledge and understanding of the recorded history of this remarkable region.

5.4. A Physically Changing Environment of the Arctic

The Arctic physical environment is increasingly dynamic due to warming trends. As stated earlier, the Arctic has been both warmer and colder than today. However, the science community have noted that warming trends coincide with sustained rising levels of recorded carbon dioxide (CO₂) in the Arctic since levels were first observed in the late 1940s at stations such as meteorological facilities at Point Barrow Alaska. Current weather trends (from multiple accredited sources in the community of Arctic scientific research) reflect that across the Arctic maritime region, sea ice melt is increasing, and associated ice pack contraction in terms of area and volume is decreasing and forecast to further diminish in coming decades. As reported through many US and Canadian research and data sources over the past several years, the Arctic Ocean ice pack has broken records in seasonal retreat, while recorded Arctic temperatures are rising far faster than temperatures at lower latitudes. In a recent illustration, the Arctic sea ice extent for July 2017 averaged 8.21 million square kilometres (3.17 million square miles).

Despite warming trends, the vast majority of the Arctic maritime region experiences at least seasonal sea ice coverage for several months of the year. However, if current trends in Arctic sea ice receding continue, by year 2030, sea ice will diminish to the point that Canada's Northwest Passage and Russia's Northern Sea Route will be open seasonally for several months extending from mid-summer into early fall. Such access could facilitate a significant change if commercial maritime traffic begins to take advantage of the significantly shortened route connecting Europe and Asia. By the mid-to-late 2030s, there is potential that transpolar routes will be navigable. Accordingly, for at least the summer season, the historical barriers of ice in the Arctic maritime region continue to shrink, affording improved access to human activity. In sum, diminished sea ice is increasingly enabling non-ice hardened vessels to operate across more of the Arctic in summer and shoulder seasons.

Reduced sea ice in the Arctic Ocean has been accompanied by seasonal increases in storm severity, with significantly stronger winds and coastal storm surges battering shores across the Arctic (and in particular, the North American Arctic). The Arctic warming trends are correspondingly reducing the amount of shore-fast ice that has historically served as a protective barrier from the sea for coastal communities and critical infrastructure along the Arctic coasts. As the Arctic warms, coastal regions frozen for centuries are now thawing. This recently 'unfrozen' terrain is proving vulnerable to erosion, which is of particular impact in coastal Arctic regions and the people who live across this fragile region. This is particularly impactful to the North American Arctic.

Arctic warming is affecting associated marine ecosystems and the corresponding food web. As sea ice diminishes and weather patterns continue to change, there are small but biologically relevant increases in ocean acidification. Changes and potential for loss of lower levels of the food web affect larger and more significant species. Further, iconic Arctic marine mammals that depend on the uniqueness of the Arctic ice pack. such as walrus and polar bear, are being forced to adopt new habits in order to survive, as not only is the food web changing, but so is the effect of diminishing sea ice being seasonally driven further from terrestrial shorelines. Impacts, of course, are not only to wildlife, as these same diminished sea ice and changing weather patterns resulting in ocean acidification can potentially degrade highly productive fishing regions, such as the Bering Sea, which puts the harvest of much needed fishrelated proteins at increasing risk. An increasingly dynamic physical environment in the Arctic is affecting populations whose ancestors have inhabited the region for generations.

Many of these people live close to coastal shorelines that provide access to maritime regions critical for marine mammal subsistence harvests. Across portions of the North American Arctic, these same shorelines are eroding rapidly due to increased storm surges, lack of protective shore ice and thawing permafrost. Associated village infrastructure is failing (at times, literally falling into the sea). As mentioned, Arctic warming is reducing the amount of shore-fast ice that has historically served as a protective barrier from the sea for these native villages along the coastal Arctic.

Environmental changes such as coastal erosion not only affect Arctic residents, but also can affect expensive and difficult to replace infrastructure such as the Canada-US North Warning System. A warming Arctic is likely contributing to increasing severity of sub-Arctic boreal forests fires. Across the North American and Asian land mass, the scope and severity of these seasonal forest fires largely go underreported, and they have considerable impact on local and regional flora and fauna.

In sum, the impacts of the changing physical environment of the Arctic are generally negative to flora, fauna and people that are intertwined and rely on an Arctic remaining cold. While the Arctic region with large and stable sea ice, along with an ocean more saline than acidic, is preferred for these current residents, the reality is that the current warming trends will likely continue and compel adaptations. This changing environment will complicate maritime operations, in part due to factors such as increased storm severity. While disadvantaging those who currently call the Arctic home, these same changes provide advantages to interests from outside the region, which will be addressed in subsequent sections.

5.5. Recent Trends and Associated Impacts to Arctic Residents

An increasingly dynamic Arctic is affecting populations whose ancestors have inhabited the region for generations. Subsistence lifestyles proudly continue but are threatened by increased activity (such as marine shipping, tourism and resource extraction), which affect marine mammal activities and populations. Correspondingly, Arctic residents strive to retain the culture and traditional ways of life, ancient traditions, linguistic heritage and cultural fabric of Arctic lifestyles, while accommodating development activities that incorporate appropriate mitigation and environmental safeguards. There is a need to factor local populations' lifestyles, practices and security interests into the development and conduct of new legal and security activities.

Through centuries, Arctic indigenous communities have proven resilient to challenge, resource exploitation, disease, subordination and assimilation brought from lower latitude industry and nation states that claimed and gained lands claimed by indigenous residents. Resilience, born of learning to adapt to the difficulties of the Arctic environment, has also been useful to help these communities endure changes imposed by influences from lower latitudes.

In recent decades, through improved approaches to shared governance, many remaining Arctic indigenous communities are now organised, provided a voice and increasingly impactful in shaping their futures within the nations in which they reside. Key illustrations of these improvements are watershed legislation in the United States associated with the 1971 Alaska Native Claims Settlement Act, Canada's

establishment of policies associated with an array of 'First Nations' designations, and Denmark's granting of semi-autonomous self-rule to Greenland. Such legislation and policy changes provide Arctic residents of indigenous origin an opportunity to enact local and regional decisions to benefit fellow residents but remain constrained without corresponding fiscal means to address chronic issues and emerging problems. Further actions are needed, and likely needed soon.

Due to an ever-increasingly connected world, challenges manifesting across the human terrain in lower latitudes are now having a newly corrosive effect on the people of the North. Many Arctic communities are economically stagnating, with high unemployment, denying residents hard cash necessary to improve local circumstances. Many such communities chronically suffer from substance abuse and under-reported crimes such as sexual assault and other abuses against indigenous women. There are increasingly unreconciled differences between modern culture and traditional values. There is disenchantment among younger generations in maintaining interest in subsistence lifestyles in light of the significant amounts of physical labor and increasing difficulties in subsistence hunting that can, in part, be attributed to the changing physical environment of the Arctic. These negative factors collectively serve as a sort of forcing function to incentivise people to consider departing the North for an easier, more secure and more economically advantaged life in the lower latitudes.

As discussed previously, the changing physical environment impacts residents of the region. Diminished sea ice, increasingly difficult weather and the associated changes in the physical terrain collectively affect community infrastructure and the ability to live in regions already at the margin. While some Arctic communities view new and rising economic interests in the Arctic – associated with shipping, tourism and extraction of mineral wealth - as an opportunity, many are sceptical of the associated impacts, and more than a few believe that economic advantages associated with these activities will largely bypass the Arctic communities all together. Many Arctic residents also view increasing economic opportunities as cause for alarm that could affect the ability to continue subsistence lifestyles, resulting from environmental disasters such as marine oil spills and toxic wastes from mining. Furthermore, there is deep concern that the inflow of activities associated with industrial development will also bring further negative influences, from people conducting new economic activities, affecting northern communities already in distress.

5.6. Economic Aspects

In the light of a warming Arctic, there are three broad categories of legal economic interest currently associated with the maritime and coastal regions. These are organised along resource extraction (ranging from rare earth minerals to petrochemicals), adventure tourism and maritime transportation. It is also noted that while marine fisheries provide an additional avenue of Arctic economic advantage, due to multi-national agreement, the Central Arctic Ocean remains secure from unregulated commercial fisheries activities. However, many of the surrounding seas of the Arctic (in particular, the Bering, Norwegian and Barents Seas) conduct large and robust fishing activities.

Seasonally ice-reduced and ice-free Arctic Ocean spaces provide improved access to sea floors for rare earth and other mineral extraction. Reduced sea ice thickness (in particular, multi-year sea ice) will likely reduce challenges in future oil extraction and offshore mineral extraction. In the modern era, Arctic resources beneath the surface (both on land and undersea), such as petro-chemicals and valuable minerals (including diamonds, gold, iron, copper, bauxite, nickel and more), are key incentives for nations and industry to secure and extract. Establishing claims for undersea resources in the Arctic is largely based on protocols defined by the United Nations Convention of the Law of the Sea (UNCLOS). Because of UNCLOS, nations seeking to extract wealth from extended continental shelves have a legal context to claim and conduct resource extraction. As reported via multiple sources, the Arctic basin is estimated to contain a significant amount of untapped sources of oil and natural gas. While lower overall global crude oil prices currently continue to dampen oil exploration in Arctic waters (particularly the Chukchi and Beaufort Seas), increasing crude oil prices raise anticipation that oil and gas exploration activities will likely expand across the Arctic in the coming years.

Both the US Navy and the US Coast Guard have described the Arctic as a 'new ocean'. This seasonal opening of the Arctic is affording new interest in Arctic maritime tourism, including cruise ship passages of the Northwest Passage. Tourism is a growing economic factor in the Arctic. Adventure class vessels (ranging from several dozen to several hundred passengers) ply Arctic waters of Europe, Greenland and the North American continent each summer, providing guests with an up-close view of the physical wonders of the region. Larger cruise ships have ventured into the Arctic, with approximately 1,700 people aboard the *Crystal Serenity* that sailed through the Northwest Passage in the summer

of 2016 and 2017. Despite the challenges of seasonal changes of navigability of routes (due to variances in sea ice) and risks from poorly charted Arctic waters, interest in Arctic adventure tourism is likely to expand and develop further, and with such expansion could come an increase in commerce between tourists and Arctic communities. Additionally, along with rising legal commerce, tourism provides increased opportunities for malign activities, which exploit gaps and seams of legal commerce.

Reduced sea ice also affords increased access to throughput shipping – in particular, Russia's Northern Sea Route and, eventually, transpolar shipping. Due to shallow and narrow routes, Canada's Northwest Passage remains a less desired route for polar transshipping traffic. While the Northwest Passage is relatively shallow (at approximately 33 foot 'safe draft'), the Northern Sea Route is a bit deeper (with an approximately 38–40 foot 'safe draft'), and a key benefit of the transpolar route is a practically 'unlimited' draft. All three routes could facilitate a significant change if commercial maritime traffic begins to take advantage of these significantly shortened routes connecting Europe and East Asia.

Transportation networks across the Arctic circumpolar region remain underdeveloped, particularly in Eastern Russia, Greenland and the North American continent. Conveyance networks across the North American Arctic are principally limited to air and seasonal marine conveyance. Economic development in the region is limited due to remoteness, lack of infrastructure, cost and difficulty of establishing new infrastructure such as roads, ports and facilities, plus a range of complementary factors. There is a need to consider how economic development can take place in ways that support sustainable development practices and goals, yet at the same time meet broad strategic goals for regional security.

Airports, seaports, roads and marine routes are difficult to establish and difficult to maintain. Cost of building infrastructure and associated sustainment logistics remain disproportionally high compared to lower latitudes. As such, the ability to respond to better secure sovereign interests, access new resources, sustain disconnected populaces and respond in times of crisis all face daunting challenges, due to limited and weakly funded transportation networks. Closely associated with limited transportation networks are Arctic economies, which remain constrained now and likely well into the future. Particularly in North America, the combination of marginal surface transportation and highly

limited Arctic industry provide little incentive for residents who desire upward mobility and a lifestyle not based on traditional subsistence measures to remain.

Marine-and riverine-based lines of communications often require icebreakers to keep these transportation routes viable in all but the late summer months. Russia uses a large portion of its significant icebreaker fleet to maintain littoral and riverine logistics flows to their northern communities. Establishing new surface roads in the Arctic region remains difficult due to fractured views of the benefit versus potential negative impact and needed permissions from Arctic residents. Even with permissions, the costs to establish and maintain surface roads remain daunting and likely a net resource loss in terms of economic benefit (at least in the short term). As a result, aircraft is required for both the movement of people and the transportation of goods and materials, even though such movement is costly and economically disadvantageous.

In sum, a diminishing ice environment in the Arctic is causal for rising interest in leveraging the region for advantages in mineral extraction, tourism and transportation. Economic opportunity is a driver for not only interest by industry, but also interest by illicit actors and an array of nation states, many of which are not Arctic nations. As such, rising economic opportunity also serves as a partial catalyst for competition – in particular, competition among great power nations.

5.7. Implications for Safety and Security

As discussed in preceding sections, the Arctic diminished sea-ice environment is drawing other influences to the region, which can contribute to unconventional and conventional security threats, including increased illicit trafficking and other illegal activities. With the rise of Russian, Chinese and other nations' Arctic interests in the era of an Arctic with diminishing ice, the threat of confrontation and conflict – while low – remains present, and potentially more challenging as pressures to seek economic benefit from the region rise.

The roles and responsibilities of Arctic security, law enforcement and military forces are complex, operationally risky and logistically straining. As human activity increases in the region, the communities of security professionals in Canada, the United States and allied and partner nations will likely need to increase their Arctic response capabilities and collaborate with other Arctic organisations and communities, in order to respond effectively to emerging challenges and developments to respective sovereign interests. Security includes law enforcement (both national and international), as well as defence, and associated non-security aspects and human factors that contribute to security. This includes aspects such as the ability to protect sovereign territory, ensure human security, regulate waterways management and, per international agreements (for example, as consistent with the United Nations Convention on the Law of the Sea), enforce national laws within a nation's exclusive economic zone (EEZ).

The physical environmental changes in the Arctic are a key factor in the challenges faced by security agencies and defence forces. The need to better understand and factor 'Arctic environmental security' in the context of protecting national interests, advancing regional cooperation, addressing civil support to citizens, ensuring human security and providing defence and law enforcement is timely and necessary. As a result of the diminishing ice environment, the Arctic, from a security and defence vantage, is once again a region of contest and confrontation where powerful nations can potentially (and likely) jockey for dominance. Today, Arctic nations and a number of non-Arctic nations are taking action in the region to respond to increased multi-national and multi-organisational interest to ensure their interests are established and preserved. As such, the Arctic is increasingly a region where great power competition is rising.

The Russian Federation has taken steps to secure and defend its interests in the Arctic by rebuilding forces, procuring new military hardware, and refurbishing and adding new military installations across its Arctic frontier. Russia's 'snap' exercise programme (a minimum notice programme with large-scale deployments, ranging from tens to hundreds of thousands of military personnel and associated equipment to regions along Russia's frontiers) has become a normalised fact over the past ten years. This snap military exercise programme includes demonstrating the ability to deploy to Russia's Arctic region. While the Russian government described such manoeuvres as defensive in nature, the size and scope of such activities in the Arctic seem considerably excessive. Meanwhile, Russia's ability to project into the Arctic not only by aircraft but also via icebreaker is a significant capability.

NATO has recently taken steps to return to conducting Arctic activities that were a relatively normal part of operations in the Alliance during the Cold War. A highlight of the return of the Alliance to activities in the High North was the recent participation of an approximately 50,000-strong contingent of Allied forces in Exercise Trident Juncture in

Norway, that included manoeuvres of a US Navy carrier and associated escort vessels in the Norwegian Sea.

The People's Republic of China (PRC) has declared itself as a 'near Arctic state', stating intentions to expand activities via the Belt and Road Initiative, seeing the Northern Sea Route across the Russian littorals as the 'Polar Silk Road'. The PRC is actively investing in icebreakers, with two fielded and a reported third vessel to be constructed; conducting extended Arctic presence activities via the icebreaker *Xue Long* (Snow Dragon); and investing in Arctic access locations such as Iceland and Russia. Through investment, the PRC has access to port facilities in Reykjavik. The PRC contributed to the large liquefied natural gas (LNG) facility in Yamal Russia (along Russia's Arctic coast) and is now getting the benefit of Russian LNG. These activities appear to be aimed at having the effect of 'normalising' Chinese actions in the Arctic – as not only a near Arctic nation, but also a nation that Arctic nations accept and to whose activities and actions across the region they offer little contest.

The sum analysis of these activities is the emergence of the PRC as an active competitor in the Arctic and one that is positioning capability and access to resources not yet claimed in Arctic international waters. Due to the understood long-range mindset of Chinese strategy, China's policy aims and efforts towards becoming an Arctic power will likely be undeterred, and it will continue to use its economic levers in creating access and capability to extract resources from the region. Due to the changing physical environment of the Arctic, the incentive to gain economic opportunity potentially available in the region is resulting in rising competition by industry and nation states. Competition without sufficient restraint and respect for multi-national protocols for cooperation can result in confrontation. Further, nations seeking opportunity through exercising their military strength add to the chance of confrontation, resulting in armed conflict.

5.8. Factors to Consider for Improving the Future Security and Defence Outlook for the Arctic among Like-Minded Nations

Respective national strategies and policies for Canada and the US, along with Arctic allies and partners in Europe, drive implementing approaches and resource decisions affecting regional Arctic security. As like-minded national governments assess threats and risks, needed capabilities

and the costs to respond, these nations need to reflect on prevention measures and the need to demonstrate resolve for maintaining a peaceful opening of the Arctic. Such resolve should consider a balanced approach to address the real problems faced now by Arctic communities, policies that balance economic development with risks to environments, and the impacts of a changing Arctic environment to national interests and obligations.

As much of this chapter has highlighted, the Arctic is vulnerable in terms of its physical and human terrain. There is rising economic opportunity, but safely and successfully gaining the advantages offered in the diminishing ice environment requires accounting and understanding of the array of associated vulnerabilities. Without appropriate and suitably scoped domain awareness and understanding of the changing dynamics of the physical and human terrain in the Arctic, nations will likely be late to preserve respective interests, secure national sovereignty and gain economic benefit from the diminishing ice environment.

Inclusive frameworks and mechanisms of responsible governments, and indigenous groups collaboratively setting conditions for cooperation, exist for the Arctic and are largely successful. The Arctic Council, the Arctic Coast Guard Forum and the Arctic Security Forces Roundtable provide distinct, separate and respective opportunities to establish and operate collaborative mechanisms for shared approaches in resource management, search and rescue, humanitarian assistance, disaster response and defence support to civil authorities. In a similar manner, the Arctic Circle and Arctic Economic Council provide a forum for industry collaboration. In sum, these forums provide context and an opportunity to address concerns and opportunities among members. These forums are particularly important as they provide real means to help in small and larger crises through agreements such as the Arctic Council working groups, such as those associated with Emergency Prevention, Preparedness and Response (EPPR) and Protection of the Arctic Marine Environment (PAME).

Advancing inclusivity is not limited to existing collaborative mechanisms. Through leveraging the power of social media, connecting problems, challenges and opportunities to larger communities of people willing to offer solutions and support their implementation matter. Such citizen volunteer efforts can help offset less than fully effective collaboration and cooperative mechanisms between nations and large institutions.

Meanwhile, NATO and NORAD are proven and tested mechanisms for defence for threats emanating from and through the Arctic region. Both these defence alliances provide the ability for Canada, the US and their allies and partners in Europe to deter and dissuade military aggression in the Arctic. When called to respond, NATO and NORAD can provide the forces capability with suitable command and control to counter air, land, sea and cyber threats, but each mechanism may not be fully suited to cope with a more diversified threat picture that could characterise the Arctic in the coming years and beyond.

Today, overall the Arctic remains under-resourced by at least several Arctic nations in terms of possessing the means to ensure sovereignty and control national boundaries. In terms of real-time sensing, identifying risks and the ability to respond across much of the Arctic remains less capable than most Arctic nations would probably prefer. The means to resource people and capability to respond to threats below significant military concerns remains more in concept and desire than reality. To illustrate, the ability to identify malign actors and the ability to intercept illicit activities in a timely manner in much of the Arctic remains scant to non-existent.

The means to cope in response to a large-scale challenge, such as a disabled cruise ship in Arctic waters, a foundering vessel with hazardous cargo on a transpolar transit, a large oil spill, or a rapid outbreak of a medical illness in Arctic communities, would be difficult to perhaps overwhelming. In particular, most Arctic nations would be significantly challenged logistically to support the responders in most non-militarised major responses. In sum, for most like-minded governments of the Arctic region, the ability to cope with the challenges associated with rising human activity, let alone with the dynamics of the changing Arctic environment, remains limited.

Perhaps a first step to addressing the myriad of challenges across the Arctic begins by seeking ways to integrate existing mechanisms in a way that does not detract from the goodness and value each mechanism provides to its membership. Such an approach can even apply to nations that would otherwise be regarded as Arctic competitors. A goal of such an approach is to seek cooperation where cooperation can be successfully achieved and provide mutual benefit. In concert with integrating mechanisms within existing Arctic forums should be complementary activities to address gaps and seams associated with securing and defending the region. Advancing trusted forums such as NATO and NORAD to respond more effectively to a wider range of threats

is one aspect. Another is addressing the fact there are little to no effective multi-national cooperation frameworks or associated mechanisms across much of the public safety, security and law enforcement organisations among like-minded nations in the Arctic (particularly below Arctic policy forums such as the Arctic Council).

Creating and resourcing mechanisms for multi-national security forces' collaboration and cooperation complementary to defence mechanisms would be one useful step to reduce threats and risk from malign activities, before damage and harm of scale and impact. Meanwhile, advancing mechanisms and opportunities for Arctic residents to contribute more meaningfully in overall governance of the region is critical and necessary in the light of amending historic mistakes. In sum, not only do indigenous voices need to be heard, but also the volume of their message needs to be turned to higher levels.

5.9. Conclusion

Increasing compliance and commitment of industry seeking to develop and extract resources in the Arctic to respond in the event of disaster or crisis is vital, since national and regional governments are unlikely to resource sufficient means to respond effectively. Important in establishing approaches to addressing problems and challenges across the Arctic is the ability to gain advanced domain awareness to capture, correlate and analyse the range of factors at work across the region. Doing so will leverage awareness and increase decision agility, thereby reducing strategic risk.

Looking to future years and decades, decision makers among like-minded Arctic nations are likely to face tough strategy, policy and resource choices. It is a reasonable and fair assumption that as the physical environment of the Arctic warms, enabling greater access and higher levels of human activity, the risks associated with increased activity – along with the strategic importance of the Arctic – will escalate. Accordingly, decision and actions are needed sooner rather than later to create a safe and secure opening of an Arctic that is likely to draw increased, larger and potentially more aggressive human activities sooner than anticipated.

In many ways, anticipating the arriving Arctic is much like risk analysis; while not every potential risk will be encountered for every scenario, accounting, planning, collaborating and resourcing mitigation of risk goes a long way in preventing events or failure to respond to threats by being in a position of strength to dissuade and deter. Increasing the capabilities of cooperation and collaboration mechanisms, and creating new mechanisms to address current gaps and seams, could prove pivotal to fostering improved outcomes for the Arctic in the coming years. In sum, to meet the challenges of a changing Arctic, it becomes imperative to investigate, plan and prepare for the future. Comprehensive challenges require comprehensive solutions. It is hoped the preceding sections suitably sketched both these factors with at least a reasonable level of accuracy.

6

The North American Arctic Maritime and Environmental Security Workshop 2018: Summary Workshop Report

Randy 'Church' Kee, Maj Gen, USAF (Ret.); Paula Williams and Heather N. Nicol

This material is partly based on work supported by the US Department of Homeland Security under Grant Award Number 2014-ST-061-ML0002-03. The workshop was also funded in part by the National Science Foundation (award #1642847). The views and conclusions contained in this document are those of the authors and should not be interpreted as necessarily representing the official policies, either expressed or implied, of the US Department of Homeland Security. The views of the authors, likewise, do not reflect those of the National Science Foundation.

6.1. Introduction

The Arctic Domain Awareness Center (ADAC) and partner organisations sponsored the 'North American Arctic Marine and Environmental Security Workshop: Assessing Concern, Advancing Collaboration', 18–21 September 2018, held at the University of Alaska Anchorage, Gorsuch Commons. The workshop planning team included professionals from the following institutions: Trent University, University of Alaska Anchorage, Arctic Domain Awareness Center, HQ US Coast Guard, US Coast Guard Academy's Center for Arctic Study and Policy (CASP), the Royal Military College of Canada, the Center for Resilient Communities (University of Idaho), Polar Research and Policy Initiative and Defence Research and

Development Canada. In preparation for the workshop, ADAC personnel prepared and distributed a literature review summarising relevant research and reports.

The workshop was a collaborative effort among Canadian and US (CANUS) operators and experts from government, academia and industry who work in, live in and/or study the Arctic to increase domain awareness and identify and assess common security challenges and solutions focused on the North American Arctic maritime region. Overall, the desired outcome was a collaborative assessment of shared security concerns (defining security broadly to include environmental and human security), gaps in technologies, methodologies, policies and practices, and recommendations for solutions that may shape the future of Arctic security.

The North American Arctic and Circumpolar North are strategically vital to CANUS national interests. Preserving and protecting CANUS national Arctic interests, including securing borders and ensuring safety and security in adjoining Arctic waterways, remains an important task but also a resource challenge for both Canada and US federal agencies. The Arctic region is facing an unprecedented amount of change in terms of environment, weather, human activity and geopolitical interest. Rapidly changing physical environmental factors include reduced sea ice, thawing permafrost, diminished shore-fast ice, and increased storm frequency and severity. Ocean acidification in highly productive fishing regions, such as the Bering Sea, puts the harvest of much needed fishrelated proteins at risk. These changes are coupled with increased marine traffic, particularly through the Bering Straits, resource exploration and extraction, drug smuggling and human trafficking, tourism and other human activities. Additionally, China has issued a policy stating that, as a 'near-Arctic State', it will seek to use Arctic resources to 'pursue its own interests', and Russia, as an Arctic State, operates in the region. All of these factors argue for both anticipatory and emergency response by Canada and the US.

6.2. Description of the Workshop

Building on prior discussions, assessments, the literature review and other workshops, this workshop included plenary panels and breakout discussions to facilitate assessment of and identification of actions to mitigate risk, improve North American Arctic maritime and environmental security, and to create a framework of actions that policy and decision

makers can leverage. This workshop aimed not only to assess, but also to provide recommendations and solutions.

Approximately 70 people attended the workshop, which opened the evening of 18 September 2018 with a welcome reception. Workshop participants were selected because of their knowledge of and daily work in the region. The second day of the workshop, 19 September, was devoted to discussions by select plenary panel members composed of experts and operators within the following fields:

- Arctic Security (which includes defence):
 - Canadian and US defence professionals
 - o Safety and law enforcement professionals
 - Waterways management services
 - Select organisations to address non-traditional aspects (such as emerging 'human factors') affecting traditional security
- Science and social science research community
 - Canadian and US atmospheric and weather services, fisheries and wildlife management, and ocean and energy management services
 - Canadian and US national ice services
 - Alaska Native and Canadian First Nations

The topics of discussion of the plenary panels in chronological order were: Strategic overview; Canadian Arctic: Challenges and emerging concerns in coastal regions and maritime security; US Arctic: Challenges and emerging concerns in coastal and maritime security; Canadian Arctic: Emerging patterns of environmental security in maritime and coastal regions; US Arctic: Emerging patterns of environmental security in coastal and maritime regions; A look from outside of North America: Applicable lessons?; and A view from North American Arctic residents. All panel members were asked to provide their expertise to address likely future challenges and potential solutions to security challenges within their area of expertise.

20 September began with a final plenary panel that addressed 'A look to the future, what can/should we expect?' Following that discussion, workshop participants were assigned to six breakout groups organised to maximise diversity among group members. Each breakout group included government, military, private sector, environmental, indigenous, Canadian and American participants. Workshop participants

were asked to expand ideas and input on solutions and recommendations of plenary panels and to develop practical solutions to the issues that they see now and anticipate in the future in the Arctic. Over 100 recommendations and solutions were developed, which were then prioritised by workshop participants using the Delphi method.

6.3. Summary of Plenary Panel Discussions

The introductory plenary panel explored Canadian and American strategic concerns in the North American Arctic. Panelists identified the remote nature and vast distances of the North American Arctic as a key challenge, compounded by a lack of funding and resources for regional security expenditures. There was a consensus that Arctic security needs are often not well understood in defence and policy-making arenas. The panel recognised that climate change affects subsistence harvesting, culture, safety, transportation and infrastructure of local communities. At the same time, both economic activity and criminal activity have increased in the North. Drug smuggling and human trafficking are increasingly important threats, along with increased marine traffic. Impacts from these activities are seen at the community level.

One important issue in the future will be how to mitigate the risks. Other urgent needs include improving charting in the North and investing in more hydrographic mapping to ensure the safety of marine traffic. The panel identified resurgent and divisive geopolitics as a problem, with Russia and China seen as potentially posing threats to peaceful geopolitical relations in the Arctic.

Panellists recommended building upon existing cooperation and finding new ways of cooperating to increase capacity; better access to information and sharing information both among security agencies and bi-nationally. Panellists recommended that more funding and resources be directed towards the North American Arctic, development of marine transportation system infrastructure and increased communication/information systems technology. Panellists recommended development of a consensus plan for long-term investment, partnerships between and among agencies and national governments, and increased joint exercises and operations between Canada and the US that will require constant updating due to rapid changes caused by climate change.

The second panel discussed challenges and emerging concerns in coastal and marine security in the Canadian Arctic. These Canadian security and defence experts expressed concern about the rapidly changing and dynamic security context in the North. Challenges include identifying, coordinating and managing government jurisdictions and agencies responsible for northern security; identifying new security challenges and the nature of new environmental and marine threats; and building capacity to better coordinate responses.

In general, this new threat environment is more focused upon the impact of climate-driven effects on communities and the need to respond to major events and disasters. The Canadian panel also echoed some of the concerns of the previous panel with regard to the problem of funding a new security architecture. This, they felt, is essential. Finally, the panel suggested that security co-development and mutual understanding are key, both within and between Canadian and American jurisdictions and raised an important question – how do we find ways to (legally) share the right information?

This panel recommended using new technologies where there is increased transportation activity to drive down costs of monitoring, such as new sensors for maritime domain awareness (MDA); space-based intelligence, surveillance and reconnaissance (ISR); new long-distance radar and other tools. A broader application of technology would also assist in closing some of the gaps in security that challenge regional border management, including air, land, rail and marine travel preclearance. Encouraging meaningful engagement with communities would be vital, because the human capacity of the region is also key to providing 'eyes on the ground'.

Panellists all agreed that any solutions to resolving regional security concerns must factor in the challenge of developing and maintaining cooperation between Canada and the US, including finding opportunities to work together to enhance mutual reliance. Continuing dialogue will help maintain a level of engagement and build confidence that will continue in the future. Other recommendations included the establishment of clear threat risk thresholds and the development of local or regional action plans to react to those thresholds. The panel also recommended identifying funding to maintain capabilities and defining what a joint response would look like, including incorporating communities and promoting community awareness.

The third panel elicited expert views on the potential future of impacts upon the US Arctic's physical environment and their implications for security. Panellists were primarily from US government environmental sectors, US academic and industry research communities. This panel also identified the problem of scale and resources including the problem of geographical distance, weather patterns and remoteness.

A key concern was the lack of infrastructure in the North. This is seen as a failure that will pose challenges for any response to a major security incident.¹

The panellists expressed concern about the lack of understanding of the security context in Alaska. Panellists suggested that there is a deep and ingrained problem communicating the importance of northern security resulting in a lack of appreciation of not just traditional security threats and environmental change, but also increasing instances of criminality. Community resilience is reduced by human trafficking, drug trafficking and organised crime. Arctic security must be defined by the resilience of Alaska communities.

The panel recommended that US security agencies work with community members at the community level with a real appreciation of the role of culture within northern communities. Traditional Knowledge (TK) is a different knowledge system than science but is crucial for domain awareness on a continuing basis. The panel recommended enhancing communication in interagency interactions. Policy makers should develop a common language and mindset about the Arctic, develop a shared understanding of security needs and plan accordingly. This panel echoed the recommendation of the other panels for more emphasis on partnership, including a need to promote and continue combined and joint exercises such as the search and rescue (SAR) partnership collaboration. Common training and exercises should be undertaken to build trust and capacity. Ideally, a unified, multidiscipline, international centre to jointly address these issues could be created with policy and information sharing capabilities. Similarly, the panel recommended reinforcing and expanding partnerships with NORAD to cyber and space domains.

The Canadian Arctic's physical environment, with its associated impact on security, was explored by the fourth panel. Panellists identified the rapid pace of environmental transformation of the Canadian Arctic, which, due to permafrost melt and changing hydro- and thermodynamics, are outpacing the design of new infrastructure. The changing environment affects all communities. Changing conditions are making it difficult for both locally-based defence strategies and traditional subsistence life. Sustainable communities are essential to northern security since they are relied upon by other security agencies as permanent infrastructure bases during emergencies or security events.

Panel members commented that cooperation with and respect for communities and indigenous populations are crucial for military training to be operable in the Arctic. Canadian Department of National Defence (DND) must minimise its environmental footprint, include environmental stewardship training for military activities, and promote positive perceptions of what DND is doing for Canadians in ways that are environmentally sustainable and socially and culturally responsible in the North. Another key message was that a constantly changing environment requires more flexibility in planning, as well as planning for stochastic events rather than continuous even change. The panel also noted that resources and funding may not be available when change occurs and needs arise. Finally, panellists identified the need to think innovatively with regard to technologies that can help offset infrastructure limitations and to find reliable data for better prediction and situational awareness, especially multiple years of data.

Panel Five provided expert perspectives on current and likely future challenges stemming from physical change to the environment in the US Arctic. All panellists commented on the increased need for situational awareness, particularly in the area of marine systems and marine forecasting. Marine systems and marine forecasting are critical areas of information that US agencies must provide. Collaboration and coordination are needed, both interagency and internationally, to improve information on weather and climatic conditions, which could be aided by cooperative engagement programmes for polar research. Scientific information includes data gathered during real-time operations and requires continuous and instantaneous communication. Improved technologies and Arctic monitoring resources are needed. Attention must be paid to models used for collection and analysis of data. There is a need for new approaches to decision making to enhance risk mitigation strategies for environmental changes. Solutions must include enhanced information, communications and science. This means continuous data transfer from industry to government, among governmental agencies and to communities of interest.

Panellists recommended improving models and predictions to strengthen environmental security and domain awareness, and enhanced interagency and bi-national cooperation in gathering data. This could include greater use of Memorandums of Understanding, as well as cooperative engagement programmes. The International Cooperative Engagement Program for Polar Research (ICE-PPR) forum is an example of how collaboration among Arctic nations might be organised.

Panel Six provided perspectives on Arctic maritime and environmental security from Norwegian and British panellists. There are major environmental and maritime security concerns in the Norwegian Arctic stemming from the drivers of climate change and economic development in Russia and China. Of central concern is the need for a better regulatory framework for the region. There are also challenges in dealing with a Russia that is more active and potentially aggressive, and this requires greater degrees of surveillance and information. Nordic countries have witnessed increased Russian activity very close to their border. The UK is also interested in Arctic security and recognises the role of the eight Arctic states in their capacity as member states of the Arctic Council. The UK is involved in the Arctic and undertakes defence training exercises in northern Norway. The US and the UK also undertake submarine exercises in the Arctic. For the UK, there is a real need for antisubmarine capabilities.

The international panel observed that the Arctic Council and NATO are key to maintaining broader relationships between Arctic states and reducing tensions with Russia. Those relationships must be maintained. The panel also recommended increased domain awareness, scientific monitoring and enhanced maritime patrol capacity to protect assets and resources and to undertake rescue and response activities. Emphasis should be placed upon bilateral collaboration with Russia in areas of oil spill preparedness and response and SAR exercises within the framework of the Barents cooperation. There is a need for a strategy to keep conflict low, yet to have clarity on borders.

Arctic indigenous residents shared their expertise on current and emerging concerns and solutions for safety, security and sustainability across the Canadian and US Arctic coast for Panel Seven. All panellists agreed that local residents must be meaningfully engaged in all decisions and activities in the region, including military training, defence and security employment, data gathering, promotion of awareness, and design of and funding for regional economic development. There is a substantial native population within the North American Arctic, and they play an important role in regional security. Communities are facing new and unprecedented challenges because of the impact of changing environments on everyday life. Panellists observed that increased traffic brings illicit drugs to communities, more tourists are stopping in communities without border security, and cultural security is eroded as new activities and events occur.

Panellists would like traditional knowledge incorporated into policy and science. Resource and regional economic development must be accomplished responsibly to protect traditional activities. Communication to local communities about what is happening; how development, jobs, and resources will be shared; and how communities can participate in a new security environment is essential. They should be involved in discussions concerning biodiversity, investment and

infrastructure development, and have a meaningful presence in regional security and decision making. Security and defence agencies should work with communities to avoid disruption of local traditional economic activities. Communities would benefit from improved bathymetry, hydrographic information and cross-border communication. Overall, the priority must be to put communities first in cooperative and holistic ways.

Day three of the workshop began with the final plenary discussion of converging trends of traditional and environmental security. In looking forward, panellists advised following the money: where companies are investing and where government resources are going are key indicators of what the future may bring. All indications are that an Arctic future will include cruise ships and liquid natural gas (LNG), which means increased transits in complicated and unpredictable waterways such as the Northwest Passage. Infrastructure is definitely a limiting factor; it is sparse and expensive to maintain, making most activities, including communications in the high North, difficult. We must do a better job of explaining why major investment in security is important. One of the biggest problems in the Arctic is a real lack of knowledge. Precise information is difficult to obtain. Methods of forecasting are useful but still limited in their ability to predict long-term changes. This is magnified by the lack of human intelligence on the ground.

Panellists recommended planning complicated scenarios for security threats and responses and preplanning for an Arctic sustainment package – a prepackaged emergency supply bundle for airdrop. Better technologies and improving use of existing technologies such as finding replacements for tracked support vehicles, advocating for an increased maritime surface presence for USN and layering intelligence tools for added capacity could all be helpful. There is a need for development of better assessment tools for reliable long-term ice and climate predictions to aid safe operations. The panel also suggested more research focusing on ice-breaker operations in foreign waters. Shared field exercises between Canada and US, as well as the development of a shared lexicon concerning security and arctic domain awareness, were also important since every agency works with different definitions.

6.4. Analysis

At the conclusion of the plenary panel discussions, the workshop planning team summarised the themes discussed. Themes included:

- Account for the advantages of and needed adaptations to a rapidly changing Arctic environment
- Infrastructure to support and address risks associated with increased marine traffic is needed
- Communication and collaboration at all levels with an emphasis on international and inter-agency collaboration must be enhanced
- Partnerships and practising partnerships should be increased
- Define thresholds
- Define acceptable levels of risk
- Engage local communities meaningfully
- The distances within and the geography of the Arctic must be understood
- NORAD should be used as a model for other domains
- Develop information sharing capabilities, including lessons learned
- Expand resources
- Increase long-term data gathering and sharing
- Understand the effects of ecological changes on communities and the economy
- Improve current models
- There is a need for cooperative federalism
- Gather and share information to improve situational awareness
- Traditional and indigenous knowledge 'If you do not know about it, find out!'
- Resources should be responsibly developed
- Information should be disseminated in a timely, accurate and actionable way
- Acknowledge the limits of our predictions
- Resources should be co-managed
- We must think beyond the now
- Bring the discussion to the Arctic

As described above, workshop participants were divided into six breakout groups whose diversity was maximised. Teams were asked to describe actions that could mitigate risk and improve security of the North American Arctic and were given the following guidance:

- What are the 'gaps, seams and shortfalls' negatively affecting North American traditional and environmental security?
- What are recommended actions to close the gaps, seams and shortfalls?

- What new collaborations will reduce risk and improve effectiveness between Canada and the US at federal, state/province and community levels?
- What knowledge products are needed to enhance understanding and reduce risk in traditional and environmental security?
- What are the new technologies that can reduce risk in traditional and environmental security?
- What new agreements, programmes, training, exercises, planning initiatives, etc., can be offered to reduce risk and improve collaboration and security?
- How can the community of research be used to assist?

Breakout groups expanded upon and delved into the recommendations and solutions discussed by plenary members on 19 September and in the morning of 20 September. Rich discussions among the participants yielded over 100 solutions and recommendations. Facilitators and recorders documented the solutions and recommendations from each group on poster paper that was displayed on walls around the conference room. Participants prioritised solutions and recommendations using the Delphi method. Each participant was given three dots they used to vote for the most important recommendations and solutions developed by all of the groups.² As there were fewer Canadian participants at the workshop, each Canadian vote was weighted twice one vote of an American participant.

After participants voted on those solutions and recommendations most important to them, the workshop planning team sorted solutions and recommendations into themes. Those themes, the topics included in each theme, and the total and weighted scores are set forth in Table 6.1. below.

6.5. Recommendations

Themes addressed by plenary groups on the first day were expanded and deepened by breakout groups on the second day. Participants prioritised developing a baseline understanding of the current system. Both countries could benefit from an understanding of the organisations and governmental agencies operating in the region and their respective responsibilities, as well as the current laws and regulations and how they differ between nations. Along with that, key contacts in each agency and organisation should be readily available to aid information sharing.

 Table 6.1
 Themes of breakout group recommendations and solutions, solutions and recommendations fitting into those themes,
 and total and weighted votes.

Theme	Solutions and recommendations	Total	Weighted
		votes	total votes
Develop an understanding of		30	45
current structure			
	Identify current and future risk		
	Identify and classify threats		
	Share a common operating picture		
	Create a map of organisations and responsibilities		
	(Canada and US)		
	Develop strategic policy guidance		
	Define key contacts (Canada and US)		
	Compare State of Alaska and Canada policies and regulations		
Information sharing and		25	43
communication			
	Build a bi-lateral open source Arctic security network		
	Research community shares data with communities		
	Operationalise communication pathways, all types including		
	operational and strategic, incorporate lessons learned		
	Enhance communication between Troopers and residents		
	Assign an informal working group to share data		
	Create a Wiki as a repository of visits, community perspectives		
	Share information, increase situational awareness		

(Continued table 6.1)

Theme	Solutions and recommendations	Total	Weighted
		votes	total votes
Joint exercises		25	32
	Joint exercises to increase environmental security, food		
	security, drug enforcement, disasters		
	Joint exercises – need for multiple actors and to address		
	cross-border issues		
Sparsity of resources		24	32
	ALCOM hardware needs		
	Multi-use platforms/mobile command posts		
	Resources are needed to have a physical presence		
	Need for increased presence and mobility		
	US needs an alternative to the Canadian Rangers		
Raising awareness/Political will		18	28
	Political will is lacking to place the needed emphasis on the Arctic		
	Increased outside awareness is necessary to increase political		
	will		
	Raise visibility of the Arctic to increase awareness		
Develop a CAN-US NORAD-like		19	27
organisation for public safety			
Vessel tracking	Develop a finer-scale vessel tracking service that is available to	15	22
	communities		

(Continued table 6.1)

Theme	Solutions and recommendations	Total	Weighted
		votes	total votes
Baseline environmental changes		10	17
	Need to document and understand the impacts of climate		
	change across the region		
	Develop an environmental atlas of the region		
	Identify critical habitat areas		
Community training		11	14
	Educate youth in the region to take the roles of observers and		
	enforcement		
	Train communities to respond to disasters		
	DHS to partner with VPSOs to extend their impact		
Disaster mitigation	There is a need to mitigate the increased risk of disasters	8	13
Leveraging commercial partnerships		3	4
	Leverage commercial partnerships		
	Alaska Aerospace Development Corporation partnerships		
Value of communities		2	3
	Federal recognition of value of local perspectives		
	There is an untapped cultural intelligence		
Common Davida Williams (2004-bow)			

A shared understanding and prioritisation of risks and threats would help each country understand when, where and which resources should be allocated. Sharing a common operating picture and strategic guidance would enhance the ability of Canada and the US to address issues that arise.

After developing a baseline understanding of the system, participants felt that the next priority would be to broadly share information and data at all scales: from the community to the federal levels and from the federal levels down. Several Canadian participants commented that Canadian laws prohibit sharing of some types of data and information, and there would need to be an understanding of what can and cannot be shared to accomplish the broadest dissemination possible. Suggestions for possible ways of sharing included creating a Wiki on which information could be posted, building a bilateral open source Arctic security network and creating an informal working group. One group suggested the operationalisation of existing communication pathways. Several groups commented that communications should include lessons learned so that others can avoid repeating mistakes.

The third recommendation of the breakout groups was joint exercises among Canadian and American agencies. The purpose of these exercises would be to increase environmental security, food security, decrease drug and human trafficking and prepare for disasters. Groups commented on the need to address cross-border issues, especially border disputes, as part of the exercises and on the need for involvement of multiple actors.

Fourth in priority was the importance of understanding the sparsity of resources available in the Arctic. A greater presence and mobility in the region is needed as marine traffic increases and environmental changes occur. Participants reported cross-border incursions and vessel incidents that were not policed. This theme echoed comments by some plenary panel members on the tyranny of distance – the vastness of the Arctic region and the lack of easy access to communities. Participants recognised that the lack of infrastructure mandates that 'you take everything you need with you when you operate in the Arctic'. Presence and mobility require resources. Some suggestions included ALCOM hardware needs, multi-use platforms and mobile command posts. Alaskan participants commented that Alaska needs an equivalent of the Canadian Rangers.

Following from the discussion about the need for resources, the next recommendation was that the importance of the Arctic needs to be recognised in order to increase political will to direct funding to this region. Many participants commented that demands in more populous

areas draw funding away from the Arctic because of its significantly lower population. Groups had inventive suggestions for raising awareness of the importance of the Arctic, such as developing a 'Whaling Wives' show, filming the lives of Arctic residents and showing a film each week so that people living in lower latitudes could better relate to the challenges of living in the Arctic, and creating a YouTube channel.

Another important recommendation from participants was to develop a CAN-US, NORAD-like organisation for public safety. Such a group could be expanded beyond public safety to the maritime domain and other areas. Such a solution could encompass many of the recommendations and solutions above, including developing an understanding of the current system and engaging in joint exercises. Many participants also emphasised the importance of tracking marine vessels. Although a system is currently in place, the resolution is not fine enough to identify country of origin. Participants felt that it is important to improve tracking to allow enforcement of laws.

Other themes that received votes from participants included creating a baseline of environmental data that is shared so that communities and both nations will have a better understanding of changes that are taking place; training community members to observe, report and enforce regulations so they can protect themselves; and the need to mitigate current and anticipated disasters in the region. Finally, participants voted for the importance of leveraging public/private partnerships and of recognising the importance of local perspectives and tapping the vast cultural knowledge in the region.

6.6. Conclusions

The discussion and recommendations of the plenary panel members during the first day of the workshop and the beginning of day two set the stage for rich discussions by breakout group participants of practical solutions and recommendations on day two. Echoing the comments of several plenary panel members, breakout group members felt it was important to understand agencies, organisations and their mandates, current laws, practices and operating procedures between Alaska/ United States and Canada. It is important to identify key contacts within each agency and organisation so that communication can take place. Participants also recommended that a common classification of risks and threats and a common operating understanding be established, as well as strategic policy guidance.

From that base, participants hoped that open lines of operational and strategic communication would be established at all levels: from individuals in communities up to the federal level for both countries and from federal down to individuals. Participants emphasised that it is necessary to understand Canadian restrictions on sharing information. Many participants emphasised that lessons learned should also be shared to help others avoid mistakes.

A baseline of understanding and open lines of communication will result in enhanced cooperation and collaboration between Canada and the United States. Practically, joint exercises to enhance environmental security, food security, human and drug trafficking and disasters should be undertaken. To maximise effectiveness, exercises should include multiple actors and should address cross-border issues. Increased observations, enhanced monitoring of activities and enforcement of security issues would be most cost-effective and efficient if local residents are employed to conduct these activities. Monitoring of marine traffic in the region should be upgraded so that enforcement of laws and regulations can take place.

Participants recognised the lack of resources, infrastructure and physical presence in the region to support joint exercises or to respond to disasters and human and drug trafficking. A lack of infrastructure mandates that any organisation, or individual, conducting exercises in the Arctic bring everything needed with them. Sparse infrastructure and resources should be remedied, but will require recognition of the importance of the Arctic and the political will to allocate resources to the area. A common theme in all discussions was the value and importance of the region, its peoples and resources to other citizens living at lower latitudes but also the lack of recognition of that value.

Many of the above-mentioned recommendations could be accomplished by instituting a NORAD-like institution that would address public safety, maritime threats and other security issues. National strategies for Canada and the US (CANUS) federal agencies drive policy and resource decisions. As strategies continue to evolve in the current US and Canadian national leadership, knowledge products, which capture insights and perspectives, and bi-national collaboration provide a unique opportunity to inform planners and policy makers alike as they revise and develop new federal strategies and policies in Ottawa and Washington DC for respective national actions in the Arctic. Equally important, such collaboration should include CANUS Arctic regional and tribal governments. To anticipate the impacts of changing environments and conditions,

as well as changing responses to these influences, security needs to be considered in a broad and holistic fashion.

Notes

- A related theme was the lack of basic support for security actors. Large distances are covered by a few key personnel, and basics (such as housing) are difficult to find. Overall, resourcing does not match need in almost all areas and for most agencies – for example,
- State Troopers, Coast Guard and Defence agencies.
- Participants could distribute their dots in any way they wanted: three votes for one solution, two for one and one vote for another, or one vote for three different solutions.

7

Regional Border Security Management in the Territorial North

Heather N. Nicol, Adam Lajeunesse, P. Whitney Lackenbauer and Karen Everett

This is an updated version of an article previously published in Heather N. Nicol and P. Whitney Lackenbauer (eds.), *The Networked North: Borders and Borderlands in the Canadian Arctic Region* (Waterloo: Borders in Globalization/Centre on Foreign Policy and Federalism, 2018).

7.1. Introduction

Overall, the management of the international land border by the Canadian Border Services Agency (and correspondingly, the US Department of Homeland Security in Alaska) is consistent with that of other regions of Canada, meaning that the same federally mandated rules and regulations apply. Customs and immigration inspections occur here, and a host of regulations and laws are imposed upon both private and commercial travellers as they cross the line. While a number of federal laws and agreements govern the management of the border, one of the most important of these is the Canada-US Beyond the Border Framework for border management. An evolving framework and cooperation agreement, it invites bilateral cooperation, yet also clearly aligns with national security practices and discourages exceptionality. The idea is to create national borders that are uniform, have a common 'look and feel' and that reflect the priorities of their respective states.¹

If the way in which boundaries and borders have been perceived and regionalised in the North leads to the presumption that a single border management framework works throughout all regions, nothing could be further from the truth. Moreover, it would be wrong to assume that the only real border is the in-situ international land boundary. Indeed, there are many different types of borders that divide the region, at different scales and in different ways. These emerge from the very different histories and the very different ways through which Westphalian notions of state have been operationalised within the region. There are. for example, land borders that divide Canada from the United States. There are also layers of boundaries which divide sub-national regions and non-state actors from each other and that define subsidiarity in this way. In some spaces, there are maritime boundaries – both established, claimed and disputed. Borders manage the flows of peoples and goods, relationships between international interests, and state sovereignty. They are integral to the conceptualisation of security from the point of view of the state. And yet, if poorly implemented or managed, borders may at times contribute to insecurity.

That point is made in this chapter where we explore Canada's 'Territorial North'. This includes the three Canadian territories lying north of 60 degrees north latitude: Yukon, the Northwest Territories and Nunavut – an extremely large area of land and water which occupies approximately 40 per cent of Canada.2 Yet, because of their remote geographies, low levels of economic activity and limited populations, border management services within the region are vastly underrepresented. For example, while there are miles of land, air and maritime boundaries in the region, there are only four international land border crossings located along the Canada-US land border. Two are located between Yukon and Alaska, and two more crossings are located in an area that is technically outside of the Territorial North - lying on the boundary between Alaska and British Columbia, although few would argue that point. Similarly, there is only one airport with established border inspection facilities, while maritime boundary enforcement and inspections are much more flexible still.

In the following discussion, we look at the implications of remote geographies for border management and regional security. The point is that security in the North American Arctic region provides a distinctive set of challenges that are very different from those of the South. Yet, the templates and tools for managing security tend to be one and the same. The following discussion highlights this discomfiture with regard to border management along Canada's international boundaries within

the Arctic region, and suggests where new ways of approaching and understanding security arrangements may be required. It sketches out the impact of remoteness, low density populations and generalised national policies upon security arrangements in the Canadian Arctic and sub-Arctic region, with consideration given to Canada's close relationship to Alaska and the broader circumpolar region. We begin with a historical overview, followed by consideration of how traditional border security is managed, and then turn to the challenges of traditional management which are now beginning to affect the security of the region.

7.2. Land Borders and Borderlands

In 1867, the Alaskan Purchase established the present-day border between the Yukon Territory and Alaska, although the current border between Alaska and British Columbia was established somewhat later.3 In 1903, the United States and Britain established a commission to determine the border there, and in 1906, a survey was undertaken demarcating the 141st Meridian as the Yukon–Alaska boundary. Easton notes that even as the boundary survey was demarcated, surveyors were approached by indigenous peoples who lived on both sides of the land, looking for accommodation for their cross-border situation. Initially, the border was little but a line in the wilderness, and although it had saliency, cross-border movements were not generally policed.⁵ The US established one border post at Tok, Alaska, whereby it conducted inspections some 90 miles from the Yukon border. Until 1971, this post inspected all traffic entering the US along the Alaska Highway and the Top of the World Highway, from both the Little Gold Creek and Beaver Creek crossings in Canada.6

The system of roadways established within the Alaskan-Yukon borderlands in the mid-to-late 20th century has had tremendous influence on the way in which the international land border is managed and how and where crossings are facilitated. Border crossings between Yukon and Alaska are linked by a system of roads and highways which connect Alaska to Yukon and parts of the Northwest Territories. Most land crossings between Yukon and Alaska, on the Canadian side, take place at the town of Beaver Creek in Yukon, located along the Alaskan Highway, and at the Fraser crossing, albeit in British Columbia – in 2016, 59 per cent of crossings took place at the latter. The Beaver Creek post on the Canadian side was built during the Second World War, but it was not until 1971 that US border inspection stations were constructed at

Alcan and at Poker Creek in Alaska – the former to the northeast of Beaver Creek, along the Alaska Highway, and the latter opposite the Canadian Little Gold Creek border post on the Top of the World Highway.⁸ The significance of this is that it established the practice of locating border posts at some distance from each other – in some cases, more than 37 kilometres apart.⁹

As previously noted, two more border posts between British Columbia and Alaska, located along the Haines Road and the Klondike Highway, also serve as a gateway for flows of Yukon goods and people to the Alaskan ports of Haines and Skagway. These posts are connected by a network of roads directing flows of international goods and people between Yukon and Alaskan ports. Located on the Haines Highway, for example, the Pleasant Camp, BC, crossing that connects with Dalton Cache, Alaska, also has considerable vehicular traffic, and effectively links Haines Junction, Yukon, with the port of Haines, Alaska. 10 While there are other connecting networks - for example, the Dempster Highway, an ice road and a recently opened permanent highway¹¹ heading north and east, connect settlements in the Northwest Territories as far north as Tuktovaktuk on the Beaufort Sea – there is no direct point of entry between the NWT and Alaska, nor any direct route via the Demoster Highway, Outside of the Yukon-Alaska borderlands with British Columbia, no other international land boundaries are situated in the Territorial North. 12

The geography of land border crossings and their impact on overall regional security is complex, depending upon what is moving across borders and where. But it is also a question of capacity. While all four of the land border posts which handle cross-border traffic between the Territorial North and Alaska are equipped for most travel and commercial services, there are differences in both the levels of flows and hours of operation at each. These reflect the degree to which specific border posts handle different types of activity as well as different volumes of traffic. Overall, there are three general categories of flows which cross the land borders: goods, including products from the Yukon's primary extractive industries and small- and medium-sized enterprises (SMEs); trains, buses and vehicular traffic facilitating the tourist industry; and the movement of local peoples, among them Yukoners, Alaskans, as well as First Nations and Inuit whose transnational homelands pre-date the border itself. The security implications are different for each.

It is the last category – that is, the movement of Canadians and Americans in personal vehicles – that dominates the flow of traffic on both sides of the land border. Given the remote geography of the region, it is likely that much of this is local traffic. In some years, for example, over half of those entering Yukon are Americans using personal vehicles, while another one third are Yukoners, presumably returning home to the Yukon Territory. There are, additionally, a large number of tourists who cross the border, but generally less than one quarter are tourists or visitors from outside of Canada and the United States.¹³

Yet, the demand on border services remains quite uneven. Seasonal tourist travel, for example, sees peak periods between April and September. Such variability in the patterns of relatively small, diverse and seasonal demands on conventional border security services in the Canadian North creates its own problems, however, as it makes ready accessibility of security processing services problematic for those who operate outside of these parameters. The Fraser crossing is a case in point. In 2015, the Canadian Border Services Agency (CBSA) reduced its hours of service beginning 1 April, ostensibly because 'the infrastructure and the human resources costs are tremendous for pretty small metrics'. This meant that throughout the summer of 2015, the CBSA did not reinstate its summer service hours between midnight and 8am. Yet, in 2015, alone, over 200,000 travellers crossed from Yukon to Alaska using the Fraser CBSA post in 2015.

In 2015, closures on the Canadian side forced the hand of US border services. Correspondingly, on the US side, the Skagway border crossing reduced its hours comparably. Representing more than a mere inconvenience, a local representative at the Skagway Convention and Visitors Bureau identified the issues that are at stake as those affecting travellers and residents using Skagway ferry services. The Bureau noted that those 'it's going to affect the most are people that... normally might get up early in the morning and drive to Skagway to put their car on the ferry to go to Haines or to Juneau for the 7 o'clock departure times... If the United States border at Alaska did reduce its hours, Yukoners would have to travel to Skagway the night before to catch the ferry to Juneau.'16 The Fraser-Skagway crossing is also not the only border post that experienced reduced border control hours. On 1 April 2015, the Stewart, BC, CBSA border post, which is approximately a six-hour drive north from Prince Rupert, also reduced its service hours to save money by closing between midnight and 8am and cutting off access to Hyder, AK, as the American side does not have a border post. This was problematic for the integrated border community 'who share almost everything, including an area code, hydro, and emergency services'. 17 In response to complaints from local residents who were worried about access to the hospital and the effect the closure would have on local tourism, the CBSA initiated a pilot

programme whereby people could call in 'and flash their passport on video if they want to cross at night'. However, this system was not without its flaws as the passport images were not reviewed in real time. Moreover, the honour system on which the programme relied experienced some setbacks as people failed to phone in as they crossed. 19

There are two important lessons to draw from the reduction in hours of these smaller, remote northern border posts. First, although the government made these decisions based on cost-saving needs, it suggests that northern borders are not considered a major security threat, potentially leaving a gap that can be exploited. Second, it also demonstrates a misunderstanding about the needs of northern communities and their economies. Problems of capacity thus face those who cross certain borders in the Territorial North. Nightly closures or restricted hours for certain border services create problems for both commercial and non-commercial travellers. The previously described patterns of transportation and trans-border flows within Yukon, British Columbia and Alaska are, thus, important in understanding the vulnerabilities that such reduced hours, along the busiest border point of connection between Yukon, British Columbia and Alaska, entail.

If underserviced border management creates precarious contexts for quotidian border crossings, these boundaries are often considered to represent an additional burden for indigenous peoples – an infringement of traditional rights to mobility. Archaeologist Norman Easton reminds us that the establishment of the international border in the early 20th century was coupled by assurances to some indigenous residents that their homes could continue to straddle the line between Canada and the United States. For those groups, and particularly the White River First Nation in the Beaver Creek area, the border has been an arbitrary imposition which divides their community and perpetuates the historical injustices of Canadian and American white settler societies. Even today, these cross-border communities feel targeted and find the CBSA border regulations infringe upon centuries-old traditions such as bringing guns and blankets for funeral ceremonies.

They also feel compelled to register their concern for the continued survival of hunting practices and cultural traditions. Indigenous leaders and community members are, therefore, very critical of existing border security practices. Yukon's White River community in particular feels that the imposition of the international border in Beaver Creek is itself a security concern in that it has created hardship for indigenous peoples located on both sides of the line. Speaking with researchers, White River's Chief David Johnny indicated how vulnerable the boundary has made

existing indigenous communities. Chief Johnny recounted that, historically, First Nations hunted, trapped and fished with no regard for the boundary between Canada and the US, which indeed had not been established. As *CBC News* reported:

'Most members of the White River First Nation live in Beaver Creek, Yukon. Others live in small Alaskan villages a few hours' drive across the border. "It still affects us to this day", says Johnny of the establishment of the Alaska-Canada border in 1903. "It was a boundary that cut us off from our own people." Johnny says the situation causes problems as people try to cross the border to go hunting on traditional grounds or try and bring food to potlaches. ...

"We're [100 kilometres] apart but you don't have that connection anymore with the line that has been drawn", he says, adding the border interferes with hunting because meat cannot be brought across the border.'²⁰

Today, the US border post sits atop a former fishing camp, but it is out of bounds for the White River band whose traditional territory straddles the border; the boundary line severely impacted both the identity of the First Nations people and their cultural survival. The imposition of the border is further complicated by the location of the border post itself, which is not always situated at the physical land border. For example, the Beaver Creek CBSA post is located approximately 37 kilometres before the land border, meaning people can drive past the post and still be in Canada for some time. Difficulties arise when returning to Beaver Creek not having entered the US.

In 2016, in recognition of this issue, the Canadian government, in response to the recommendation of the Standing Senate Committee on Aboriginal Peoples, tasked Fred Caron to undertake a report. In conducting his analysis of First Nations and Border Crossings, Caron visited the Yukon and spoke with representatives of Teslin Tlingit Council, Little Salmon/Carmacks First Nation, Tr'ondëk Hwëch'in First Nation, the White River First Nation and the Daylu Dena Council. He noted their concerns in his subsequent report, recognising both the similar and broader problems experienced by Canada's First Nations communities in general. Although the issue of the Jay Treaty arose and was central to the discussions (for more detailed discussion, see Chapter 3 by Greg Boos, Heather Fathali and Greg McLawsen), Caron also noted that 'while there was a belief on the part of some of the First Nation representatives... that the current issues would not exist had

Canada implemented the Jay Treaty, there was also a view that, in order to set the path forward, what is required is a mechanism to recognise inherent and Jay Treaty rights in a modern context'.²¹

Caron identified six areas in which contemporary border management impacts upon First Nation community integrity and broader connectivity of indigenous peoples, leading to basic insecurity in the sense that 'the current array of federal laws, regulations and policies constitute a significant abrogation of their historic rights, and an obstacle to the survival of their unique cultures'. These included:

- Lack of recognition of inherent rights
- Adverse impact on family and cultural connections
- Acceptability of identity documents at ports of entry
- Issues of treatment by CBSA officers
- Restrictions on trade and personal goods
- Location of Ports of Entry.

A number of potential solutions were proposed, especially in regard to family and cultural survival, which included the relaxation of Canadian restrictions on entry for those Native Americans having a criminal offence on their record, particularly where the offence is dated and there is minimal risk of re-offending; the permitting of any member of a Canadian First Nation or a member of a federally-recognised US Tribe right to enter and remain in Canada, identical to that of an Indian registered under the Indian Act; a review of import restrictions as they relate to traditional medicines, and recognition of the not-for-profit nature of indigenous healers' practice; the creation of secure identity cards issued by First Nations for their members, compliant with the requirements of the US Western Hemisphere Travel Initiative for land border crossings; relaxation of import duty rules for personal use goods for communities in close proximity to the US border; greater recognition of First Nations' trading rights and consequent modification of import and export rules; and a review of import and export rules respecting goods used for cultural purposes including medicines. Moreover, suggestions were made that would seek to train CBSA agents in cultural issues and to enhance the number of indigenous CBSA agents:

'The general feeling expressed at the engagement sessions was that many of the issues listed above were a result of a lack of training of CBSA officers in First Nations history, culture and rights. This contributed also to what was perceived as a lack of consistency in treatment by CBSA officers and a "luck of the draw" at the border as to whether an understanding CBSA officer was present. The overwhelming opinion of those attending the engagement sessions was that the mandatory training of CBSA officers in the history, culture, and rights of First Nations people should be instituted. In particular, it was thought that this training should be tailored around the First Nations in close proximity to the Port of Entry where the CBSA officer is posted and that these First Nations should participate in the design and implementation of the training."²³

On the issue of location of Ports of Entry, Caron noted for Yukon specifically that 'in the case of White River, the location of the Port of Entry at a distance of 37 kilometres from the actual border line meant that members exercising traditional pursuits beyond the Port of Entry location but still within Canada have to cross through the Port of Entry at Beaver Creek, Yukon and be questioned, for example, on the possession of wild game and fish even though they have not left Canadian soil. In both cases, in addition to other solutions mentioned in the above paragraphs, First Nations recommended relocation of the Port of Entry.'²⁴

The Caron Report proved to have traction and, in response, in December 2018, Public Safety Canada announced that they plan to implement new border management measures to address Canada-United States border-crossing issues for First Nations, including the Yukon-Alaska border. These measures include:

- The addition of a machine-readable zone to the Secure Certificate
 of Indian Status (SCIS) card, which will help simplify the border
 crossing process for First Nations individuals using the SCIS as
 a piece of identification at land and sea ports of entry between
 Canada and the United States
- The recruitment by the Canada Border Services Agency (CBSA) of more indigenous border services officers
- Enhanced training on indigenous cultures for CBSA staff
- Strengthened outreach and cooperation by the CBSA with concerned First Nation communities along the Canada-United States border²⁵

Informal conversations with CBSA and other security personnel in the region confirmed that this issue is also important to them. CBSA officials feel that they work hard to accommodate and facilitate anomalous mobility and potentially inadmissible goods and peoples as much as

possible, within the limits of their discretionary powers, and worry about local resentment. Their discretionary power is being challenged by indigenous peoples with growing access to global governance and rights legislation, raising the issue of how to better structure and manage cross-border passages for interconnected and mobile indigenous peoples through arrangements and implementation of agreements that have been negotiated or adopted elsewhere in Canada and the United States. A broader and larger commitment to the resolution of this issue is, therefore, quite welcome.

We have focused thus far on people and communities. But in addition to their role in enforcing security arrangements upon individuals, it is important to understand that the Yukon-Alaskan borderlands are the site of significant activity for managing the crossborder flows of goods and natural resources that contribute to the northern economy. Land borders and land border posts are to date the major portals through which exports and imports flow from the Yukon Territory. Contrary to popular belief, Yukon is not the location of a plethora of huge extractive industry projects on an annual basis. there is considerable extractive industry within any given year, and demand for transportation services varies from year to year. While the economy of the Territorial North has seen significant boom and bust in relation to the exploitation and shipment of natural resources and mineral products, there is a consistent demand for flows of goods to and from international markets. Everett suggests that the Yukon Territory is quite vulnerable in this regard: any border policies and regulatory frameworks that create additional burdens to this flow can influence the flow of resources or the export of products from vulnerable SMEs that make up the backbone of the Northern economy.²⁶ This also makes any obstruction to the road system or the creation of potential bottlenecks extremely disruptive for the regional economy. Restricted hours of operation, limited infrastructure and infrastructure vulnerability is, thus, a real concern, given the restricted network of roads and international border crossings which are accessible to those in the Territorial North.

Due to costs, remoteness and low population densities, alternative transportation infrastructures are poorly developed. It is possible to cross into the United States via the existing network of roads from parts of Yukon, the Northwest Territories and Northern British Columbia. Otherwise, highways and road networks in the Northwest Territories lead to urban centres in northern Alberta and Saskatchewan. Distances between centres in the Northwest Territories and the Alaskan ports make northern road transportation generally prohibitive. Overall, most trucks

loaded with exports from Yukon enter Alaska either directly at the Beaver Creek/Alcan crossing towards Anchorage, or indirectly through the BC Fraser crossing headed towards Skagway and the port of Haines. But the Fraser crossing is the main crossing for trucks loaded with product from Yukon, traveling to the Port of Haines. The Fraser CBSA post (directly connected via the Klondike Highway to both Carcross and Whitehorse) is among the busiest border crossings in terms of vehicular traffic, as large numbers of tourists and local traffic follow the Klondike Highway to the Fraser/Skagway crossing. ²⁷ In 2015, for example, more than 60 per cent of all land border crossings took place at this border crossing, between the months of May and September.

Overall, the Fraser crossing has seen growing commercial vehicle traffic. Since 2010, between 2,000 and 3,000 loaded trucks from BC and Yukon cross annually, while equivalent numbers return back across the border, now empty, for more cargo, Although the numbers of trucks crossing from Canada to the US is increasing, the hours of commercial and traveller services at Fraser remain much more restricted than at the Beaver Creek crossing. Commercial processing is closed after 4:45pm on weekdays and remains closed each weekend. Moreover, as Everett notes, in Yukon, 'there are no FAST lanes and it is not necessarily feasible to use alternative crossings to get to the port in Skagway if there are delays at the Fraser/Skagway crossing. The next closest crossing to the port is through Pleasant Camp/Dalton Cache and requires added drive time to get to Skagway, which would increase transportation costs. Other problems arise from the requirement of all pre-cleared goods to go to a C-TPAT importer in the US to be eligible for use of the FAST lanes... which can be a problem for businesses that ship to multiple locations.²⁸

The CBSA has acknowledged that, in remote areas, what appear to be small issues can lead to large vulnerabilities – for both border crossers and CBSA agents alike. A major study in 2015 suggested that 'the remoteness of some crossings poses a risk due to the distance from police backup or medical services, and the lack of cell-phone coverage in some areas... Yet the personal-alarm radio system used at crossings "has limited ability" to communicate with other entry ports and cannot be used to reach other agencies.'²⁹ Moreover, the same report noted that 'many locations have only one primary inspection lane, which holds things up should a more detailed examination be required. Numerous crossings don't have a booth in the primary inspection area, so officers have to take travellers' documents inside another building to run queries.'³⁰

In 2018, the Canadian government announced a major project designed to modernise Yukon's existing transportation infrastructure and to update border management technologies. It pledged CA\$6.9 million for Yukon's Intelligent Transportation Systems technologies not just to facilitate surveillance to expedite conventional security practices, but to enable broader monitoring of conditions leading to secure road conditions. They pledged to 'enable smarter connections on Yukon's trade corridors by giving users the data and information they need to make safe and efficient decisions'. The government expects that the project will even include components of the Intelligent Transportation Systems architecture, including Commercial Vehicle Operations Support; Intelligent Transportation Systems Enablers; and Road Weather Information Systems: Frost Depth Monitoring Systems; Traffic Monitoring Systems; Structural Health Monitoring and Stream Monitoring Systems; and Advanced Traveller Information Management Systems. 32

7.3. Air Borders

An overall lack of highways and road connections, when combined with the seasonal nature of ice roads (limited to the transportation of goods in the winter and spring), means that much of the region's commercial and non-commercial traffic arrives via air and sea connections. Airports are, thus, particularly important, as the only lifeline for many remote communities, connecting them to southern Canada and the United States. Only 10 per cent of travellers to Yukon, for example, arrive by air. Most of them land at the Eric Nielsen International Airport in Whitehorse. Another 25 per cent land directly at Dawson City, Yukon.³³ CBSA agents at times may process upwards of 250,000 international passengers annually. Most are tourists and visitors. However, the only regularly scheduled CBSA facility with capacity to process international travellers on large commercial flights is located at the Eric Nielsen International Airport in Whitehorse. The latter is designated an 'Airport of Entry' or AOE and, as such, has full services to process large commercial flights with international travellers.³⁴ Overall, however, many flights are seasonal, and there are no regularly scheduled international flights for passengers or cargo.

Also common are AOE/15 facilities, which facilitate the processing of travellers and cargo for smaller non-scheduled general aviation, provided the number of passengers does not exceed 15, and reported to and received authorisation from CBSA provided that they land during

normal office hours.³⁵ There are eight such designated airports of entry in the Territorial North, including the territorial capitals of the NWT and Nunavut – Yellowknife and Iqaluit respectively. AOE/15 SEAPL – that is float or seaplane facilities – process seaplanes in much the same way as other unscheduled AOE/15 flights.³⁶ As is the case for CBSA agents involved in land border integrity, problems of inadmissible immigration related to foreign labour, visitors and potential Canadian residents affect air as well as land borders. Any other direct international flights to the remainder of the territories are small and unscheduled. If and where they do occur, they are processed by CBSA at sites with facilities. In other cases, CBSA is 'on call' when unscheduled international flights and vessels arrive – creating pop-up processing facilities. Overall, therefore, outside of a few specific designated centres, airports and airstrips with potential to manage international passengers or cargo are quite limited.

At this point, limited air passenger and cargo clearance infrastructure creates very few real security issues in the North. In general, flights from Yellowknife connect with territorial destinations or large southern cities like Edmonton, Vancouver and Ottawa – which become the gateways for international immigration and security clearances. This means that the management of foreign nationals and the processing of visas is limited. This aside, however, most flights that service the Territorial North or connect with southern Canadian AOEs and immigration processing takes place elsewhere.

7.4. Maritime Boundaries

We have so far focused upon the land and air borders and their security and border management functions. Only two conventional ports and port security management structures are in place in Canada's North, and of these only one is located in the Territorial North – Tuktoyaktuk. Although technically located outside of the region, Churchill, Manitoba, is the other major port servicing the North. The port of Churchill serves primarily to export grain produced in the Canadian prairies internationally. The port has recently come under new management (Arctic Gateway Group)³⁷ after it was shut down in 2016. Most Arctic cargo from Churchill is destined for Canadian communities, but proposals have been made which could see Churchill become a major international port for transhipping goods and products to and from the Canadian Arctic. Canada's Arctic will likely see increased maritime activity moving in and out of the

Northwest Passage and, in many cases, depositing tourists and workers into the Arctic.

Currently, the international flow of goods and products through the maritime spaces of Canada's Territorial North is limited. These factors, including the potential for greater activity within the maritime spaces of the Canadian North, make security management demands in this region much more complex than the map of shipping and border management facilities provided by the CBSA suggests – not least because the main security concerns now reside in the lack of delimitation of these maritime boundaries. The potential sea routes and ports of entry in the Territorial North, and the potential for greater traffic, also raise the risk of maritime disasters - both for tourist and commercial cargo ships. The existing boundary security facilities are not intended to control greater degrees of traffic or monitor environmental degradation. The Agreement on Cooperation on Aeronautical and Maritime Search and Rescue in the Arctic attempts to rectify the dearth of security facilities available to cope with an expanding roster of new security concerns related to maritime activities. Similarly, the Agreement on Cooperation on Marine Oil Pollution, Preparedness and Response in the Arctic was adopted at the Arctic Council's Kiruna Ministerial Meeting in May 2013 and attempts to minimise the likelihood of environmental disaster in response to increased shipping.

Canadian Arctic maritime security institutions, thus, face a problem of capacity. Import and export clearance facilities are available only at Inuvik, Tuktoyaktuk and Iqaluit, where traffic is expected to increase. The CBSA has begun a pilot project to broaden the reach of its regional offices in managing commercial shipping, while the Coast Guard and Canadian Forces are planning to meet the search and rescue requirements which this new situational awareness demands. Overall, Canada has seen a large increase in the number of tourists and cruise vessels visiting the Arctic, lured to the region by the decreasing sea ice and a growing international interest in the Arctic environment. While speculative, it is safe to assume that the further melting of the Arctic ice will lead to more cruise ship operations in the future. The continued reduction in the extent and age of sea ice will likely extend the window of navigability, thus enabling more reliable scheduling. However, a report by the House of Commons Standing Committee on Foreign Affairs and International Development noted that 'diminished ice does not mean an absence of ice, and the changing ice patterns and composition of that ice are in some ways making the waters less predictable for vessels'.38

New concerns regarding the potential safety of coastal villages, should a major oil spill or shipping disaster occur, are increasingly prevalent.

Indeed, Canada's Arctic will likely see increased maritime activity moving in and out of the Northwest Passage and, in many cases, depositing tourists and workers into the Arctic, which will no doubt have an impact on northern communities³⁹ and possibly mean an increased presence of CBSA officers at transit stops. As economic activity increases in the Arctic, and the number of ships passing through Canada's Arctic waters (the Northwest Passage) grows with the region's declining ice-cover, responsibilities surrounding law enforcement, pollution control, immigration and public safety will increase. This view reflects, however, the understanding that Arctic shipping is primed to grow exponentially, while Arctic resource extraction will, likewise, expand dramatically. In 2019, however, several of these core assumptions may be out of date. In fact, the number of transit voyages through Canada's Arctic waters has not materially increased since 2008. Furthermore, the most in-depth work on this subject sees serious interest from the world's major shipping companies' new or increased Arctic activity. Cruise ship activity has also generated commentaries about the potential risks to Arctic waters.

These concerns are generally related to environmental disaster or the risk to human life, and centre on the capacity of Canadian responders to monitor and effectively rescue those in danger at sea within Canada's international waters. Beginning in 2005, Canada has seen an increase in the number of tourists and cruise vessels visiting the Arctic, lured to the region by the decreasing sea ice and a growing international interest in the Arctic environment. Increases in cruise ship activity along the Northwest Passage in recent years has also generated some commentaries about the potential risk of illegal immigration through the small Arctic hamlets which those ships frequently visit. Since the early 2000s, there has been a widespread expectation that Canada was on the verge of an Arctic resource boom. High commodity prices, coupled with increasingly accessible deposits and foreign investor interest, created the impression that workers might soon be flooding into the region. The potential security dimensions of this boom were obvious. An influx of workers meant more safety concerns, more activity at regional transportation hubs, and more crime and smuggling. These projections, however, must be re-evaluated in light of the crash in commodity prices in 2015. As such, the anticipated influx of new workers and shipping has, likewise, diminished.

Due to the low influx of foreign workers, it is not surprising that the criminal investigations units of CBSA that investigate and enforce and

regulate the importation and exportation of goods, or the admissibility of persons to Canada, are located in southern Canada. For example, Yukon is serviced by the Vancouver office. NWT is serviced by the Calgary office and Nunavut is serviced by the Ottawa office. Nonetheless, conventional border security remains important. There have been new initiatives to make such services more effective and nimbler within Canada's changing maritime security context. For example, the CBSA launched a pilot preclearance programme, the Arctic Shipping Electronic Commercial Clearances Program (ASECC), in the 2015 Arctic shipping season to provide greater oversight. Its goal was to enhance the management of commercial transits within Arctic waters, and it utilises electronic reporting to overcome the substantial costs to the carrier of a longdistance diversion to the only Arctic commercial vessel port in Tuktoyaktuk or a port in southern Canada. It offers an alternative to current practices whereby the CBSA, through a request from a regional office, can require a vessel to divert to the nearest designated customs office, or may make arrangements to clear marine vessels and cargo while they are anchored at sea, on a special service or cost recovery basis. The ASECC also attempts to provide an alternate process to that which requires CBSA agents to examine Arctic vessels in uncontrolled and/or dangerous environments. Recognising that a lack of resources and facilities in the Arctic often means a limited ability to conduct exams, the CBSA pilot project also seeks to eliminate the risk of clearing vessels after a vessel has arrived in the Arctic, without sufficient advance notice for a thorough risk assessment.

It is not just monitoring the flows of international visitors or monitoring increased traffic that is at stake in the Territorial North's maritime border management, however. Indigenous peoples also register concerns with the future management of maritime boundaries. For example, the Territorial North has been the location of comprehensive land claim negotiations among Canada's Inuit and First Nations. This has affected not only the internal structures of governance within northern territories, but also has had a considerable impact on maritime jurisdiction and expanded claims to Canada's EEZ and Continental Shelf. Inuit now challenge the exclusivity of the federal government to make decisions concerning offshore marine jurisdictions, while Ottawa recognises the implications of its legal agreement with the Inuvialuit Land Claims upon the future of Beaufort Sea boundary arrangements. Inuit and First Nations, empowered by the United Nations Declaration on the Rights of Indigenous Peoples and their Permanent Participant status in the Arctic Council, are demanding a greater role in international

decision-making, including the determination of boundary lines and management functions.⁴⁰ Recognition of tribal boundaries as distinct from those managed by Washington and Ottawa maintains cross-border communities in ways which encourage cooperation and enhanced human security, but which lead to a distinctive set of security concerns.

7.5. Terrorism and Undocumented Immigration

The concerns of conventional border security have in recent years become increasingly focused on the problem of terrorism and conventional security concerns. In general, the problem with inadmissible immigration at all ports of entry in the North is larger than concerns regarding terrorist activity. Indeed, concern about terrorist activity remains relatively low, in large part because of limited activity and evidence concerning terrorist incursions. Instances of illegal immigration and attempted entry of inadmissible foreign nationals as a result of air and cruise ship activity are not overly prevalent, and concerns are, in general, few. The difficulty and expense of immigration to the Arctic region is considerable. Nonetheless, monitoring immigration is a concern.

In recent years, there have been increased levels of immigration related to temporary foreign worker programmes targeting the Territorial North. Targeted immigration programmes have, at times, encouraged foreign nationals from southern Canada to relocate to the North to take advantage of foreign national specific nomination programmes. Foreign nationals wishing to relocate to the Northwest Territories, for example, may apply under the Northwest Territories Provincial Nominee Program (NTNP) for provincial nomination under one of four categories: Skilled Worker, Critical Impact Worker, Entrepreneur Business or Self Employed Business. The NTNP allows immigrants with the appropriate skills and experience to receive a Northwest Territories Provincial Nomination Certificate. This allows foreign nationals to apply for Canadian Permanent Residence with processing times that are faster than other Canadian immigration classes. In Yukon, a similar nominee programme exists. In addition, Yukon has developed both a Business Nomination and Express Entry programme to assist in the development of a regional labour force.

Overall, these programmes can provide successful applicants with permanent residence within six months of verification. The security issue here is associated with the inadmissible movement of foreign nationals under this provincial nominee programme – particularly

between companies and between provinces and territories, shifting concern about illegal migration away from the international border line or port of entry to the corporate and social landscape of the North itself.

7.6. Conclusions

Conventional border management has resourced national security and economic concerns. It focused upon large transportation corridors with high flows of goods and people. Security actors and agencies in the Canadian North struggle, however, by being at the other end of the continuum. Low-level demand for cross-border services have led to closures for economic efficiency, and normal movements of local peoples across boundaries – where firearms are regularly carried on both sides – consumes disproportionate CBSA resources, leading to mismatches of resources and personnel in relation to many of its security imperatives.

All of this suggests that simply imposing post-9/11 Southern Canadian security standards on the North is problematic. The Canadian Arctic has long been perceived as a region apart from the rest of the world, isolated by geography. As such, the region has never served as a major point of ingress: the maritime and land borders are vast and lightly-guarded, and international trade has been confined to a few ports and land crossings. Because of this, controlling access has long been a question of monitoring air space and the maritime approaches. Given this situation, the task of aerospace and maritime domain awareness has typically fallen to the Canadian military rather than the police or border services. This has been a natural response, given that, since the start of the Cold War, the most likely trespassers into the region were Soviet aircraft or submarines.

Today, the situation is changing. This century has brought a shift towards recognition of a broad range of unconventional security threats facing the Arctic. Melting sea ice has begun to open the region to shipping, and experts expect that this trend will accelerate. While the ultimate consequences of this melt are debated and indeed unknowable owing to the complicated dynamics at play, commentators and government analysts generally predict an increase in foreign commercial and pleasure vessels entering Canada's Arctic waters — while the timeline remains highly ambiguous. As a result, Canada anticipates more immigration, trade and regional traffic, as well as the potential for smuggling, criminal, and search and rescue issues as a natural consequence of this activity, at some undefined point in the future.

While the anticipation of unconventional security threats is certainly important, it would be prudent to also anticipate new challenges for conventional security. The North has been fraught with real mismatches of resources and personnel in relation to international and transnational security imperatives. Low-level 24-hour demand for cross-border services is met with closures, and normal movements of local peoples across boundaries where firearms are regularly carried on both sides create an inordinate problem. There have been few applications of modern technologies to supplement management practices and make them modern and efficient. The amount of time that CBSA border officials devote to gun management, for example, and the relative lack of resources for maintaining continuous services at all border posts provide a sense of insecurity for those who rely upon frequent border crossings. These problems are generally consistent with the security situation at many remote crossings within the Canada-US border framework, but are accompanied by a suite of other less conventional challenges related to a rapidly changing and globalising North.

This highlights a major challenge to adjust regional crossing management to meet the protocols and concerns identified in larger cross-border security agreements that are continental in scope and which target the security concerns of major management issues in southern Canada. Security challenges in the North are no different in some ways, and yet very different in others. One of the main problems for the future will be in better facilitating the cross-border movement of indigenous peoples through arrangements which undertake to evoke special status and recognise connected cross-border communities. This may well be one of the most important conclusions. The CBSA has had tools and legislation to obstruct or eliminate cross-border mobility, but few tools or discretionary powers to resolve some of the insecurities and integral disjunctions that the superimposition of this international line have on local communities, flows of goods and people. As Caron noted, this will require a rethinking and modernisation of border management, but this has to be done with consideration of the overall configuration of northern border challenges on land, sea and air.

Notes

- This is a phrase often used by border security operators and agents in conversations about Canada's border security.
- 2 See e.g., Robert M. Bone, The Canadian North: Issues and Challenges, 5th ed. (Don Mills: Oxford University Press, 2016).
- 3 Heather N. Nicol, *The Fence and the Bridge: Geopolitics and Identity along the Canada-US Border* (Waterloo: Wilfrid Laurier University Press, 2015).
- 4 Victor Konrad and Heather N. Nicol, Beyond Walls: Reimaging the Canada-US Borderlands, 2nd ed. (New York: Routledge, 2016).
- 5 Norman A. Easton, 'King George Got Diarrhea: The Yukon – Alaska Boundary Survey, Bill Rupe, and the Scottie Creek Dineh', Alaska Journal of Anthropology 5, no. 1 (2007).
- 6 Wikipedia, 'Alcan-Beaver Creek Border Crossing', last modified 9 August 2018, https://en.wikipedia.org/wiki/ Alcan_-_Beaver_Creek_Border_Crossing.
- 7 Yukon Government. Department of Tourism and Culture, Yukon Tourism Visitation Report December 2016 (Department of Tourism and Culture, 2016), 3, http://www.tc.gov.yk.ca/ pdf/12-Dec2016-indicator-report.pdf.
- 8 Wikipedia, 'Alcan-Beaver Creek Border Crossing'.
- 9 Canada. Indigenous and Northern Affairs Canada, Report on First Nations Border Crossing Issues (Indigenous and Northern Affairs Canada, 2017), https://www. aadnc-aandc.gc.ca/eng/1506622719017 /1506622893512.
- 10 Heather N. Nicol, Adam Lajeunesse, and Karen Everett, 'Managing Flows: A Profile of Regional Border Security Management in the Territorial North', in *The Networked North: Borders and Borderlands in the Canadian Arctic Region*, ed. Heather N. Nicol and P. Whitney Lackenbauer (Waterloo: Centre on Foreign Policy and Federalism; Victoria: Borders in Globalization, 2017), 115, https://biglobalization.org/sites/default/files/content-attachments/networked-north-2017.pdf.
- 11 Mackenzie Scott, 'Beyond Expectations: Highway Makes Tuktoyaktuk an All-Season Destination', *CBC News*, 17 July 2018, https://www.cbc.ca/news/canada/north/

- tourists-tuktoyaktuk-inuvik-highway-1.4749295.
- 12 Heather N. Nicol, Adam Lajeunesse, and Karen Everett, 'Managing Flows', 115
- 13 Yukon Government. Department of Tourism and Culture, Yukon Tourism Visitation Report December 2015 (Department of Tourism and Culture, 2015), 12, http://www.tc.gov.yk.ca/ pdf/12-dec-2015-indicator-report.pdf.
- 14 CBC News, 'Fraser Border Hours Reduced for Travellers Entering Yukon', CBC News, 31 March 2015, http://www.cbc.ca/ news/canada/north/fraser-borderhoursreduced-for-travellers-enteringyukon-1.3015860.
- 15 Yukon Government. Department of Tourism and Culture, Yukon Tourism Visitation Report December 2015. 3.
- 16 CBC News, 'Fraser Border Hours'.
- 17 Anna Killen, 'Border Closure Plan Panned by Stewart and Hyder Residents', BC Local News, 26 February 2015, https://www. bclocalnews.com/news/border-closureplan-panned-by-stewart-and-hyderresidents/.
- 18 CBC News, 'Fraser Border Hours'.
- 19 CBC News, 'Fraser Border Hours'.
- 20 Philippe Morin, 'White River First Nation United Despite Being Split by Yukon-Alaska Border', CBC News, 20 June 2015, https://www.cbc.ca/news/canada/ north/white-river-first-nation-uniteddespite-being-split-by-yukon-alaskaborder-1.3120897.
- 21 Canada. Indigenous and Northern Affairs Canada, *Report*.
- 22 Canada. Indigenous and Northern Affairs Canada, *Report*.
- 23 Canada. Indigenous and Northern Affairs Canada, *Report*.
- 24 Canada. Indigenous and Northern Affairs Canada, *Report*.
- 25 Crown-Indigenous Relations and Northern Affairs Canada, 'Canada Implements Measures to Address Canada-United States Border-Crossing Issues for First Nations', Newswire, 12 December 2018, https://www. newswire.ca/news-releases/canada-implements-measures-to-address-canada-united-states-border-crossing-issues-for-first-nations-702608391.html.
- 26 Karen G. Everett, 'National Border Management Polices and Their Effect

- on Regional Trade: A Study of the Yukon Exporting Industry', in *The Networked North: Borders and Borderlands in the Canadian Arctic Region*, eds. Heather N. Nicol and P. Whitmey Lackenbauer (Waterloo: Centre on Foreign Policy and Federalism; Victoria: Borders in Globalization, 2017), 140, https://biglobalization.org/sites/default/files/content-attachments/networked-north-2017.pdf.
- 27 Yukon Government. Department of Tourism and Culture, Yukon Tourism Visitation Report December 2015, 3; and Yukon Government. Department of Tourism and Culture, Yukon Tourism Visitation Report December 2016. 3.
- 28 Karen G. Everett, 'National Border Management', 131.
- 29 The Canadian Press, 'Safety Hazards Plague Small Border Posts, Federal Evaluation Says', CBC News, 23 March 2015, https://www.cbc.ca/news/canada/ windsor/safety-hazards-plague-smallborder-posts-federal-evaluationsays-1.3005223.
- 30 The Canadian Press, 'Safety Hazards'.
- 31 Yukon Government, 'Yukon Government Invests in the Modernization of Intelligent Transportation Systems in Yukon', last modified 17 May 2018, https://yukon.ca/en/news/government-canada-invests-modernization-intelligent-transportation-systems-yukon.
- 32 Transport Canada, 'National Trade Corridors Fund', last modified 11 April 2018, https://www.canada.ca/en/ transport-canada/news/2018/04/ national-trade-corridors-fund.html.
- 33 Yukon Bureau of Statistics, Yukon Monthly Statistical Review April 2016 (Yukon Bureau of Statistics, 2016),

- http://www.eco.gov.yk.ca/stats/pdf/mr apr2016.pdf.
- 34 Canada Border Services Agency, 'Airport of Entry (AOE)', last modified 15 February 2019, https://cbsa-asfc.gc.ca/do-rb/ services/aoe-eng.html.
- 35 Canada Border Services Agency, 'Airport of Entry/15 (AOE/15)', last modified 15 February 2019, https://www.cbsaasfc.gc.ca/do-rb/services/aoe15eng.html.
- 36 Canada Border Services Agency, 'Airport of Entry/15/Seaplane (AOE/15/SEAPL)', last modified 15 February 2019, https://cbsa-asfc.gc.ca/do-rb/services/ aoe15seapl-aoe15hydra-eng.html.
- 37 Erin Brohman, 'Warm Reception in Churchill for New Owners of Port and Railway', CBC News, 5 September 2018, https://www.cbc.ca/news/canada/ manitoba/churchill-port-rail-ownershudson-bay-line-1.4810683.
- 38 Canada. House of Commons. Standing Committee on Foreign Affairs and International Development, Canada and the Arctic Council: An Agenda for Regional Leadership (41st Parl., 1st Sess., 2013), 32, http://publications.gc.ca/collections/ collection_2013/parl/xc11-1/XC11-1-411-7eng.pdf.
- 89 Kate Kyle, 'Arctic Hamlets Prepare For Giant Cruise Ship Crystal Serenity', CBC News, 17 August 2016, https://www. cbc.ca/news/canada/north/crystalserenity-arctic-hamlets-prepare-1.3723425.
- 40 Peter W. Hutchins et al., Setting out Canada's Obligations to Inuit in Respect of the Extended Continental Shelf in the Arctic Ocean (Hutchins Legal Inc, 2015), http://liberalsenateforum.ca/wp-content/uploads/2016/05/Hutchins_Arctic.pdf.

Bridging the Gap: Fostering Military-Civilian Collaboration to Improve Marine, Aviation and Telecommunications Infrastructure in the US Arctic

Mead Treadwell and Taylor Drew Holshouser

8.1. Absence of US Arctic Infrastructure Creates a Power Imbalance in the Arctic, and a Change in Approach is Needed

For all the talk of a potential great power conflict over maritime boundaries or natural resources, the single greatest challenge to the United States' security in the Arctic remains the lack of basic infrastructure in the region. With only two polar icebreakers, no deep draft ports, few airfields and even fewer roads, the US military faces an infrastructure gap that significantly impedes its ability to maintain an active, year-round presence in the Arctic Ocean, except via aircraft stationed thousands of miles away. As other nations increase activity in this region, the lack of infrastructure and presence hampers US efforts to conduct a range of operations, including vessel escorts, law enforcement, search and rescue, and at-sea pollution monitoring in ecologically-sensitive areas. It also leaves the US ill-prepared for low-frequency, high-impact events, such as a 300-person cruise ship running aground off Demarcation Point or, perhaps driven by conflict distant from the Arctic, a hostile vessel imposing a blockage on international shipping lanes in the Bering Strait or the Arctic Ocean itself.

Civil authorities, including local, state, federal and tribal governments; non-governmental organisations (NGOs); the private

sector and the general public in the Arctic region face the same gaps. Given the lack of ports, airports, roads and railways, transportation and shipping are prohibitively expensive, raising the cost of goods and services, and slowing the pace of scientific research, economic growth and human development. According to one study, the cost of scientific fieldwork in the Arctic is on average eight times higher than comparable work done in southern latitudes.¹ Similarly, the lack of existing infrastructure and high shipping costs make commercial development projects in the Arctic extremely sensitive to commodity price fluctuations, cost overruns and regulatory delays, and thus less competitive in a globalised world. More distressingly, high prices raise the cost of living in a region where 5,000 rural homes lack access to running water and sanitary waste disposal systems.² Would political, economic and social insecurity of this magnitude be tolerated anywhere else in the United States? Most assuredly not.

How then to bridge the gap? For both military and civilian authorities, the answer depends on the availability and willingness of capital providers to finance new projects. Add up pending projects and proposals to bring new mineral, oil and gas, icebreakers, ports and associated transportation projects to the US Arctic, and the number easily surpasses US\$100 billion.3 Certainly, all this money will not come from the federal government. Most that comes will be in anticipation of revenue back to the investors. In the past decade, Congress has encouraged federal, state and tribal public-private partnerships (PPPs), but little of this thinking has entered the Arctic infrastructure discussion. Given that it is unlikely under almost any federal budget scenario that the Department of Defense or the Department of Homeland Security, which oversees the Coast Guard, will receive all of the funding needed to bolster security in the Arctic, a conceptual shift is required. Missions critical to national security will stay underfunded without a systematic approach that works to support revenue collection, civil economic development and returns to investment that are measured quantitatively as well as qualitatively. To that end, military and security forces need to better collaborate with civil authorities and the private sector to finance, build and operate critical infrastructure. Filling a 'revenue vacuum' presents the most urgent path to filling the 'power vacuum' that has left US national interests less secure in the Arctic today.

This chapter suggests near-term approaches that defence planners, civil authorities and the investment community can take to enhance Arctic shipping and aviation infrastructure (including domain awareness) and broadband telecommunications. This chapter does not cover nascent

attempts to establish Arctic-focused development banks, but will simply say that frontier infrastructure financing has the same kinds of challenges and benefits in all undeveloped parts of the world – it is challenged by requiring longer, lower financial returns. Benefits can be measured many ways, and economic growth and peace and stability are all intended impacts of developmental financing institutions wherever in the world they are focused.

8.2. Historically, US Arctic Military and Civil Development have helped each other, but Revenue Considerations often came later

Since the late 19th century, military investment in the Arctic has moved through successive cycles of boom and bust – each driven by a prevailing strategic imperative of the day. As whalers, trappers, miners and thousands of others rushed to the Territory of Alaska in the late 1890s and early 1900s, the US took an interest in the Arctic, having largely neglected the region since it purchased the territory from the Russian Empire in 1867. The United States Revenue Cutter Service, a predecessor to today's Coast Guard, was tasked with establishing US sovereignty over the territory's 6,500-mile coastline. Revenue cutters such as the CORWIN and the BEAR – built for operating in ice-covered waters – regularly patrolled the Gulf of Alaska and the Bering Sea, delivering mail and supplies, transporting government agents and scientists, enforcing federal laws, collecting taxes and duties, and otherwise assisting local residents, including indigenous villages along the coast. In the winter of 1897-8, the crew of the BEAR achieved national fame when they drove a herd of reindeer from Port Clarence to Point Barrow, where 235 American whalers were stranded after their ships got stuck in the ice. The 'Overland Relief Expedition', as the operation was known, impressed upon the federal government the need for overland communications and a sovereign presence inland from the coast.4

To that end, in 1900, Congress appropriated US\$500,000 for the construction of a telegraph system to connect the continental states to army outposts and remote villages across the territory. Over four years, the Army Signal Corps mobilised thousands of soldiers to link 1,400 miles of telegraph wire and 2,400 miles of undersea cable from Seattle to Nome. By 1905, the Washington-Alaska Military Cable and Telegraph System (WAMCATS) was complete. Open for both military and civilian use, WAMCATS drastically reduced the time it took to transmit information

to and from the Territory. This fuelled commercial growth, improved the standard of living for thousands of residents and provided a vital lifeline to the outside world, no more so than in the winter of 1924–5, when the city of Nome used WAMCATS to send an urgent request for additional antitoxin during an outbreak of diphtheria, preventing an epidemic that threatened more than 95 per cent of the local population.

During the interwar period, investment in the region lagged. With the launch of the Lend-Lease Program at the start of the Second World War, the US and Canada constructed a series of airfields, known as the Alaska-Siberian Air Road, to ferry aircraft from the US to the Soviet Union. But it was the attack on Pearl Harbour and the threat of a Japanese invasion of mainland North America, made real by the bombing of Dutch Harbour and occupation of Attu and Kiska in 1942, that sparked a construction boom. Financed by war bonds, the Army Corps of Engineers built the Alaska-Canada Highway to facilitate the movement of troops and supplies to the territory. At a cost of US\$138,000,000, the 1,400-mile highway created the first overland transit link between the US and its northern territory. Tens of thousands of troops flooded into the territory, constructing more than 300 separate facilities during the Second World War.⁸ Although most would be abandoned after 1946, some, like Elmendorf and Eielson Air Force bases, associated Ft Richardson and Ft Greely and Allen Army Airfield, to name a few, remain important facilities to the present day.9

As East-West tensions rose after the Second World War, and the threat posed by Soviet bombers, and later intercontinental ballistic missiles (ICBMs), became apparent, the US recognised the Arctic as a theatre of strategic importance. To provide early warning of a potential Soviet attack on North America, the American and Canadian militaries launched a multi-year project to build a series of radar stations across US and Canadian territory in the High Arctic. Finished in 1957, the Distant Early Warning Line, or DEW Line, as it was known, consisted of 63 installations stretched out nearly 10,000 miles along the 69th Parallel from Cape Lisburne to Baffin Island. During the construction of the DEW Line, much attention was shown to the cost savings that occurred from permafrost research done by the Arctic Research Laboratory (ARL). As one Canadian officer put it, the laboratory 'enabled savings in the cost of construction of the DEW Line greater than all the money spent on the ARL in its lifetime'. That research was due in large part to the Office of Naval Research, which began sponsoring the ARL (later the Naval Arctic Research Laboratory, or NARL) in 1954. But cost-saving research was not the only breakthrough to come out of ARL/NARL. As early as 1947,

the Navy employed Iñupiat as workers, paying high wages that attracted people from beyond Barrow. As many scientists came to realise, the Iñupiat had better knowledge and a subtler understanding of the Arctic than any of the researchers at the lab and thus turned to them for support and advice. As one writer later put it, the legacy of NARL was to 'show the breadth and wisdom of Native environmental knowledge and demonstrate how essential Native involvement is to scientific inquiry'.¹¹

The end of the Cold War and the fall of the Soviet Union had a dramatic effect on the strategic value of the Arctic. While both the US and the former Soviet Union maintained their strategic triad, including some Arctic-capable ballistic missile and attack, the end of the Soviet Union reduced the US strategic interest in the High North overall. Engaged by emerging threats in Eastern Europe, the Middle East and elsewhere, Congress and the Department of Defense saw no benefit in maintaining costly strategic assets in the Arctic. Navy bases were closed at Adak, Alaska and Keflavik, Iceland. US Naval research operations were dramatically curtailed in the Arctic, and the Barrow-based research lab was transferred to civil and private users. Some radar stations along the DEW Line were closed (this was also spurred by technological changes allowing fewer people to run remote facilities) and, in some cases, dismantled. Other Alaska and Arctic installations that remained open were reconfigured as logistical hubs for deploying US forces and military assets around the globe. Nationally, the 'Arctic' became conflated with 'Alaska', relegating the region to a parochial interest of the state's congressional delegation.

By the first decade of the 21st century, scientific understanding and public awareness of global change grew, and the Arctic once again figured large in the global imagination – not as a perilous landscape at the centre of a nuclear-armed standoff between two superpowers, but as a land itself in peril, threatened by a warming atmosphere. The Arctic Council, founded in 1996 by the eight Arctic states to discuss and coordinate search and rescue, sustainable development and environmental monitoring and assessment, expressly forbid any discussion of military security. The Arctic became a zone of cooperation, not conflict.

That view has proven to be remarkably prescient. By focusing on issues of mutual interest and excluding any discussion of military security, the Arctic Council has helped to isolate the region from geopolitical tensions elsewhere in the world. This has provided a unique degree of flexibility for a political framework that emerged by moral consensus rather than force or tragedy – ensuring the Council's activities continue even as Russia, Canada, the US and the five other Arctic states

regularly hold military exercises to test readiness and showcase coldweather capabilities. But now, as the Arctic warms twice as fast as the rest of the planet and new technologies make the recovery of oil and gas easier and shipping safer, the Arctic is once again emerging as a region of economic and political importance – increasing the risk that national security concerns disrupt the Council's efforts to facilitate greater political and scientific cooperation. For example, an allied sanctions regime against Russia has been aimed, in part, at slowing Russia's expansion of oil and gas production in the region – the same region the US and allies had promoted for investment after the end of the Cold War.

Presently, any effort to determine either the US or Russia's future intentions in the Arctic would only end in speculation. Russia has clearly sought to diversify its markets for energy, and to bring in new investors and technology providers after sanctions were established. The United States has barely begun to focus on building its own Arctic capabilities and developing innovative ways to match or deter any other state's relative advantage. Greater investment in basic infrastructure in the Arctic would be a positive first step.

8.3. Developing Revenue to pay for Arctic Infrastructure helps expand both Civil and Military Infrastructure

To date, public calls for greater Arctic investment have focused primarily on large, individual assets such as required icebreakers or deep-water ports without a systematic look at ways to ensure enough revenue is derived from those assets to defray operational costs, much less a return of capital costs. The US is somewhat alone in this approach. Russia may have built its icebreaker fleet with public funds, for example, but it does have a business plan to collect as much as US\$900,000,000 per year over time from ships using the Northeast Passage. 12 A US icebreaker today might similarly, if asked, provide a reliable service in assisting shipping in the Arctic, but it has no means – and no current official plans – to collect any tariff while doing so. Overhead, Russia collects over US\$500,000,000 per year in overflight fees, much of it from opening Arctic air routes.¹³ The US only charges flights not originating or terminating in the US, and dedicates none of the funds directly to building out the US Arctic civil aviation system. 14 US telecommunications infrastructure might be said to be more focused on generating needed revenues – but because national subsidies are involved, there is sometimes a disincentive to cooperate on pan-Arctic assets that might serve more than one nation at once. Meeting the infrastructure gap in the Arctic, for both security and civil purposes, will require a better combination of efforts to develop revenue to support that infrastructure.

8.3.1. Shipping

Every year, the Suez Canal provides transit between the Indo-Pacific region and the Mediterranean-Atlantic region for approximately 18,000 vessels. A study of global shipping traffic presented by Russian members to the Arctic Economic Council in 2017 suggests that perhaps 10 per cent of that traffic, on top of Arctic-originating or -terminating traffic like LNG and mineral exports, could be attracted to the Arctic Ocean. ¹⁵ If the going Northern Sea Route tariff averages US\$500,000 per ship, attracting 1,800 ships would generate US\$900,000,000 in revenue. If Russia is the only provider of this service, its footprint, security capability and power projection in the Arctic will only grow.

US security planners have cause to worry about Russia's plans for several reasons. While the United States has agreed to and abides by, but has not ratified, the United Nations Convention on Law of the Sea, it has not accepted the contention that a tariff-based, profit-making compulsory ship escort service in the Arctic, as required by Russian law, is consistent with Article 234 of the convention, or consistent with international principles of freedom of navigation. Second, even if collection and payment of tariffs were voluntary (perhaps encouraged by insurance requirements), Russia's monopoly in servicing Arctic shipping is a concern for security. Most near-term expected growth in Arctic shipping is likely to come from energy transport. The US and its allies went out of their way to ensure that pipeline routes out of the Caspian Region, for example, did not give Russia greater political and economic leverage, given that Russia has had a propensity for turning off pipeline taps for economic and geopolitical gain. The US is yet to take such a position in the Arctic.

Behind the US security establishment's call for six new icebreakers, and Alaska policy-makers' call for new deep draft ports in the Arctic, there is very little expected dependence on revenues to defray those investments. Only recently, the Alaska delegation has proposed an Arctic Seaway Development Authority in legislation introduced late in 2018. The concept behind that legislation is to establish a way to collect voluntary tariffs to support what some have called 'Uber for Icebreakers', an alternative, internationally-based ship escort and port of refuge system to Russia's Arctic monopoly. The Iceland-based NGO

Arctic Circle had advanced the concept after an inquiry that included shipping nations in Asia that are seeking reliability before committing vital exports to new Arctic routes. If the estimate of US\$900,000,000 in potential Arctic shipping services is anywhere near correct, capital and operating funds for needed icebreakers and other investments to support reliable shipping can ultimately be repaid.

It is important to highlight the benefits of a new icebreaker or a deep draft port, but doing so without reference to a broader strategic vision of Arctic infrastructure is self-limiting – somewhat akin to building a shiny new race car without any racetrack. In short, US capabilities will not markedly improve even if a new icebreaker is financed and built if it is not followed by additional investment in a deep draft port and an active effort to play a role in emerging Arctic shipping. American taxpayers can be expected to support expenditures that raise our security, but if those same icebreakers, ports of refuge, charting and domain awareness devices make shipment of goods between China and France more efficient, a tariff is also warranted. US policy has called for a 'safe, secure and reliable' - meaning reliable for shipping - Arctic Ocean since 2009 but little attention has been given to reliability.¹⁷ As the Coast Guard has identified, its existing fleet of two icebreakers - one heavy and one medium – is too small to fulfil mission demands at high latitudes. 18 Serving shipping, even shipping of assets in and out of US Arctic communities, is, at best, still a seasonal goal of the US Coast Guard. The US has not officially identified a means of officially helping new Arctic shipping, while Russia has – illegally, by the account of the US and many other nations – required ships transiting waters near Russia to pay a tariff for icebreaker assistance. Adding six new icebreakers - three heavy vessels to enter service in 2021, and three medium vessels to enter service later in the decade - would allow the US to establish a robust sovereign presence in the region and markedly improve its ability to conduct search and rescue, law enforcement, vessel escort assistance and scientific research, among a range of other tasks.

Additionally, expanding the existing port at Nome or constructing a new port at Port Clarence to serve deep draft vessels would provide a much-needed facility for new US icebreakers, US Navy ships and submarines if, for some reason, a naval task force was sent to the region, and for other vessels transiting the region, such as cargo ships, bulk freighters and LNG carriers. With a deep draft port would come a range of services from fuel bunkering and storage to salvage and towing services and port reception facilities – all of which would provide security

for US forces and support the development of safe, secure and reliable commerce in the Arctic.

The US is slowly making its marine and coastal observing infrastructure more robust: the State of Alaska and the US Coast Guard have helped fund the Alaska Marine Exchange's network of shore-based Automatic Identification System (AIS) receivers. Real-time monitoring and domain awareness supports policing of day-to-day maritime operations in the region, helps avoid conflicts between large ships and small fishing and sealing vessels and puts additional 'eves' on ship locations to help prevent groundings and oil spills. New AIS receivers aboard satellite networks, such as Iridium, extend the domain awareness picture further offshore in every ocean, including the Arctic. Highfrequency (HF) and X-band radars are particularly important as they provide accurate and real-time measurement of surface currents and sea ice conditions, while buoys and tide gauges also provide important real-time domain awareness of tidal fluctuations, wave conditions, sea surface temperatures and ice detection. Real-time information for accurate weather forecasting and domain awareness improves safety for both military and civilian vessels operating in the region. However, there are only three HF radar stations, one X-band station and one wave buoy in the Chukchi or Beaufort seas. 19 According to the National Oceanic and Atmospheric Administration (NOAA), at least five more wave riding buoys are needed at critical transportation sites in Unimak Pass, Bristol Bay, the Bering Strait, Kotzebue Sound and Utqiagvik.²⁰ Most of the US Arctic also lacks accurate hydrographic data – by one estimate, less than 5 per cent of the US maritime Arctic is charted to modern international standards – impeding the development of safe shipping and increasing the likelihood of a vessel grounding.²¹

8.3.2. Aviation

With over 10,000 people transiting the Arctic Ocean by air every day – and with more coming in the decades ahead – the US should also look at ways to use overhead revenues to make or to help improve aviation infrastructure in the Arctic. Paved runways long enough to support large commercial and military aircraft are of primary importance. As was seen in December 2018 with the emergency landing of Delta Air Lines Flight 128 at Shemya due to a failing engine, having the right airport at the right time and place can make all the difference between a mild inconvenience and a tragic accident. However, there are few airports capable of supporting commercial or military aircraft in the US Arctic. Excluding

Thule Air Base, of the four US runways north of the Arctic Circle that are paved, only two, at Utqiagvik and Deadhorse, are longer than 6,000 feet – although neither has enough ramp space (and de-icing capability) to support more than two large fixed-wing aircraft at any given time. Furthermore, while the Federal Aviation Administration's (FAA) NextGen air traffic control system – using satellite- and ground-station-based Automatic Dependent Surveillance–Broadcast (ADS-B) technology – was first tested in Bethel, it still has significant coverage gaps over the US Arctic. According to one estimate, at least 12 more ADS-B relay stations are needed to provide adequate coverage of the region. Once they are built, US airspace in the Arctic will be more closely integrated with the global movement to ADS-B-based air traffic control, bolstering the safety and reliability of aviation infrastructure in the Arctic.

The US should also explore innovative ways to forward deploy military assets at existing airports and runways in the Arctic. With no permanent basing in the Arctic beside Thule Air Base in Greenland, the US military suffers from a shortfall of adequate training grounds to test cold-weather, high-latitude capabilities and staging facilities for organising incident response teams. However, it is possible to establish a temporary or semi-permanent footprint in the region without having to construct new runways or facilities. Since 2008, the Coast Guard has used civilian and State National Guard aviation facilities in Nome. Kotzebue and Utqiagvik to support Arctic Shield, an annual operation that forward deploys multiple assets in the summer to provide search and rescue and broader partnerships with local communities. In 2017 alone, Arctic Shield deployed 440 personnel, saved 20 lives, assisted 27 others, inspected 24 commercial vessels, and brought together more than 4,700 local children and adults during the service's maritime safety awareness programme, demonstrating how military-civilian partnerships can succeed despite existing budgetary and operational restraints.²³

8.3.3. Telecommunications

Besides Arctic shipping and aviation, the US will also need to invest in telecommunications infrastructure. Today, the US Arctic is one of the least connected regions in the world. Broadband data, whether uploaded or downloaded via satellite, fibre optic or terrestrial microwave links to landlines or mobile radio networks, are limited, even in some larger communities and commercial facilities. The result is that the cost of living is higher, opportunities for education and employment are reduced, and Arctic residents remain isolated from each other and the world at large.

The lack of basic telecommunications infrastructure also inhibits environmental monitoring and forecasting, search and rescue operations, shipto-ship and ship-to-shore communications, and other critical activities. At high latitudes, secure and reliable military communications can also be difficult to establish, limiting domain awareness and eroding command and control systems.

Where more robust telecommunications infrastructure in the US Arctic has come about recently, federal, state and private cooperation has helped speed the way. In 2011, GCI, Inc. launched the GCI TERRA Project to provide terrestrial broadband to oil and gas facilities at Prudhoe Bay as well as 85 villages and more than 40,000 residents across the US Arctic. Federal subsidies to rural schools, libraries and health clinics help pay the bill. Iridium's polar orbiting global network was kept alive literally rescued from bankruptcy in 2000 – by a basic contract with the US Department of Defense. Today, the firm is doing well and completing launch of 75 new satellites in early 2019. Through a joint venture with NavCanada called Aireon, the firm is also providing global ADS-B coverage, which will fill in gaps across wide open spaces around the world that are not served by terrestrial networks. Harris Corporation, and its downstream data partner ExactEarth, will provide global awareness of location of ships carrying AIS devices, as payloads on the same network. Both capabilities greatly improve efforts to track ships and planes transiting the Arctic.

For some years, an Arctic-based fibre route has been envisioned that would be paid for, basically, by reducing latency in rapid securities trading transactions between Europe and Asia. If long-distance benefits help support construction of fibre to access more areas of the Arctic, then again a revenue-based approach will have helped US security. The national interest, therefore, needs to work with the commercial interest.

8.4. Conclusion

Short of the kind of World War which built Arctic airfields and the Alaska highway, or a new Cold War which built the radar network which serves both security and civil aviation today, the prospects for expanding Arctic infrastructure are dim if core investments are based on security subsidy alone. For that reason, security planners need to work with civil authorities and private investors to adopt a more robust market-based approach to bringing about infrastructure. Some may suggest this requires a culture change on the part of Congress and the military. To us,

the authors of this chapter, the major change necessary is in creating lines of communication between those responsible for Arctic infrastructure. An integrated revenue entity like the proposed Arctic Seaway Development Authority will help for shipping infrastructure.²⁴ Stronger cooperation between the US Air Force, the FAA and State aviation planners will better expose potential revenue sources to meet both civil and military needs. Likewise, while security issues are generally excluded from Arctic Council discussions, including discussions on filling broadband gaps, an exception should be made to bring security planners to the table on telecommunications. Exercises to understand how an Arctic Development Bank can help increase infrastructure availability in the North, such as those pursued by the Northeast Asia Economic Forum, the Northern Forum, and individually proposed by Scott Minerd, CIO of Guggenheim, at the World Economic Forum, can also have a positive security impact. Finally, in the Alaska Command, there is a Civilian Advisory Board. A pan-Arctic approach, which brings civil leaders, civil authorities and military authorities together more frequently can only improve the kind of communication needed to address common needs and opportunities.

Notes

- 1 Mark L. Mallory et al., 'Financial Costs of Conducting Science in the Arctic: Examples From Seabird Research', Arctic Science 4 (2018): 624–33.
- 2 Rosa Cheryl, 'Alaska's Rural Water and Sanitation Conundrum', *ARCUS*, no. 3 (Fall 2013).
- 3 Michael Perkinson, 'Promoting Sustainable Development in the Arctic: A Private Sector Proposal for Partnership', Presentation, Arctic Economic Council: Top of the World – Arctic Broadband Summit, Utqeagvik, AK (July 2016).
- 4 Lyman J. Gage et al., Report of the Cruise of the US Revenue Cutter Bear and the Overland Expedition for the Relief of the Whalers in the Arctic Ocean from Nov. 27, 1897 to Sept. 13, 1898 (Washington: Government Printing Office, 1899).
- 5 Alaska State Library Historical
 Collections, Alaska Communications
 System Photograph Collection, 1904–1963,
 Historical Note (date unknown);
 Heather Hudson, Connecting Alaskans:
 Telecommunications in Alaska from
 Telegraph to Broadband (Fairbanks:

- University of Alaska Press, 2015), 13–25.
- 6 Hudson, Connecting Alaskans, 13-25.
- 7 Japan's decision to occupy the Aleutians was driven by the strategic realisation that not every road is a one-way street. Thus, the occupation's dual-purpose was to establish a viable route for Japanese forces to invade the West Coast and block a potential allied invasion of Japan along the most direct North Pacific Great Circle Route.
- 8 Stephen W. Haycox, *Alaska: An American Colony* (Seattle: University of Washington Press, 2006), 260.
- 9 The main battery of US ground-based missile defence, configured to deter and defeat threats from both North Korea and Iran, is based at Delta Junction, Alaska, served by Allen Army Airfield.
- 10 Thomas W. Ray, 'A History of the DEW Line, 1946–1964', Air Defense Command Historical Study No. 31, United States Northern Command (June 1965).
- 11 Karen Brewster, 'Native Contributions to Arctic Science at Barrow, Alaska',

- *Arctic* 50, no. 3 (September 1997), 277–88.
- 12 Far East Development Fund, 'Northern Sea Route: Key Economic Characteristics', Presentation, Arctic Economic Development Council, Helsinki, Finland (February 2017).
- 13 Cathy Buyck, 'EU, Russia in Stalemate on Siberian Overflight Fees', *Aviation Week* and Space Technology (1 April 2013).
- 14 Some of these revenues are used to subsidise the Essential Air Service Program to remote or underserved communities across the United States.
- 15 Far East Development Fund, 'Northern Sea Route: Key Economic Characteristics', Presentation, Arctic Economic Development Council, Helsinki, Finland (February 2017).
- 16 Office of Senator Lisa Murkowski, 'Murkowski Unveils Legislation to Reinvigorate America's Arctic Role', Press Release (12 December 2018).
- 17 The White House: Office of the Press Secretary, 'Arctic Region Policy', National Security Presidential Directive/NPSD -66, Homeland Security Presidential Directive/ HSPD-25, Policy Memo (9 January 2009).
- 18 Congressional Research Service, 'Coast Guard Polar Security Cutter (Polar Icebreaker) Program: Background and Issues for Congress', *Policy Brief* (10 December 2018), 1–17.

- 19 US Congress, House of Representatives, Subcommittee on Coast Guard and Maritime Transportation (Committee on Transport and Infrastructure), Maritime Transportation in the Arctic: The U.S. Role: Hearing before the Subcommittee on Coast Guard and Maritime Transportation, 115th Cong. (2018). (Testimony of Molly McCammon, Executive Director, Alaska Ocean Observing System, 7 June 2018.)
- 20 US Congress, House of Representatives, Subcommittee, Maritime Transportation in the Arctic: The U.S. Role: Hearing (2018). (Testimony of David Kennedy, Senior Advisor, NOAA Arctic Program, 7 June 2018.)
- 21 US Congress, House of Representatives, Subcommittee, Maritime Transportation in the Arctic: The U.S. Role: Hearing (2018). (Testimony of David Kennedy, 7 June 2018.)
- 22 Tom George, 'ADS-B Coverage in Alaska: Where You Have It – And Where You Don't', *Aircraft Owners and Pilots Association* (17 April 2017).
- 23 United States Coast Guard, 'US Coast Guard: Arctic Shield 2017 Fact Sheet', Policy Brief (2 February 2018).
- 24 Shipping and Environmental Arctic Leadership Act, Senate Bill 3740, 115th Cong. (2018).

Part 3

Security: Policy, Cooperation and Institutional Challenges

9

Canada's Northern Borders in the Context of National Border Regimes

Karen Everett

9.1. Introduction

Canada's current border management framework, Beyond the Border: A Shared Vision for Perimeter Security and Economic Competitiveness, was introduced in 2011 and outlines responsibilities for both Canada and the United States in managing the shared border. As border management is a federal function, the expectation is that the provisions in Beyond the Border are applicable to all of Canada's borders. Canada, however, is a large country with diverse regions, and national policies may not always reflect regional needs.² For example, not all regions experience the same volumes of cross-border flows. In July 2017, for example, 10,435,140 non-citizens entered Canada through its various ports of entry. Of that, almost half went to Ontario (5,071,368) and only 104,627 went to Yukon.³ Additionally, the characteristics of the border are different in the South than in the North. In the South, for instance, the land border with the United States is 6,416 km long,⁴ and there is 68,000 km of coastline along the Pacific and Atlantic Oceans, and at the Gulf of the St Lawrence.⁵ In the North, however, the land border with Alaska is only 2,475 km long,6 while the coastline is 176,000 km and includes 'the coasts of the three northern territories, as well as Labrador (north of Hamilton Inlet), Manitoba, Ontario and Quebec along Hudson Bay and Hudson Strait'. Yet, despite these differences, Heather Nicol explains that 'Border management has been generally established with reference to busy land-crossings in the highly urbanised and heavily trafficked

mid-latitudes of North America. Here, trade and terrorism are of central concern. This is not as true in the North...'8 This means that parts of the border, such as those in the North, may be left vulnerable because of one-size-fits-all policies.

To better understand the border management requirements in the North, this chapter critically examines the *Beyond the Border* framework, as well as multiple federal government documents that provide insight into regional border management priorities. This chapter begins with an overview of the methods and methodology used to select and analyse the documents. This is followed by an analysis of the different documents and their regional security priorities, and concludes with a discussion that puts forth different policy suggestions that may address regional security gaps.

9.2. Methods and Methodology

As mentioned above, two different document sets are analysed for this chapter: border management documents and those that address northern security and governance issues. This section begins by identifying the documents and explaining the rationale behind the selection process. It then provides an overview of the analytical framework that is based on the Copenhagen School's five security sectors.

9.2.1. The Canadian Government Documents

As this chapter is about border management, the first set of documents to be analysed are related to the current border management framework, *Beyond the Border*, that was released at the end of 2011 and remains in place at the time of writing. For a deeper understanding of *Beyond the Border*, the results of its public consultation process and four annual implementation reports are analysed to provide necessary context and details on the evolution of Canada's border management system under *Beyond the Border*. While these documents provide information on how border management is practised and the priorities set by the government, they are only part of the larger picture. For example, *Beyond the Border* makes frequent reference to a number of other documents and plans that facilitate different aspects of border management and were also included in the analysis. In total, 13 border management documents were examined, as identified in Table 9.1.

Table 9.1 List of Analysed Border Management Documents

Document Title	Year
Perimeter Security and Economic Competitiveness.	2011
What Canadians Told Us. A Report on Consultations on	
Perimeter Security and Economic Competitiveness	
Between Canada and the United States	
Perimeter Security and Economic Competitiveness.	2011
Action Plan. Beyond the Border: A Shared Vision for	
Perimeter Security and Economic Competitiveness	
Canada-United States Beyond the Border Action Plan	2012, 2013,
Implementation Report	2015, 2016
Canada-United States Action Plan for Critical	2010
Infrastructure	
Agreement Between the Government of Canada and	2012
the Government of the United States of America for the	
Sharing of Visa and Immigration Information	
Beyond the Border Action Plan Statement of Privacy	2012
Principles by the United States and Canada	
Cybersecurity Action Plan Between Public Safety	2012
Canada and the Department of Homeland Security	
Border Infrastructure Investment Plan Canada – United	2013
States April 2013	
Border Infrastructure Investment Plan Canada – United	2014
States December 2014	
Bill-C23. Preclearance Act, 2016. An Act Respecting the	2016
Preclearance of Persons and Goods in Canada and the	
United States	

Source: Author

The dates of the documents show that other than the implementation reports and the Preclearance Act introduced in 2016, there has not been a substantial update to the border management framework since shortly after *Beyond the Border's* inception. Nevertheless, when all the border management documents are read together, a clearer picture of Canada's border management regime emerges.

The second set of documents addresses larger issues of regional governance and security. They include regional strategies, military strategies, Senate and Parliamentary reports, and speeches and press releases by the Prime Minister(s). The full list of documents is found in Table 9.2.

These documents demonstrate a diverse range of topics on regional issues and, as such, offer different perspectives on what the government considers as regional specific border, security and governance concerns. The section below outlines the framework used for the document analysis.

 Table 9.2
 List of Northern Security and Governance Documents

Type of	Title	Year
Document		
Northern	Canada's Northern Strategy: Our	2009
Strategies	Heritage, Our Future	
	Statement on Canada's Arctic Foreign	2010
	Policy: Exercising Sovereignty and	
	Promoting Canada's Northern Strategy	
Military	The defence section of Canada's	2005
Strategies	International Policy Statement: A Role	
	of Pride and Influence in the World –	
	Defence	
	Canada First Defence Strategy	2008
	Strong, Secure, Engaged: Canada's	2017
	Defence Policy	
Senate Reports	The Coast Guard in Canada's Arctic:	2008
	Interim Report (Standing Senate	
	Committee on Fisheries and Oceans)	
	Controlling Canada's Arctic Waters: Role	2009
	of the Canadian Coast Guard (Standing	
	Senate Committee on Fisheries and	
	Oceans)	
	Rising to the Arctic Challenge: Report on	2009
	the Canadian Coast Guard (Standing	
	Senate Committee on Fisheries and	
	Oceans)	
	Sovereignty & Security in Canada's Arctic:	2011
	Interim Report (Standing Senate	
	Committee on National Security and	
	Defence)	

(Continued table 9.2)

(Continued table 9.2)

Type of Document	Title	Year
Parliamentary Reports	Canada's Arctic Sovereignty (Standing Committee on National Defence)	2010
	Canada and the Arctic Council: An Agenda for Regional Leadership (Standing Committee on Foreign Affairs and International Development)	2013
	Government response to Canada and the Arctic Council: An Agenda for Regional Leadership (Standing Committee on Foreign Affairs and International Development)	2013
Prime Minister Speeches and Press Releases	Prime Minister Announces Expansion of Canadian Forces Facilities and Operations in the Arctic (press release by Stephen Harper)	2007
	Strong Leadership. A Better Canada (Stephen Harper's Speech from the Throne)	2007
	United States – Canada Joint Arctic Leaders' Statement (statement between Justin Trudeau and Barack Obama)	2016

Source: Author

9.2.2. The Copenhagen School and the Five Security Sectors

Securitisation Theory emerged in the 1990s as a new approach to address developing security concerns that fell outside of traditional military tensions that had dominated scholarship for much of the Cold War. Different schools of thought developed during this time, including the Copenhagen School that sought out new ways of understanding security and its processes. For example, one area of focus is the role of securitising actors, such as politicians, and the use of discourse to argue that a security concern can only be addressed through the use of extraordinary measures rather than normal political actions. Another example is the development of five distinct, but interconnected, security sectors that are more inclusive of a broad range of security threats. First is the military sector that examines traditional military threats and

conflicts between state militaries. Second is the political sector that explores non-military threats, such as terrorism and other incidents that threaten sovereignty. Third is the societal sector that seeks to understand how certain actions threaten group identity(ies). Fourth is the environmental sector that assesses threats to an ecosystem, and finally there is the economic sector that examines threats to an economy. Both the speech and sector analyses have their merits and contribute to a broader understanding of security.

This chapter uses the five sectors as a framework to establish the differences between border security in the North and the South. In particular, the sectors will identify security threats (both extraordinary and non) that may not seem as obvious as others, therefore revealing the complexity of border management. Moreover, this kind of analysis will provide a more comprehensive understanding of both national and regional security concerns.

9.3. Analysis

The analysis that follows is organised by security sector. Within each sector, the border management documents are analysed first, followed by the Northern documents. This structure provides the national context to which the North is compared, therefore allowing for the identification of key similarities and differences between the national and regional levels. The results of this analysis are important, especially when making policy-related decisions.

Military Sector

As the Canadian Forces do not perform traditional border management functions in Canada, the military was not discussed in the various border management documents. The Canadian Forces do, however, perform a number of security and safety-related tasks in Northern Canada and play an important role in the Northern documents. For example, they perform surveillance and domain awareness activities to identify any foreign intrusions along Canada's northern maritime and air borders. There is, however, an overall consensus that Canada is not expecting to engage in military conflict in the coming years. The military also performs soft security functions like search and rescue (SAR) on the land and other emergency response tasks, and to 'assist other government departments' in the region. A strong military presence, therefore, is required to perform the range of functions the military undertakes in the

Arctic. Much of the military's regional functions also connect the military sector to the political sector in terms of Arctic sovereignty¹⁷ where Canada must demonstrate its ability to successfully perform in the region.¹⁸ This is discussed below.

Political Sector

Considering that Beyond the Border is a shared plan with the United States, it would not be unrealistic for there to be concerns about the extent to which the two countries will work together and what that means for Canada's sovereignty at the border. Yet, during the public consultation phase for the Action Plan, Canadians who chose to submit a response did not raise concerns about sovereignty and the securing of the shared border. 19 This might be because *Beyond the Border* prioritises initiatives like cross-border law enforcement 'to create integrated teams in areas such as intelligence and criminal investigations, and an intelligence-led uniformed presence between ports of entry'. ²⁰ A priority, therefore, is the expansion of the Shiprider programme²¹ that 'involves vessels jointly crewed by specially trained and designated Canadian and US law enforcement officers who are authorised to enforce the law on both sides of the international boundary line'. 22 Yet, despite the success of Shiprider, other attempts at cross-border enforcement have experienced a number of operational challenges in bringing this aspect of the Action Plan to fruition.²³ Threats to the political sector also include terrorism as these acts are designed to threaten existing political systems.²⁴ Beyond the Border addresses this issue as it seeks to prevent terrorist acts from occurring on Canadian soil. In particular, this includes efforts to 'address threats before they reach our shores'. 25 Stopping threats overseas will be addressed further in the discussion on the societal sector.

In contrast to *Beyond the Border*, sovereignty is a major concern in northern border management. For example, Canada argues that the Northwest Passage is internal waters, while other states disagree. The challenge for Canada is that 'if the Passage were considered an international strait, Canada would not have the right to pass and enforce its own laws and regulations governing international shipping'. ²⁶ Sovereignty, therefore, is to be maintained, in part, through increased enforcement activities and, perhaps more importantly, regional cooperation. ^{27,28} As mentioned in the military sector, another aspect of sovereignty is the ability to perform search and rescue operations. The Coast Guard also participates in these activities, as well as other 'marine safety and environmental protection services to Canadians, and essential at-sea support to other federal government departments and agencies',

all of which contribute to Canada's Arctic sovereignty.²⁹ Concerns around terrorism are briefly raised in one document;³⁰ however, sovereignty remains the primary regional focus. Another reason that terrorism is overlooked is likely because there are more immediate safety-related concerns that need to be addressed as the waters begin to open.

Societal Sector

As mentioned in the political sector, *Beyond the Border* prioritises security 'at the earliest possible point' to prevent threats from entering Canada and the US.31 This means that threats come from outside of Canada's borders. There is a certain body of literature on border management that addresses the different ways that non-citizens and other outsiders considered threats to national identity are therefore treated differently at the border.³² To detect these potential threats as soon as possible, governments and security agencies use various risk management practices, such as biometrics, to identify these risks.³³ Beyond the Border commits to these kinds of practices, and bilateral cooperation permits the sharing of information on immigrants entering either country.³⁴ Beyond the Border also states that 'Effective risk management should enable us to accelerate legitimate flows of people and goods into Canada and the United States and across our common border, while enhancing the physical security and economic competitiveness of our countries', thus linking the societal and economic sectors. 35

In the Northern documents, emphasis is placed on ensuring that indigenous rights are protected rather than addressing outside threats to the border. To increase indigenous rights, some of the documents call for increasing consultations with indigenous groups on policy development and settling any outstanding land claim agreements. 36,37 Although these comments appear, at least on the surface, to be about protecting indigenous identity, the context is often in relation to larger arguments around maintaining regional sovereignty, thereby connecting the societal and political sectors. 38 Continued access to traditional food sources is also raised as a consequence of increased maritime traffic and resulting pollution. 39 Indeed, loss of access to this food will have an impact on Inuit communities and their ability to maintain traditional lifestyles and thus connects the societal and environmental sectors.

Environmental Sector

The environment is not a prominent issue in *Beyond the Border*. However, the section on Critical Infrastructure and Cyber-Security does recognise that natural disasters could have negative consequences for the continued

operation of shared infrastructure.⁴⁰ There is also concern about the effects of natural disasters on the economy and that contingency plans need to be in place.⁴¹ Additionally, the Action Plan addresses safety-related issues associated with foreign plants, food and animals that may cross the border.⁴²

The Northern documents make clear that changing environmental conditions have consequences for regional security. For example, as Arctic waters become more accessible due to melting ice, testimony by a Canadian Forces member to the Senate explains that 'terrorism, people-smuggling, drug-smuggling, and other criminal activities... are cited as possibilities' in the future. 43 Indeed, the Canadian Forces recognise climate change as a security issue as this was also reflected in the military strategy.⁴⁴ Moreover, accessible waters mean a likely increase in safety-related incidents like oil spills, 45 other 'environmental incidents', 46 an increase in search and rescue requirements 47 and the possible decline in traditional food sources discussed above. As such, the changes to the environment can have a tremendous impact on the region and are clearly linked to the political sector and sovereignty through Canada's ability to adequately maintain enforcement capabilities in the region. Interestingly, there is more discussion about adapting to climate and environmental change than there is about slowing down climate change as a security strategy.

Economic Sector

Beyond the Border is concerned with ensuring Canada's economic security and access to American markets just as much as it is with national security. The second section of the Action Plan addresses these issues and states that 'The Beyond the Border Action Plan enhances the benefits of programs that help trusted businesses and travellers move efficiently across the border, introduces new measures to facilitate movement and trade across the border while reducing the administrative burden for business, and invests in improvements to our shared border infrastructure and technology.'48 A close reading of the document also shows that there are economic components to some of the security and safety aspects of the Plan.

As for the North, economic discussions mostly focused on a desire for greater economic development not only in Canada, but the Arctic at large. To achieve this, regional economic practices should be built on best practices to increase the likelihood of success.⁴⁹ While a stronger regional economy would most certainly be of benefit to northerners,

economic development in different industries is often possible because of environmental change.⁵⁰ This means that threats to the environmental sector can be seen as an opportunity for the economic sector.

The analysis above, framed in the five sectors, reveals that border and larger security issues in the North are not the same as in the South. For example, maritime borders play a much more significant role in the Arctic, while the land and air borders are addressed more in the South. Additionally, the political and environmental sectors were the most prominent in the North as many of the concerns raised by the various documents were associated with functions of sovereignty and the changing environment. There is also less interplay between the sectors in the South than in the North, suggesting that border management in the North is more complex than what appears in *Beyond the Border*. These findings are important in terms of the treatment of regions within national security and border management frameworks and have policy implications that are discussed in the following section.

Policy Considerations

Analysis through the lens of the five sectors revealed much about the requirements of border policy in Canada's North. As nothing in the Northern documents suggests there is an immediate threat that requires extraordinary security measures, there is an opportunity to carefully craft a regional border management policy that can address existing requirements, while also creating the structures that will be needed for emerging concerns. This section considers policy suggestions that speak to maritime security and the process of regional security policy development overall.

9.4. Maritime Border Management

In general, it is not surprising that maritime security was not a central focus of *Beyond the Border* as the majority of Canada's coasts are located in the North.⁵¹ That being said, as Arctic waterways become more accessible with melting sea ice, maritime borders will inevitably play a more significant role in Canada's border management structure. There are four policy directions that Canada could pursue in regard to northern maritime border security.

First, Canada and the United States have the opportunity to update *Beyond the Border* by creating a section that accounts for the unique

needs of the North. This would be an important step towards increased bilateral relations in the region as Beyond the Border tends to ignore the North, and the Northern documents overlooked shared regional security concerns. Within this context, there are three key changes to be considered. First, a more formal border management role for the military could be carved out. For example, NORAD's maritime surveillance functions could be of benefit to civilian border agencies if this information is shared with the appropriate civilian security agencies on both sides of the border in real time. 52 This would contribute to Beyond the Border's priority of early threat detection and also aligns with existing information sharing practices. Second, the two governments could pilot a Shiprider programme in the Beaufort Sea during the summer months. Although the two states are engaged in a boundary dispute in the Beaufort Sea, there is no reason to believe they cannot cooperate as they will have a vested interest in this border as maritime traffic increases with time.⁵³ Finally, the existing focus of Beyond the Border on maritime commerce should be amended to include maritime safety and environmental enforcement in the North. Doing so would also facilitate northern commerce as shipping rules and regulations would be adhered to, and this shift could also form the basis under which Shiprider would operate. Certainly, an additional section would be of benefit to both states. At the same time, re-visiting Beyond the Border may also result in changes to other sections of the Action Plan that may, or may not, be of benefit to Canada.

Second, Canada and the US could create a regional border management policy that is independent from *Beyond the Border*. This approach provides both governments with the ability to address region-specific border needs without having to make changes to *Beyond the Border*. As such, greater emphasis could be placed on issues of environmental monitoring, maritime surveillance, indigenous rights and emerging regional economic requirements, such as shipping. At the same time, a consequence of this option may include a more aggressive re-opening of debates around the Northwest Passage and the Beaufort Sea, for which the Canadian government must be prepared.

Third, Canada could go at it alone. This would give Canada the opportunity to create a regional framework that follows its own agenda and priorities, especially when it comes to management of and enforcement in the Northwest Passage. Certainly, this would contribute to Canada's claim that the Passage is internal waterways. That being said, Canada's policies would not likely diverge too much from existing

practices with regard to immigration and criminal enforcement along the border due to existing policies and security requirements. For instance, Canada could not treat international cruise ship voyagers differently in the North than the South, meaning that border policies would likely follow suit with existing practices. Moreover, there is the possibility that it could raise regional tensions if the US disagrees with the policy direction Canada takes.

Finally, the government could maintain the status quo and do nothing. As Arctic waters remain difficult to navigate,⁵⁴ it is easy to delay addressing these issues until they become more frequent and pressing. Of course, this decision runs the risk of resulting in an extraordinary situation for which the government is ill-prepared if the required security resources are not in place.

Regardless of the policy direction the government takes, there will need to be significant investments in the region. First, icebreakers perform important security functions as they 'provide logistical and platform support to the Royal Canadian Mounted Police (RCMP) and the Canadian Forces'.⁵⁵ Yet, icebreakers only operate in the region during the summer,⁵⁶ and plans to build a new polar capable icebreaker have been delayed,⁵⁷ further limiting Canada's regional security capabilities. Second, more human resources will be needed to perform different security functions. Retired Colonel Leblanc told the Standing Senate Committee on National Security and Defence that:

'The total number of full-time personnel responsible for security issues of a federal nature in this area is probably less than 300 for most of the year, to look after an area that is larger than continental Europe. This includes Canadian Forces, RCMP officers dealing with federal matters, Canada Border Services Agency, Citizenship and Immigration Canada and Canadian Security and Intelligence Service. The Canadian Coast Guard provides a boost to those numbers during the shipping season.'58

Finally, new infrastructure will be required to accommodate any substantial changes to security practices and increases in personnel. However, the lack of existing basic regional infrastructure⁵⁹ and minimal investments in northern border infrastructure in general⁶⁰ does not bode well for regional security. Investments of this nature will only occur when the government makes northern border management a policy priority.

9.5. Developing Security Policy for the North

Border management in the North is a complex issue, meaning that policy-making decisions cannot be made lightly. So far, this chapter has demonstrated the usefulness of the Copenhagen School's five security sectors to identify regional security concerns and identified possible policy directions. However, there is more to the process. In particular, determining what issues take priority is just as important, and this is where stakeholder engagement can benefit the policy-making process.

There are multiple border management stakeholders. For example, the *Beyond the Border* consultation report identifies 'other levels of government, business, labour, civil society, border communities, Aboriginal groups, think tanks, academics and individual citizens' as key stakeholders. A broad range of stakeholders is important because they can provide different insights into the same problem. Certainly, different levels of government know how various 'local economic, cultural, and political elements' should be considered, while the business community would know best how border policies affect their ability to trade. Indigenous communities, border communities and individual citizens are also experts on how the border will affect their daily life.

This will be important for future border management policy development as the *Beyond the Border* consultations did not adequately engage with indigenous organisations, some of which wanted 'a separate consultation process with First Nations'. Going forward, engagement with affected indigenous groups and communities will be important, especially considering the duty to consult outlined in the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP). Engagement with northern indigenous communities and organisations must occur as different border management practices have implications for different communities.

Although stakeholder engagement is an important policy tool, there are two challenges with this practice. First, policy makers will have to decide how to prioritise conflicting policy requirements as each group of stakeholders will likely have different needs. This is further complicated by the concept of path dependency whereby the federal government may be reluctant to diverge from what it already knows and try something different. If this is the case, it will be more likely that new approaches will be addressed if Canada (and the United States) pursue a northern border strategy that falls outside of *Beyond the Border* as there will be more room to address region-specific concerns that are not constrained by normative understandings of border management found in the South.

A second challenge may occur if stakeholders on both sides of the border identify different priorities or mechanisms to address shared concerns. This would require careful negotiations by both federal governments and, again, run the risk of path dependency if a joint policy is desirable. If not, this is where Canada opting to create its own northern border strategy may prove more useful. In either case, foregoing public engagement sessions is bad policy and bad politics.

9.6. Conclusion

This chapter critically examined border management in a Northern context. By applying the Copenhagen School's five security sectors to the current border management framework and a number of other federal government documents, a more nuanced understanding of the unique needs of Canada's northern borders emerges, as does Beyond the Border's inability to adequately address them. To be sure, Beyond the Border does not account for regional differences, and thus does not capture the emphasis on maritime borders and sovereignty concerns in the North, nor does it account for environmental change and the effect it has on border management. The result is a security gap that can create regional insecurity. To address this gap, the Canadian government has the option of working with the United States, working unilaterally or maintaining the status quo. Regardless of the decision, investments in regional security will be required, sooner or later. Creating a new policy is optimal as it gives Canada (and the United States) the opportunity to shape regional security needs, with the help of stakeholders, before security threats impose policy on the government.

Notes

- 1 Public Safety Canada, 'About Public Safety Canada', last modified 8 August 2018, https://www.publicsafety.gc.ca/cnt/bt/ index-en.aspx.
- 2 Victor Konrad and Heather N. Nicol, Beyond Walls: Re-Inventing the Canada-United States Borderlands (Burlington, VT: Ashgate Publishing Company, 2008), 101, 106.
- 3 Statistics Canada, 'Table 24-10-0041-01 International Travellers Entering or Returning to Canada, by Type of Transport', last modified 19 August 2018,

- https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=2410004101.
- 4 Janice Cheryl Beaver, *U.S. International Borders: Brief Facts* (Congressional
 Research Services, The Library of
 Congress, 2006), 2, https://fas.org/sgp/crs/misc/RS21729.pdf.
- 5 Donald S. Lemmen, Fiona J. Warren, and Colleen S.L. Mercer Clarke, 'Chapter 1: Introduction', in Canada's Marine Coasts in a Changing Climate, ed. Donald S. Lemmen et al. (Ottawa: Government of Canada, 2016), 20,

- https://www.nrcan.gc.ca/sites/www. nrcan.gc.ca/files/earthsciences/files/pdf/ NRCAN_fullBook%20%20accessible.pdf.
- 6 Beaver, U.S. International Borders, 2.
- 7 Lemmen, Warren, and Mercer Clarke, 'Chapter 1: Introduction', 20.
- 8 Heather N. Nicol, 'Conclusion', in The Networked North: Borders and Borderlands in the Canadian Arctic Region, ed. Heather N. Nicol and P. Whitney Lackenbauer (Waterloo: Centre on Foreign Policy and Federalism; Victoria: Borders in Globalization, 2017), 177–79.
- 9 C.A.S.E. Collective, 'Critical Approaches to Security in Europe: A Networked Manifesto', Security Dialogue 37, no. 4 (2006): 444.
- Barry Buzan, Ole Waever, and Jaap de Wilde, Security: A New Framework for Analysis (Boulder, CO: Lynne Rienner Publishers Inc., 1998), 23–24.
- 11 Buzan, Waever, and de Wilde, *Security*, 22–23.
- 12 'Types of Operations', last modified 21 March 2018, http://www.forces.gc.ca/ en/operations/types-operations.page.
- 13 National Defence and the Canadian Armed Forces, Strong, Secure, Engaged: Canada's Defence Policy (Ottawa: National Defence and Canadian Armed Forces, 2017), 50, 79–80.
- 14 Canada. Senate. Standing Senate Committee on National Security and Defence, Sovereignty & Security in Canada's Arctic: Interim Report (40th Parl., 3rd Sess., 2011), 28.
- 15 Canada. Senate. Standing Senate
 Committee on Fisheries and Oceans,
 Controlling Canada's Arctic Waters: Role
 of the Canadian Coast Guard (40th Parl.,
 2nd Sess., 2009), 11; Canada. Senate.
 Standing Senate Committee on National
 Security and Defence, Sovereignty &
 Security, 28; National Defence and the
 Canadian Armed Forces, Strong, Secure,
 Engaged, 51.
- P. Whitney Lackenbauer and Adam Lajeunesse, 'The Canadian Armed Forces in the Arctic: Building Appropriate Capabilities', Journal of Military and Strategic Studies 16, no. 4 (2016): 9.
- 17 Buzan, Waever, and de Wilde, Security, 50.
- 18 Canada. Parliament. Standing Committee on National Defence, Canada's Arctic Sovereignty (40th Parl., 3rd Sess., 2010), 4.
- 19 Canada, Perimeter Security and Economic Competitiveness. What Canadians Told Us. A Report on Consultations on Perimeter

- Security and Economic Competitiveness Between Canada and the United States (Ottawa: Foreign Affairs and International Trade Canada, 2011).
- Canada, Perimeter Security and Economic Competitiveness. Action Plan. Beyond the Border: A Shared Vision for Perimeter Security and Economic Competitiveness (Ottawa: Foreign Affairs and International Trade Canada, 2011), 25.
- 21 Canada, Perimeter Security and Economic Competitiveness, 25.
- 22 Royal Canadian Mounted Police, 'Canada-U.S. Shiprider', last modified 26 October 2016, http://www.rcmp-grc. gc.ca/ibet-eipf/shiprider-eng.htm, para. 6.
- 23 Jim Bronskill, 'Canada-U.S. Cross-Border Police Project "Postponed" Over Differences', CBC News, 4 March 2016, http://www.cbc.ca/news/politics/ canada-u-s-cross-border-police-projectpostponed-over-differences-1.3475784.
- 24 Buzan, Waever, and de Wilde, *Security*, 141–2.
- 25 Canada, Perimeter Security and Economic Competitiveness, 35.
- 26 Canada. Senate. Standing Senate Committee on Fisheries and Oceans, The Coast Guard in Canada's Arctic: Interim Report (39th Parl., 2nd Sess., 2008), 18.
- 27 Canada. Parliament. Standing Committee on Foreign Affairs and International Development, Canada and the Arctic Council: An Agenda for Regional Leadership (41st Parl., 2nd Sess., 2013), 18.
- 28 Canada. Parliament. Standing Committee on National Defence, Canada's Arctic Sovereignty, 7.
- 29 Canada. Senate. Standing Senate Committee on Fisheries and Oceans, Rising to the Arctic Challenge: Report on the Canadian Coast Guard (40th Parl., 2nd Sess., 2009), 47.
- 30 Canada. Parliament. Standing Committee on National Defence, Canada's Arctic Sovereignty, 28.
- 31 Canada, Perimeter Security and Economic Competitiveness, 3.
- Didier Bigo, 'Security and Immigration:
 Towards a Critique of the Governmentality
 of Unease', Alternatives 27, no. 1 (2002):
 81; Karine Côté-Boucher, 'Risky Business?
 Border Preclearance and the Securing
 of Economic Life in North America', in
 Neoliberalism in Everyday Life, ed.
 S. Braedley and Meg Luxton (Montreal:
 McGill-Queen's University Press, 2010),
 58; Buzan, Waever, and de Wilde,
 Security, 121.

- 33 Benjamin J. Muller, 'Risking it all at the Biometric Border: Mobility, Limits, and the Persistence of Securitization', Geopolitics 16, no. 1 (2011): 92, 97, 101.
- 34 Government of Canada, 'Agreement Between the Government of Canada and the Government of the United States of America for the Sharing of Visa and Immigration Information', last modified 3 September 2013, http://www.cic.gc.ca/english/department/laws-policy/agreements/can-usa-agreement.asp.
- 35 Canada, Perimeter Security and Economic Competitiveness, 35.
- 36 Canada. Senate. Standing Senate
 Committee on Fisheries and Oceans,
 Rising to the Arctic Challenge, 31;
 Government of Canada, Canada's
 Northern Strategy: Our North, Our
 Heritage, Our Future, (Ottawa:
 Government of Canada, 2009), 30.
- 37 Canada. Parliament. Standing Committee on National Defence, Canada's Arctic Sovereignty, 14; Canada. Senate. Standing Senate Committee on Fisheries and Oceans, Controlling Canada's Arctic Waters, 60; Canada. Senate. Standing Senate Committee on Fisheries and Oceans, Rising to the Arctic Challenge, 35; Government of Canada, Canada's Northern Strategy, 30–1.
- 38 See Buzan, Waever, and de Wilde, *Security*, 22–3.
- 39 Office of the Prime Minister, 'United States Canada Joint Arctic Leaders' Statement', last modified 20 December 2016, http://pm.gc.ca/eng/news/2016/12/20/united-states-canada-joint-arctic-leaders-statement; Standing Senate Committee on Fisheries and Oceans, Controlling Canada's Arctic Waters, 4–5.
- 40 Canada, Perimeter Security and Economic Competitiveness, 34.
- 41 Canada, '2015 Canada-United States
 Beyond the Border Action Plan
 Implementation Report', Last modified
 29 September 2016, https://www.
 publicsafety.gc.ca/cnt/rsrcs/
 pbletns/2015-bynd-brdr-mplmntn/
 index-en.aspx; Canada, [2014]
 Canada-United States Beyond the Border
 Action Plan Implementation Report,
 (Ottawa: Canada, 2015), 17, https://
 www.publicsafety.gc.ca/cnt/rsrcs/
 pbletns/archive-2014-bynd-brdrmplmntn/archive-2014-bynd-brdrmplmntn-en.pdf.
- 42 Canada, Perimeter Security and Economic Competitiveness, 8.

- 43 Canada. Senate. Standing Senate Committee on National Security and Defence, Sovereignty & Security, 28.
- 44 National Defence and the Canadian Armed Forces, *Strong, Secure, Engaged*, 51
- 45 Canada. Senate. Standing Senate Committee on Fisheries and Oceans, The Coast Guard in Canada's Arctic, 29.
- 46 Canada. Senate. Standing Senate Committee on Fisheries and Oceans, Controlling Canada's Arctic Waters, 19.
- 47 Canada. Senate. Standing Senate Committee on Fisheries and Oceans, Controlling Canada's Arctic Waters, 42.
- 48 Canada, Perimeter Security and Economic Competitiveness, 13.
- 49 Canada. Parliament. Standing Committee on Foreign Affairs and International Development, Canada and the Arctic Council, 44, 48, 49.
- 50 Canada. Senate. Standing Senate Committee on Fisheries and Oceans, Rising to the Arctic Challenge, vii, 3.
- 51 Donald S. Lemmen and Fiona J. Warren, 'Synthesis', Canada's Marine Coasts in a Changing Climate, eds. Donald S. Lemmen et al. (Ottawa: Government of Canada, 2016), 3, https://www.nrcan.gc.ca/sites/ www.nrcan.gc.ca/files/earthsciences/ files/pdf/NRCAN_fullBook%20%20 accessible.pdf.
- 52 Government of the United States of America and Government of Canada, Agreement Between the Government of the United States of America and the Government of Canada on the North American Aerospace Defense Command (Ottawa, 2006), 3.
- 53 See Canada. Parliament. Standing Committee on Foreign Affairs and International Development, Canada and the Arctic Council, 18.
- 54 Canada. Parliament. Standing Committee on Foreign Affairs and International Development, Canada and the Arctic Council, 32–3.
- 55 Canada. Senate. Standing Senate Committee on Fisheries and Oceans, The Coast Guard in Canada's Arctic, 3.
- 56 Canada. Senate. Standing Senate Committee on Fisheries and Oceans, The Coast Guard in Canada's Arctic, 25.
- 57 Murray Brewster, 'How Far Behind Schedule is Canada's Shipbuilding Program? Ottawa Won't Say', CBC News, 16 May 2018, https://www.cbc.ca/news/ politics/shipbuilding-seaspan-schedule-1.4664480.

- 58 Canada. Senate. Standing Senate Committee on National Security and Defence, *Sovereignty & Security*, 30.
- 59 Alicja Siekierska, 'Exposed in the North: Canada Falls Behind in Developing the Arctic', Financial Post, 16 March 2018, https://business.financialpost.com/ transportation/finland-feature.
- 60 See Transport Canada, Border
 Infrastructure Investment Plan Canada –
 United States December 2014
 (Transport Canada, 2014), 91–3.
- 61 Canada, Perimeter Security and Economic Competitiveness. What Canadians Told Us. 13.
- 62 Emmanuel Brunet-Jailly, 'Conclusion: Borders, Borderlands, and Security:

- European and North American Lessons and Public Policy Suggestions', in Borderlands: Comparing Border Security in North America and Europe, ed. Emmanuel Brunet-Jailly (Ottawa: University of Ottawa Press, 2017), 352.
- 63 Canada, Perimeter Security and Economic Competitiveness. What Canadians Told Us, 15.
- 64 United Nations, *United Nations*Declaration on the Rights of Indigenous
 Peoples (United Nations, 2008).
- 65 Andrew Bennett and Colin Elman, 'Qualitative Research: Recent Developments in Case Study Methods', Annual Review of Political Science 9 (2006), 464.

10

An Evaluation of the Security Relationship between Canada and Greenland

Andrew Chater

10.1. Introduction

Canadians see Greenland every time they look at a map of their country, but perhaps do not realise the depth of the relationship between these two international actors. Canada (a sovereign country) and Greenland (a semi-sovereign constituency of Denmark) have a lot in common. There are similar populations of Inuit living in each country (65,000 in Canada and 50,000 in Greenland). The Inuit represent less than 1 per cent of the Canadian population, yet more than 90 per cent of Greenland's population. The capitals of Greenland (Nuuk) and Canada's Arctic territory Nunavut (Iqaluit) are closer together than the national capitals of Ottawa, Ontario and Washington, DC. Canada has a similar amount of Arctic tundra compared to Greenland (2.6 million square kilometres versus 2.2 million square kilometres). The political movement for Greenland's home rule emerged after the Second World War, which is more or less concurrent with the movement demanding responsible government for Canada's Arctic territories. One could argue that Canadians and Greenlanders are less regional neighbours than they are cultural cousins. Yet, a conflicting picture emerges of the security situation between these international actors. Ask a Canadian about Canada's number one international partner, and he or she will invariably say the United States, or perhaps Britain. These relationships have obvious strategic importance. Yet, there is importance in the relationship with Greenland, as well.

There are at least four defining security issues between the two countries. First, there is a great deal of attention on the fact that both claim ownership of Hans Island in the Nares Strait. Territorial disputes are relatively rare in the world today, especially disputes between allies. Second, Canada and Denmark disagree on the extent of the continental shelf that extends off the two countries, possession of which bestows mineral rights. Third, there has been concern over potential oil development off Greenland and lacking environmental regulation, as an oil spill from a rig in Greenland's waters would damage Canada's marine environment, and vice versa. Fourth, a proposal exists to allow unfettered travel between Canada and Greenland for the Inuit. challenging notions of state rights and sovereignty in historical context. Based on a LexisNexis search of the news articles about Canada and Greenland in 2017 and 2018, these four issues were predominant in media coverage, as the majority of articles concerned resources, borders, tourism, climate change and scientific research.2 These articles often paint a conflictual picture of relations between Canada and Denmark. Examples of headlines include: 'Canada's Arctic Development Lagging: Report – Russia, Norway, U.S., Greenland All Make Significant Inroads'; 'Inuit Want Free Travel Over Arctic Waters'; and 'Greenland Won't Stop Harvesting Atlantic Salmon'. One could look at this information and conclude that the potential for conflict between the countries exists.

What is the nature of the security relationship between Canada and Greenland? This chapter presents an argument that security governance between the two actors is strong and that securitisation of these four issues has taken place for political purposes. First, Hans Island is inconsequential and only about one square kilometre in size. Canada, Denmark and Greenland have repeatedly pledged to resolve the issue peacefully. Second, Canada, Denmark and Greenland have worked together to map their conflicting continental shelves and again have pledged to resolve the dispute peacefully. Third, although exploration has taken place, viable oil production has not been quick to develop and so paranoia over the consequences is premature. Fourth, political action on the proposal to loosen Canada and Greenland's border has not been forthcoming, perhaps more an aspiration than an eventuality. This chapter draws on primary and secondary sources to complete a case analysis.

To make this argument, this paper draws on critical security theory. Positivist theorists of international security, which we might term mainstream theorists, see security threats as real and pressing issues with which states must contend. Examples of these theories are realism and liberalism. Critical security theorists see security threats as political constructs that emerge through 'securitisation'.³ Endangering issues emerge, but whether state leaders see these as security threats depends on their shared understanding and construction. Defining an issue as a security issue can be advantageous as it allows a state response outside of the normal constraints on government behaviour.⁴ In securitisation, a 'securitising actor', such as a government or the media, describes an 'existential threat' to a 'referent object', such as the state or a group of people.⁵ In essence, the securitising actor argues that a particular issue threatens the continued existence of something worthy of protection. People must understand that the securitising actor has authority, that the threat is real and the referent object is worthy of protection. If successful, people will accept extraordinary measures to respond to the issue. The securitisation process elevates the importance of issues.

For example, politicians (a securitising actor) might argue that another country's military is an existential threat because it has the ability to invade and take control of a given territory (a referent object). For successful definition as a security issue, citizens would need to accept that the politicians are trustworthy, that the opposing country's military is strong and that losing control of the given territory is undesirable. An oppressive country might have difficulty convincing its population that outside forces are a threat, rather than liberators. The government of a strong and free country might have trouble convincing its population that a foreign army really might carry out an attack. If securitisation is successful, politicians have a plethora of extraordinary tools available not normally available to deal with a crisis, such as limiting the freedom of speech to criticise the war effort or imposing conscription to ensure adequate troop levels. This chapter presents an argument that security governance between Canada and Greenland is strong, and that securitisation of various issues has taken place for political purposes, with governments and sometimes non-state actors elevating well-managed issues to the level of security threats.

10.2. Hans Island

Canada and Denmark both dispute the ownership of Hans Island, a one-kilometre square piece of land that lies in the Arctic Ocean between Canada's Ellesmere Island and Greenland. In 1973, the governments of Canada and Denmark formally divided the maritime territory between Canada and Greenland, but left the question of Hans Island in dispute. The December 1973 treaty is the Agreement between the Government

of the Kingdom of Denmark and the Government of Canada relating to the Delimitation of the Continental Shelf between Greenland and Canada. The coastal boundaries around the island are clear, but neither country could produce documentation to show which country possesses the surface of the island. For 45 years, there has been no resolution to the conflict.

Does the island contain resources? No, as the island is a rock with no vegetation. Is there a historical interest based on human inhabitation? No, as humans have never lived on the island. Would possessing the island affect either country's coastal boundaries? No, as Canada and Denmark divided up all available coastal territory around the island. Would it affect international law? No, it would not have implications under the United Nations Convention on the Law of the Sea articles 55–75, which establish the area and rules of exclusive economic zones '200 nautical miles from the baselines from which the breadth of the territorial sea is measured'.

Initially, there was amped-up military rhetoric around the island; recently, these tensions have eased. There have been trips to the island to demonstrate sovereignty by Canadian and Danish officials, such as a 2002 voyage of the Danish frigate *Vaedderen* past the island that may have resulted in troops landing⁷ or a July 2005 visit to the island by Canada's Defence Minister Bill Graham, 8 both of which led to diplomatic protests. In 2008, the governments of Canada and Denmark put an end to these shows and signed the Ilulissat Declaration, which saw the five Arctic coastal states pledge to solve such issues peacefully, strongly asserting that there is no need for a comprehensive legal treaty in the Arctic. The declaration was an initiative of the government of Denmark, seeking explicitly to avoid the militarisation of the region; indeed, officials saw the agreement as the beginning of a new forum to address governance issues. The Ilulissat Declaration (2008) says, 'We remain committed to this legal framework and to the orderly settlement of any possible overlapping claims.' Ten years later, the five Arctic coastal countries renewed the agreement, and Canada and Greenland announced an inter-departmental task force to resolve the issue. 10 Negotiations seem likely to be smooth.

There is significant academic debate over the island. Canadian political scientist Rob Huebert writes that, 'Canadians need to be concerned about the precedent that will be established by an unfavourable resolution'. International lawyer Christopher Stevenson writes that the resolution of the issue in the International Court of Justice could set a 'dangerous precedent' linking military visits with sovereign

control, as one way the court could resolve the dispute would be to equate both countries' earlier military visits with effective control. ¹² International lawyer Michael Byers is critical of the view that the Hans Island issue represents vital security interests for either country. He believes that both countries should be able to resolve the issue in simple negotiations. ¹³ He has provided three solutions to the problem, either dividing the island, sharing sovereignty over the surface or declaring it international territory.

This case represents an example of securitisation of a minor issue. The securitising actors are the governments who militarised the island and made public displays of force to assert sovereignty, such as the voyage of the Vaedderen. The existential threat is continued sovereignty over the island, even though there is no economic benefit in such status. The referent object is an inconsequential island that both countries could abandon easily. In 2010, I interviewed former Canadian Minister of Defence Bill Graham about the issue. In our interview, he admitted that his visit to the island in 2005 was to create intrigue around the dispute as a means to win investment in Arctic defence. 14 He said that it was necessary to articulate drama around Arctic sovereignty as a means to place Arctic defence onto the crowded national agenda. In our interview, he characterised the Hans Island issue as an example of such an effort to bring attention to the area, though noted his visit to the island was unplanned, coming amidst a number of stops in the region as a late addition to the itinerary. In essence, Graham admitted to being a securitising actor and politically constructing an issue, though he did not use such language. He did not characterise the issue over the island as innately important. He stated he was supportive of the idea of Canada and Greenland sharing the island, though with equivocations. The fact that Canada and Denmark did not resolve the issue in 2008 or 2009 is bewildering. The conflict over the island is inconsequential yet well managed, despite the lengthy process to bring about a resolution.

10.3. The Continental Shelf

The governments of Canada and Denmark both strive to define the extent of their outer continental shelves. The United Nations Convention of the Law of the Sea, in Article 76, states that countries can exploit sub-surface national resources on their continental shelves up to 350 nautical miles from the end of their coastlines. Beyond 200 nautical miles, the waters are international waters, which mean that an extended continental shelf

only gives countries rights to resources beneath the surface, such as oil or gas. The five circumpolar countries (Canada, Russia, Denmark, the United States and Norway) are currently in the process of mapping their continental shelves, which they will submit to a United Nations panel for evaluation. The area is unlikely to yield significant economic resources. A North Atlantic Treaty Organization report has found that 95 per cent of resources in the Arctic lie within 200 nautical miles of coastal states, and those remaining resources are likely cost-prohibitive. ¹⁵ Countries map their continental shelves in the Arctic because it is a scientifically difficult thing to do, and so the effort to do it brings international prestige in some circles. It is akin to a space programme. In the case of Canada, preparing a robust claim is important scientifically and supports Canada's claim in the North Atlantic, which will likely produce energy resources.

The Canadian government under Prime Minister Stephen Harper, a Conservative politician, perpetuated the issue as a security matter. It made Canada's Arctic an issue of sovereignty, such as making 'exercising our Arctic sovereignty' one of four pillars of its official northern strategy. Londer this pillar, it said that ensuring Canada claimed the 'maximum extent of its continental shelf' was a key priority. Sovereignty is a security concept, as protecting sovereignty is perhaps a country's most elemental responsibility. Canada and Denmark spent more than seven years mapping shelves, and Canada was ready to make its claim, which scientists determined did not include the North Pole; however, in December 2013, the media reported that the government of Stephen Harper ordered scientists to complete more surveys and prepare a claim that included the North Pole. In essence, the Harper government ordered scientists to find a way to include the North Pole in Canada's claim, even though the evidence did not support this conclusion.

Political scientist Elizabeth Riddell-Dixon's book *Canada, Sovereignty* and the Extended Continental Shelf implicitly rejects the notion that the mapping of the continental shelf is a contentious issue. She writes, What resources do exist beyond two hundred nautical miles will be difficult and expensive to develop'. She goes on, In contrast to such alarmist headlines, the process of delineating Arctic ECSs has overall been marked by exemplary bilateral and multilateral cooperation among Arctic countries'. She confirms, The five Arctic coastal states – Canada, Denmark, Norway, the Russian Federation, and the United States, which is not even a party to UNCLOS – are defining or have defined their ECS in accordance with the norms enshrined in the Convention'. She concludes that the December 2013 decision by the government of Canada under Conservative Prime Minister Stephen Harper to request a more

ambitious ECS claim undermines confidence in Canada's process and is unlikely to lead to a positive outcome.²²

This case represents an instance of securitisation, taking a scientific issue and making it political by forcing scientists to make an ambitious claim to bolster sovereignty. In the words of Riddell-Dixon, 'It is impossible to document the full story of what transpired behind the scenes as the Harper government was careful to keep it out of the public domain'.²³ Yet, it is possible to make extrapolations. Canadian journalist Paul Wells quotes an unnamed Conservative strategist who says that, upon becoming leader of the Canadian Alliance party in 2002 and Prime Minister of Canada in 2006, Prime Minister Stephen Harper knew that many symbols of Canadiana had an association with the Liberal Party: 'Health care. The Charter. Peacekeeping. The United Nations. The CBC'.²⁴ Wells says that Harper frequently discussed an article in the magazine The Report that asked, 'Does the Right hate Canada'. 25 The Conservative strategist says that Harper deliberately tried to emphasise patriotic symbols not associated with the Liberal Party brand, such as the Arctic, the military, the Royal Canadian Mounted Police, hockey, sports, the monarchy and the War of 1812.26 Canada's health care system, the Charter of Rights and Freedoms, most peacekeeping missions, joining the United Nations and establishment of the Canadian Broadcasting Corporation had come under Liberal governments: even Canada's flag. national anthem and national colours are Liberal achievements. There are not the same Liberal associations with the Arctic, as both the Liberal and Conservative parties can claim some political heritage there, along with police, hockey and the military. In this case, a securitising actor (the government of Canada under Stephen Harper) acted to protect Canada's Arctic sovereignty (an issue related to an existential threat) and made the continental shelf a referent object by associating it with Canada's sovereignty, despite the fact the issue is better understood as a scientific or legal issue.

10.4. Oil and Gas in Greenland

There is concern that oil development off Greenland threatens Canada. A 2008 report from the United States Geological Survey predicts that '90 billion barrels of oil, 1,669 trillion cubic feet of natural gas, and 44 billion barrels of natural gas liquids may remain to be found in the Arctic, of which approximately 84 per cent is expected to occur in offshore areas'. The report has more than 330 citations, according to Google

Scholar. Earlier cited headlines clearly present the case that there is a potential for oil development in the Arctic region. Despite this potential, Canada has rolled back its offshore oil exploration in the Arctic. Canada has more than 100 exploration licences, leases or permits issued concerning its Arctic dating back decades, ²⁸ but it put a moratorium on new development in 2016 for environmental reasons. ²⁹ Greenland, meanwhile, has a clear interest in increasing its offshore oil production. A July 2009 law gives Greenland control over its resources noting, 'Revenue from mineral resource activities in Greenland shall accrue to the Greenland Self-Government authorities'. ³⁰ The agreement also freezes funding for Greenland from the Danish government, and adjustment based on the 'general price and wage index of the Finance and Appropriation Act for the year concerned'. ³¹ The oil and gas policies of Greenland and Canada differ.

The government of Greenland has actively encouraged offshore gas and oil exploration. Cairn Energy began drilling exploratory wells in 2010, with three wells in 2010 and four in 2011.³² Greenland's Prime Minister at the time, Aleqa Hammond, indicated that offshore oil was a major source of potential new revenue.³³ Yet, oil production in the Arctic is not immediate. Statoil gave up three exploration licences in 2015, citing lack of economic potential in the light of current oil and gas prices.³⁴ Exploration of the area continues, with eight zones currently attracting interest, though the government does not expect production for 5–10 years.³⁵ Viable areas for extraction are not immediate, and the government has not been aggressive in consulting with local community groups, such as the Inuit Circumpolar Council.³⁶ Environmental groups and indigenous groups have protested exploration wells (such as Greenpeace in 2011).³⁷ The discovery of exploitable oil is probable, though it may not be exploitable.

Various academic articles indicate that oil and gas development is a driver of state behaviour in the Arctic. They clearly see that economic interest is a major motivator of state action in the region.³⁸ The question as to whether the discovery of oil will benefit local communities is pertinent. Political scientist Anne Hanson writes, 'I suggest that if oil is discovered, there will be a need for local strategies for development, identifying and addressing the necessary initiatives and investments to achieve a sustainable local development'.³⁹ A lot of academic work in recent years has focused on oil and gas in the region.

In this case, environmental and indigenous groups are the securitising actor, arguing that oil exploitation is an existential threat to the environment; yet, there is relatively strong governance of oil and

gas exploration. Canada and Denmark have two agreements that sees states pledge to work together and share resources in the event of an oil spill or search and rescue emergency (the 2011 Agreement on Co-operation on Aeronautical and Maritime Search and Rescue in the Arctic and the 2013 Agreement on Co-operation on Marine Oil Pollution Preparedness and Response in the Arctic). The Arctic Council was the venue to create these agreements, and so all Arctic countries are parties. Both treaties establish that states will follow international law in the Arctic, divide the region into zones of responsibility, encourage interdepartmental communication to address issues, establish that states will work together in the event of emergencies and oblige information sharing should issues emerge. These agreements do not mean that governance is foolproof, but do mean that states have taken a collaborative approach to regional management, which will likely continue in the future. These agreements, coupled with slow progress on oil and gas development, mean that this issue will not be pressing for several years.

10.5. Borders

There has been discussion in recent years about opening borders for Inuit peoples around the world. The Inuit people moved freely between modern-day Alaska, five Canadian territories or provinces and Greenland for a millennium before contact with Europeans. The states that exist in the region today bear little in common with natural divisions among the Inuit. There are seven major Inuit language groups with dozens of community variations. More than 65,000 Inuit live in Canada, with Inuit comprising the majority in one of its territories, Nunavut, as well as in other self-governing regions. About 51,000 Inuit live in Greenland, which is nearly the entire population. Nearly 17,000 Inuit live in the United States, the vast majority in Alaska, and almost 16,000 Inuit live in Denmark, which are distinct minorities. An Inuit commission led by the Inuit Circumpolar Council, the Pikialasorsuaq Commission. tasked to consult on management of the North Water Polynya between Greenland, Ellesmere Island and Baffin Island, has recommended that Inuit should be able to travel 'between Ellesmere Island and Greenland in dogsleds, on snowmobiles or using small planes'.40 The Inuit would be able to travel between Canada and Greenland without passports and without necessarily entering a border crossing. They call for governments to 'establish a free travel zone for Inuit across the Pikialasorsuaq region'.41

There are less than 150,000 Inuit people in the world; it seems reasonable to allow them free passage between their territories. The security risks are minimal, given the small population. There is a moral argument that free passage recognises the legitimate historical territory of the Inuit before the imposition of borders by colonial powers, namely Canada and Denmark. Opening borders could send an important signal that the heritage of the Inuit has a place in modern-day Canada and Denmark, and that the historical territory of indigenous peoples has a place in the modern world. There is a practical argument as well; northern communities in Canada lack passport processing, and so obtaining a passport can be onerous, especially for isolated communities. A significant number of Inuit, especially poor Inuit, do not currently possess a passport.

There is relatively little academic literature on this topic; however, some literature points on this proposal are not without precedent. Historical work shows that Article III of the Jay Treaty from 1794 between the United States and Britain allows free movement of Aboriginal peoples from Canada into the United States, which is still in effect to an extent today. ⁴² Indigenous people can move from the Canada to the United States without a passport, but the same is not true in reverse; it is difficult to think of significant security issues that have emerged because of this arrangement. The chapter by Greg Boos, Heather Fathali and Greg McLawsen in this volume addresses the matter in greater depth.

The securitising actor, in this case, is governments. Governments inherently securitise the issue through the basic creation of a border. A controlled border sends the message that there are threats that need detecting moving across the border, which is true. The existential threat is sovereignty, as in the protection of international borders and the limitation of human travel. The sanctity of international borders is the referent object. States could easily allow the free movement of indigenous peoples across international borders, and doing so would create an interesting precedent for historical usage in international border law. It does not seem likely this issue will see resolution for years to come. It does not seem to be a top issue for indigenous communities or indigenous peoples' organisations, though it is on the agenda. So far, there is little movement on the issue.

10.6. Conclusion

What is the nature of the security relationship between Canada and Greenland? The relationship is collaborative, and issues have good

management. There is a dispute over the ownership of Hans Island, which both countries have agreed to resolve peacefully based on international law. In the past, governments securitised the issue by making it a military matter; that rhetoric lingers, but it does not represent the current state of relations. Both countries seek to map their extended continental shelves and have worked together to do so. The government of Canada, in the past, securitised the issue by equating the mapping with protecting sovereignty; the effects of the argument are clear, but current relations are more collegial. Some groups, particularly environmentalists, are fearful that offshore oil development threatens the environment. There has been securitisation of the issue, which has some merit; however, both states have shown they will work together to manage offshore development, seen through two treaties created in the Arctic Council. An issue that remains unresolved is whether to open the border for indigenous peoples. States securitise the issue; there is little movement on the issue. Overall, despite some outward signs that disagreement exists, the potential for broad conflict between Greenland and Canada is very low. When the relationship between the two countries makes headlines, which is relatively rare, we should remember the frequent collaborative spirit of Arctic international relations.

Notes

- This chapter refers to Greenland as a country, even though it is not a sovereign state. It is a constituent country of Denmark.
- 2 Excluding obituaries.
- 3 Johan Eriksson, 'Observers or Advocates? On the Potential Role of Security Analysts', Co-operation and Conflict 34, no. 3 (1999): 215
- 4 Karen Marie Fierke, Critical Approaches to International Security (Malden, Massachusetts: Polity Press, 2007), 104.
- 5 Barry Buzan, Ole Wæver, and Jaap de Wilde, Security: A New Framework for Analysis (Boulder, Colorado: Lynne Rienner, 1998), 29–30.
- 6 United Nations Convention on the Law of the Sea, 1833 UNTS 3; 21 ILM 1261 (1982), article 57.
- 7 Rob Huebert, 'Return of the Vikings', The Globe and Mail, 28 December 2002, https:// www.theglobeandmail.com/opinion/ return-of-the-vikings/article758850/.
- 8 Brian Laghi, 'Danes Call Graham's Visit to Hans Island "Occupation", *The Globe and*

- Mail, 27 July 2005, https://www.theglobeandmail.com/news/national/danes-call-grahams-visit-to-hans-island-occupation/article20424592/.
- 9 Jon Rahbek-Clemmensen and Gry Thomasen, Learning from the Ilulissat Initiative: State Power, Institutional Legitimacy, and Governance in the Arctic Ocean 2007–18 (Copenhagen, Denmark: University of Copenhagen Centre for Military Studies, 2018), 16–17.
- 10 Sara Frizzell, 'Truce? Canada, Greenland and Denmark Inch Closer to Settling Decades-Old Spat Over Hans Island', CBC News, 28 May 2018, https:// www.cbc.ca/news/canada/north/ canada-denmark-battle-ownershiphans-island-1.4679142.
- 11 Huebert, 'Return of the Vikings'.
- 12 Christopher Stevenson, 'Hans Off!: The Struggle for Hans Island and the Potential Ramifications for International Dispute Resolution', Boston College International and Comparative Law Review 30 (2007): 273–74.

- 13 Michael Byers, Who Owns the Arctic: Understanding Sovereignty Disputes in the North (Victoria, British Columbia: Douglas and McIntyre, 2009), 23–26.
- 14 Andrew Chater, 'Beyond the "Golly Gee" Stage: The Inspiration of Academics Who Study Arctic Sovereignty', *International Journal* 67, no. 3 (2012): 846.
- 15 Osman Askin Bak, The High North: Emerging Challenges and Opportunities (Special Draft Report) (Brussels; NATO Parliamentary Assembly, Scientific and Technology Committee, 2015).
- 16 Government of Canada, Canada's Northern Strategy: Our North, Our Heritage, Our Future (Ottawa, Ontario: Minister of Indian Affairs and Northern Development and Federal Interlocutor for Métis and Non-Status Indians, 2009).
- 17 Government of Canada, *Canada's* Northern Strategy, 12.
- 18 I was a research assistant on this book project.
- 19 Elizabeth Riddell-Dixon, Breaking the Ice: Canada, Sovereignty and the Extended Continental Shelf (Toronto, Ontario: Dundurn Press, 2017), 31.
- 20 Riddell-Dixon, Breaking the Ice, 37.
- 21 Riddell-Dixon, Breaking the Ice, 39.
- 22 Riddell-Dixon, *Breaking the Ice*, chapter 6.
- 23 Riddell-Dixon, Breaking the Ice, 215.
- 24 Paul Wells, The Longer I'm Prime Minister: Stephen Harper and Canada, 2006– (Toronto, Ontario: Random House Canada, 2013), 68.
- 25 Wells, The Longer I'm Prime Minister, 67.
- 26 Wells, The Longer I'm Prime Minister, 68.
- 27 Kenneth J. Bird, et al., Circum-Arctic Resource Appraisal: Estimates of Undiscovered Oil and Gas North of the Arctic Circle: U.S. Geological Survey Fact Sheet. (Washington, DC: US Geological Survey, 2008).
- 28 http://www.aadnc-aandc.gc.ca/eng/110 0100036900/1100100036901.
- Office of the Prime Minister of Canada, 'Select Actions Being Taken Under the United States-Canada Joint Arctic Leaders' Statement', last modified 20 December 2016, http://pm.gc.ca/eng/ news/2016/12/20/select-actionsbeing-taken-under-united-states-canadajoint-arctic-leaders-statement.
- 30 Act on Greenland Self-Government. Act no. 473 of 12 June 2009, chapter 3, article 7.1.
- 31 Act on Greenland Self-Government, chapter 3, article 5.2.

- 32 CBC News, 'Greenland Offshore Drilling is Safe: Cairn Energy', CBC News, 25 May 2011, https://www.cbc.ca/news/canada/ north/greenland-offshore-drillingis-safe-cairn-energy-1.977542.
- 33 Brian Scheid, 'Offshore Oil Production in Greenland Inevitable: Prime Minister', S&P Global Platts, 26 September 2014, https://www.spglobal.com/platts/en/market-insights/latest-news/oil/092614-offshore-oil-production-in-greenland-inevitable-prime-minister.
- 34 Reuters, 'Greenland Will Offer Oil, Gas Concessions Next Year – Minister', 21 October 2017, https://www.reuters. com/article/greenland-china-oil-gas/ update-2-greenland-will-offer-oil-gasconcessions-next-year-minister-idUSL 4N1N63TY.
- 35 Sputnik International, 'Greenland's Arctic Oil Exploration Unlikely to Bring Results in 5–10 Years', 24 May 2016, https://sputniknews.com/world/201605241040180017-greenland-oil-exploration/.
- 36 Jim Bell, 'ICC-Greenland Worries About Potential Oil-Gas Activity in Baffin Bay', Nunatsiaq News, 13 January 2017, http:// nunatsiaq.com/stories/article/65674iccgreenland_worries_about_oil-gas_ development_in_baffin_bay/.
- 37 CBC News, 'Greenland Offshore Drilling is Safe: Cairn Energy'.
- 88 For example, Klaus Dodds, 'A Polar Mediterranean? Accessibility, Resources and Sovereignty in the Arctic Ocean', Global Policy 1, no. 3 (2010): 303–11; Kathrin Keil, 'The Arctic: A New Region of Conflict? The Case of Oil and Gas', Cooperation and Conflict 49, no. 2 (2014): 162–200
- Anne Hanson, 'Offshore Oil Exploration and Impact Assessment in Greenland', Northern Public Affairs, May 2016, 65.
- 40 Bob Weber, 'Inuit Want Free Travel Over Arctic Waters', Canadian Press, 24 November 2017.
- 41 Pikialasorsuaq Commission, 'An Inuit Vision for the Future of the Pikialasorsuaq', last modified 23 November 2017, https://www.inuitcircumpolar.com/press-releases/an-inuit-vision-for-the-future-of-the-pikialasorsuaq-2/.
- 42 Denise Evans, 'The Jay Treaty and Aboriginal Rights', *Dalhousie Journal of Legal Studies* 4 (1995): 219.

11

Arctic Security for a Big Small Country

Tony Penikett

11.1. Introduction

What does 'Arctic security' mean for a nation state with lots of geography, but not many people? To be sure, superpowers still rule the world or dream of doing so. Throughout the Cold War, the 'old' superpowers, Russia and the United States, scoped the great white spaces of Arctic lands and waters as potential battlegrounds. Near the end of the Cold War, on 1 October 1987 at Murmansk, Mikhail Gorbachev proposed that the Arctic become a 'zone of peace' and a new theatre of cooperation, but we are not there yet. The old superpowers still aim enough nuclear weapons at each other to incinerate the planet at the press of a button. And the 21st century now catches the ascendant powers: China, India and others casting covetous eyes over the Arctic's lands, resources and waters.

So, how might an Arctic nation with bountiful natural wealth but limited human resources respond not just to the challenges of climate change, cyber warfare and globalisation but also considerable threats to its economic, social and environmental security from distant powers? One answer might be a 'bottom up', 'North First' or communitarian approach to security.

11.2. Old Crow

In *Hunting the Northern Character*, I wrote about a memorable 2006 conversation I had with a Canadian Senator. The Senator had travelled from Ottawa to visit Old Crow, the home of the Vuntut Gwitchin First Nation (People of the Lakes), the northernmost First Nation in Canada's Yukon

Territory. In a word, the Senator was astonished by what he saw. Rather than the poverty, poor housing and dysfunction evident on many 'Indian reserves' in southern Canada, he witnessed in Old Crow a bustling, prospering community, with new houses under construction and new jobs in the regional airline in which the Vuntut Gwitchin were now part owners.

The source of the economic and social health in this community resulted from its land claims treaty negotiated with the federal and territorial governments and signed in 1993, which returned 7,744 square kilometres of land to Vuntut Gwitchin ownership and CA\$19.2 million 'compensation', much of it held in trust for future generations.²

Gazing upon the community's new houses and airline jobs, the Senator wondered aloud how Canada could justify that expenditure. Think of it as an investment, I responded. Look west to Alaska. The US has something like 20,000 armed forces in the state. At that time, Canada had but two soldiers based in the territory. The Vuntut Gwitchin Treaty and the viable community it fostered, I argued, represented a substantial investment in Canada's Arctic sovereignty and security. At that point, I had not heard public policy articulated exactly that way, but validation of my view came in a 2015 EKOS Research Associates survey finding that 78 per cent of respondents in the Canadian North and 69 per cent of respondents in the Canadian South – 81 per cent and 71 per cent respectively in 2010 – thought that the 'best way to protect [Canada's] national interests in the Arctic is to have [Canadians] living there'.

11.3. Difficult Choices

As every politician knows, governing means making choices between: sovereignty and security; economic and social security; also, arms acquisitions and environmental protection. Has Canada sometimes traded away some of its sovereignty? Historian Desmond Morton has written that, by joining various alliances, the country did exactly that.⁴ Canadians quickly air their anxieties about the country's 'sovereignty', such as when, in 1969, the oil tanker *SS Manhattan* sailed through the Northwest Passage, which Canada sees as its 'internal waters', and the US regards as 'international strait'. Although Canadian nationalists saw this as an act of American 'imperialism', Canada and the United States did not go to war over the issue. Rather, Ottawa and Washington simply agreed to disagree. Regardless, in 1970, the federal government asserted Canadian sovereignty with the Arctic Waters Pollution Prevention Act.

After US Coast Guard icebreaker *Polar Sea* navigated the Passage once more in 1985, Canada drew straight baselines around the Arctic Archipelago, effectively redefining its Arctic boundaries. For all that, an EKOS poll showed that one in four Canadians imagined that the country had military bases all along the Northwest Passage.⁵ During the Cold War, only American and Russian submarines actually cruised through Canada's 'internal waters'.

More so, can any 'middle power' afford both a mighty military machine and a government-funded health care system? The United States remains the most heavily armed nation in the world. By contrast, Canada's single-payer health care system is its most expensive and popular social programme. Canada's healthcare system was estimated to cost CA\$253.5 billion in 2018; the country spends one tenth of that on defence.

In truth, the eight Arctic states all face tough choices about security expenditures. Canadians and Americans agree on the urgent need for Arctic Ocean ports and new icebreakers, but neither Parliament nor Congress have proved ready to appropriate the necessary sums. A single icebreaker may cost over US\$1 billion, and southern politicians will always have other priorities.

11.4. Different Perspectives on Security

Northerners have long been aware that 'security' may mean different things to different folk. At a US and Canada Military Law Training session at a Seattle Coast Guard base, in September 2015, I suggested that, for the Canadian Arctic, three broadly different perspectives colour security debates among parliamentarians, political scientists and Northern thinkers.

a. For conservatives, security must be bought with armaments and military infrastructure. Armed might increases a nation's command and control of its territory. Rob Huebert, an articulate exponent of this view, writes: 'Within Canada, Arctic sovereignty can be understood in the context of the Canadian government's ability to *control* what happens in the area that it defines as its Arctic region.' However, as every caribou hunter and Arctic mariner knows, *control* is an illusion. No matter how massive a country's military spending, that cannot stop climate change or prevent extreme weather events. Besides, Arctic security means much more than Arctic sovereignty.⁸

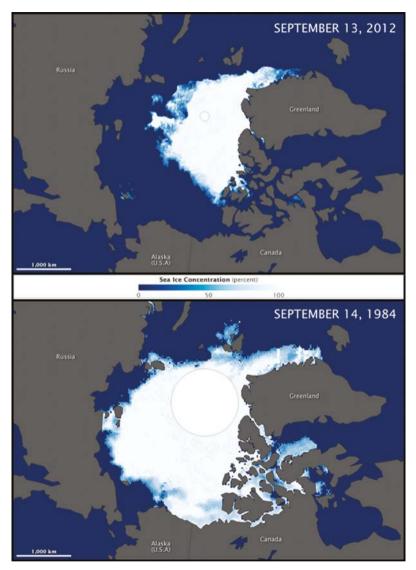


Fig. 11.1 NASA Earth Observatory maps comparing minimum extent of Arctic sea ice from 2012 (top) and 1984 (bottom). Assembled from NASA Earth Observatory images by Jesse Allen, using data from the Advanced Microwave Scanning Radiometer 2 AMSR-2 sensor on the Global Change Observation Mission 1st-Water (GCOM-W1) satellite, 2012. Retrieved from http://earthobservatory.nasa.gov/IOTD/view.php?id=79256 via Wikimedia Commons.

To protect against external threats, about half of Canadians do agree that their country must build a more muscular military presence in the Arctic. At the same time, everybody knows that fighter jets screaming over the tundra or warships calling at all the world's ports, but never to the non-existent ports of Arctic North America, do not make northerners feel secure. Another uncomfortable truth for Canada is that, for decades, both conservative and liberal governments loudly announced military procurement decisions, then followed with missed deadlines, endless delays and quiet cancellations.

b. Former Liberal foreign minister Lloyd Axworthy promoted a concept called 'human security'. For liberals, 'human security' means, among other things, food, housing and individual human rights. Indeed, Canadian public opinion research showed that citizens saw threats to Arctic security coming not from missiles or bombers, but climate change, environmental degradation and extreme poverty.¹⁰ In an address to the United Nations, Axworthy argued: '... security should be measured in terms of ultimate outcome for individuals and peoples...'¹¹

One problem with the liberal idea is that it focuses on the *individual*, who may not be a good reference point for Arctic security. For Hollywood, the lone man with a gun represents the iconic figure of the Western frontier, but in Jack London's 'To Build a Fire', the Cheechako walking down the Yukon River at fifty degrees below zero – without a companion – freezes to death. Perhaps neither the *state* nor the *individual* stand as a referent point for Arctic security.

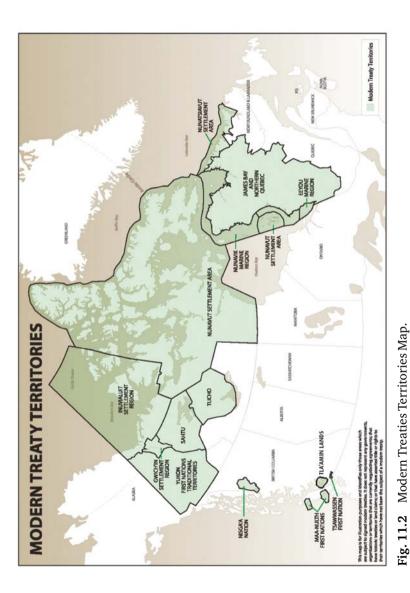
As Franklyn Griffiths, Canada's pre-eminent Arctic scholar, explains:

'I suggest we take the referent object for life and quality of life in the Arctic to be neither the state, nor the individual, nor civil society, but the *community*, typically the remote small indigenous community which is embedded in the natural environment. Characterising the referent object, the term "community" also sums up the many and varied purposes of collective action for the good in Arctic conditions. It connotes order without law. This is order that's based on shared norms or standards of behaviour that govern human relations and, especially in an Arctic setting, human relations with the world of nature."

c. From this kind of 'social democrat' perspective, security starts with viable cooperative communities as the cornerstone. As Gorbachev declared on 1 October 1987: 'The community and interrelationship of the interests of our entire world is felt in the northern part of the globe, in the Arctic, perhaps more than anywhere else.' A former conservative prime minister, Stephen Harper, used to say of the Arctic that Canada must 'use it or lose it', but in the Far North, there exist enduring human communities that have been 'using it' since time immemorial. Indeed, the greatest threat of Canada 'losing' its Arctic might arise not from hostile nuclear submarines or long-range bombers, but from the social, climatic and economic challenges that keep those living there from fully benefiting from Canadian citizenship.¹4

Securing the world's emerging Arctic 'community of communities' might sound like an idealist's dream, but survey research suggests that building towards such a goal would appeal not only to Canadians, but to other Arctic residents as well. ¹⁵ By itself, the Canadian military could not defeat the army of any major power. Taking a multidimensional approach to securing the Canadian Arctic and the wider Arctic community is more realistic than making empty promises of military expansion, which offer only fantasies of command and control.

Harking back to the conversation with the Senator in Old Crow, treaty negotiations have contributed mightily to Arctic sovereignty and security in both Canada and the United States. Following the Alaska Native Claims Settlement Act (ANCSA) of 1971, indigenous Alaska communities collectively recaptured 180,000 square kilometres of Alaska lands, making them the largest private landowners in the state, and almost US\$1 billion in compensation. Following ANCSA, Canada chose to negotiate 20 treaties with northern indigenous peoples. For indigenous people, these treaty lands and self-government agreements represented redress for a century of colonisation. For Canada, these treaties stand as enduring expressions of the nation state's sovereignty and security. Of necessity, given the political complexities of our time, a successful Arctic security strategy would combine elements of all three perspectives described above.



Reprinted with permission of the Land Claims Agreements Coalition of Canada.

http://landclaimscoalition.ca.

11.5. Securing the Arctic Community

At the North American Arctic Maritime and Environmental Security Workshop in Anchorage in September 2018, I suggested that a strategic security architecture for a big country with a small population then might need four dimensions: a deep conception of security; wide cooperation around the Arctic region; longitudinal, two-way collaboration between Arctic villages, regional and national governments, and international entities such as the Arctic Council, International Maritime Organization (IMO Polar Code), NATO, NORAD, SAR treaty and the United Nation Convention on the Law of the Sea (UNCLOS); plus investment over time in civilian and military infrastructure.

- Deep Conception of Security: A deep conception of 'security' would a. encompass everything from military to individual to community security, including, of course, economic, social and environmental aspects. Without potable water, individuals suffer. Without food security, a community suffers. Without habitable dwellings, Arctic residents shiver in the dark. Without income security, homeless northerners bed down beneath ATMs. Absent climate change mitigation, the whole world suffers. Food, water, housing, environmental, economic and social security all matter, especially in the Arctic. In their survey sample drawn from the Canadian North, EKOS found that, when asked to rate five different aspects of Arctic security, nine in 10 respondents identified environmental and social security as being the most important; two thirds regarded economic security and cultural and language security as such; while 45 per cent placed importance on national security. 16 This illustrated that to many Canadians, particularly those in the North, the conception of security includes domestic factors (cultural, social and environmental security) in addition to national security. 17
- b. Wide Cooperation: On-the-ground cooperation among villages, cities and regions, also nation-states, is also a fundamental requirement for Arctic security. Norwegian scholar Andreas Østhagen notes that the European Union has responded to Washington's demands for increased EU defence spending by improving regional cooperation, pooling of resources and the sharing of talent. Østhagen thinks that collaboration and cooperation may be a financial necessity, even for superpowers.¹⁸ Even now, long after the Cold War, Swedish diplomat and security expert Rolf Ekéus thinks we cannot achieve security in the Arctic without the cooperation of both Russia and the

- United States, which at the Bering Strait are separated by very few kilometres.¹⁹ In any case, today's threats to Arctic security are economic and environmental, and more civilian than military.
- c. Longitudinal Coordination: Longitudinal coordination between communities, regions and nations counts as a vital third dimension. Achieving Arctic scale security depends on effective, longitudinal coordination between chiefs or governments of communities, legislators of sub-national entities, federal governments or nation-states, and international bodies like the Arctic Council, the IMO and UNCLOS. Such coordination can be achieved only through two-way communication, not top-down, south-to-north diktats from national capitals. It will also require functioning relationships at every level, including with the private and not-for-profit sectors.

Securing the Arctic will also require multi-party coordination at all levels, from community to region to nation, as well as long-term infrastructure investment plans, such as the most successful private operators make. In the polar regions, coordination and communication between the public and the private sectors is critical. Sometimes, as in the following example, it can be a matter of life and death.

In 2001, Dr Ronald Shemenski, the only physician among 50 researchers working at the Amundsen Scott–South Pole



Fig. 11.3 A Kenn Borek Twin Otter aircraft flies over Antarctica. Photograph by Christopher Michel, 2013. Retrieved from Wikimedia Commons.

Research Station, suffered a potentially life-threatening gall bladder attack. To retrieve the 59-year-old doctor, an eight-seat Twin Otter plane fitted with skis for landing gear flew from the Rothera Research Station on the Antarctic Peninsula, the first successful evacuation at the South Pole during the cold and dark polar winter. Kenn Borek Air, a Canadian company led the mid-winter rescue flight.

d. Investment over time: Beyond isolation, many Arctic communities suffer both economic distress and environmental damage, as well as food, health and housing deficits. Security for such communities may only be achieved with long-term investments in airports, ports, roads, schools and other such multiple-use infrastructure. The sustainability of any such investment plan will need firm commitments from chiefs, mayors, legislators, governors and federal officials towards building the necessary consensus on infrastructure investments. Given Canada's sorry history of military procurements, common sense might suggest forging all-party, long-term plans for multi-use (civilian, corporate and military) infrastructure in the Arctic for the nation.

The best demonstration of Canadian sovereignty would be to ensure that residents of our North are able to continue living in their communities. As the EKOS study showed, some respondents, noting the high costs and lack of access to services in the North, argued that 'the remoteness of northern communities should not result in inferior services and quality of life compared to that enjoyed by other Canadians. In the words of one focus group participant, "We pay taxes just like everybody else".'20 By fighting housing shortages, low educational attainment and drug and alcohol abuse, Canada's Arctic sovereignty can be greatly strengthened. We can reinforce our national relationships with the Arctic by investing in the region's economic and social foundations, by fully implementing nation-building land-claim settlements with indigenous peoples and by investing in military hardware and multi-use infrastructure. The Canadian Department of National Defence (DND)'s Defence Science Advisory Board (DSAB) Report 1001 actually recommended a 'northern first' policy for procurement for Arctic operations (building multipurpose infrastructure for military operations, resource developers and communities).21

The 'North First' approach of the Defence Science Advisory Board makes a lot of sense, especially if, together, the federal parties in Parliament, after consulting with indigenous communities and territorial

governments, could be persuaded to adopt a long-term plan to build multi-purpose infrastructure, ports and runways, and to base icebreakers and rescue aircraft in the North. On the cornerstone of community, Canada could build Arctic security using the tools of cooperation, coordination and long-term investment.

11.6. Conclusion: A Security Framework

To sum up, a security framework for a big country with a small population would be founded on a *deep definition* of *security*; *wide cooperation* between villages, towns and regions; *longitudinal (two-way) coordination* between villages, cities, states and territories, nations and international entities; and *long-term investments* in multi-use infrastructure.

To be clear, Canada's Arctic sovereignty and security could be compromised by our Arctic citizens not having access to clean drinking water, second-rate schools, low or melting ice cover and permafrost that upset communities and disrupt the migratory patterns of the fish and game on which northerners rely. And it can be undermined by high unemployment rates that force many young northerners to move south to find work. Poverty is an obvious source of insecurity.

During his last Arctic tour, Conservative Prime Minister Stephen Harper described his Arctic mission as nation-building. 'This is the frontier. This is the place that defines our country', he said.²² 'Our country

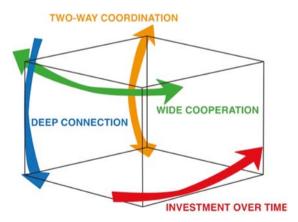


Fig. 11.4 An effective Arctic security framework should involve two-way coordination, deep connection, wide cooperation and long-term investments. Source: Author

is widely recognised as one that broadly defines its security by seeking to promote environmental, cultural and food security at home in Canada and throughout the world. This commitment should hold true in every part of the country – from sea to sea to sea.'23 The latter commitment most Canadians might well embrace. But as Thomas Berger famously pointed out in *Northern Frontier, Northern Homeland*, the report of his Mackenzie Valley Pipeline Inquiry, 'The North is a *frontier*, but it is a *homeland* too.'24

Notes

- 1 Mikhail Gorbachev, 'The Speech in Murmansk at the Ceremonial Meeting on the Occasion of the Presentation of the Order of Lenin and the Gold Star Medal to the city of Murmansk', 1 October 1987 (Novosti Press Agency: Moscow, 1987).
- 2 Vuntut Gwitchin First Nation Final Agreement (Whitehorse, Yukon, signed 29 May 1993), 298.
- 3 EKOS Research Associates, 'Rethinking the Top of the World: Arctic Public Opinion Survey', (The Gordon Foundation, 2015), 40, http://gordon foundation.ca/app/uploads/2017/03/ APO_Survey_Volume-2_WEB.pdf).
- 4 Desmond Morton, 'Providing and Consuming Security in Canada's Century', Canadian Historical Review 81, no.1 (2000).
- 5 EKOS, 'Rethinking the Top of the World: Arctic Public Opinion Survey', 6.
- 6 Canadian Institute for Health Information, 'Health Spending', accessed 16 February 2019, https://www.cihi.ca/en/healthspending.
- 7 Rob Huebert, 'Canadian Arctic Sovereignty and Security in a Transforming Circumpolar Word', Canada and the Changing Arctic: Sovereignty, Security, and Stewardship, Franklyn Griffiths, Rob Huebert, and P. Whitney Lackenbauer (Waterloo, Ontario: Wilfred Laurier University Press. 2011). 19.
- 8 Tony Penikett, 'Arctic Security Means More Than Arctic Sovereignty', *The Globe and Mail*, published 26 January 2011, updated 3 March 2018, https://www.theglobeandmail.com/opinion/arctic-security-means-more-than-arctic-sovereignty/article563433/.

- 9 EKOS, 'Rethinking the Top of the World: Arctic Public Opinion Survey', 43.
- 10 EKOS, 'Rethinking the Top of the World: Arctic Public Opinion Survey'.
- 11 Lloyd Axworthy, Address to the 51st General Assembly in September 1996 and in an address of April 1997. Quoted in Franklyn Griffiths, 'Not That Good a Fit? "Human Security" and the Arctic', in Arctic Security in the Twenty-First Century: Conference Report ed. Jayantha Dhanapala, John Harriss, and Jennifer Simons (Vancouver: Simon Fraser University, School for International Studies, 2008), 56.
- 12 Griffiths, 'Not That Good a Fit?', 60.
- 13 Gorbachev, 'The Speech in Murmansk'.
- 14 EKOS, 'Rethinking the Top of the World: Arctic Public Opinion Survey'.
- 15 Originally a reference to Canada by Prime Minister Joe Clark in 1979, as cited in Who Speaks for Canada?: Words That Shape a Country, ed. D. Morton and M. Weinfield (1998).
- 16 EKOS, 'Rethinking the Top of the World: Arctic Public Opinion Survey', 36.
- 17 EKOS, 'Rethinking the Top of the World: Arctic Public Opinion Survey', 36.
- 18 Andreas Østhagen, 'Coastguards in peril: a study of Arctic defence collaboration', *Defence Studies* 15 (2015): 143–60.
- 19 Rolf Ekéus, 'Military Security in the Arctic', Arctic Security in the 21st Century: Conference Report (Vancouver: Simon Fraser University School for International Studies, April 2008): 38.
- 20 EKOS, 'Rethinking the Top of the World: Arctic Public Opinion Survey', 24.
- 21 Defence of National Defence, Defence Science Advisory Board, DSAB Report 1001: Defining a Comprehensive Approach

- to the Canadian Arctic Theatre of Operations (Ottawa, April 2012), 9ii.
- 22 Stephen Harper, quoted in Mark Kennedy, 'Prime Minister Defends Annual Arctic Visit', Montreal Gazette, 28 August 2010, www.pressreader.com/canada/montrealgazette/20100828/290558833591448.
- 23 Tony Penikett, 'Arctic Security Means More Than Arctic Sovereignty'.
- 24 Thomas R. Berger, Northern Frontier, Northern Homeland: The Report of the Mackenzie Valley Pipeline Inquiry: Volume 1 (Ottawa: Supply and Services Canada, 1977) vii.

Part 4 **Emerging Trends**

12

Minimising Vulnerability in Canada's Arctic Borderlands through Cross-scale Linkages: The Beaufort Sea Partnership

Justin Barnes

12.1. Introduction

Cross-border governance structures in the circumpolar North are being both challenged and stabilised by climate change and the neoliberal restructuring of global society. Significant changes are occurring within northern society, and northern stakeholders have no choice but to adapt to the multiple social, political, economic and environmental adjustments taking place.¹ Climate change and other environmental issues are producing an unequal distribution of environmental burdens that is increasing inequality among regions both on a global scale and within developed countries.² In addition, factors that define the neoliberalisation of the modern political economy are beginning to shape northern society. These factors include a different role of the state, privatisation, market-driven development, and continentalised and globalised economic integration.³

These changes to global society are exposing both long-standing and new vulnerability concerns for northern stakeholders in Canada. In addition, modern borders in the age of globalisation that have been described as 'smooth' and 'porous',⁴ but also 'secure',⁵ point to various political, economic, social and environmental implications for northern stakeholders.⁶ Globalisation has created a paradox in the Arctic where the increasingly globalised world is producing new forms of vulnerability, while also creating an institutional network that mitigates that vulnerability both on the national and international scale.⁷

'Vulnerability' can assume multiple forms and can impact different groups in distinctive ways across a specific region, borderland or border. How various stakeholders in northern society are minimising their vulnerabilities through cross-scale linkages will be observed through an examination of the Beaufort Sea Partnership. Co-management structures such as the Beaufort Sea Partnership, as part of the overall Beaufort Sea Large Ocean Management Area (LOMA), have the potential to help generate alternative forms of governance that cross and connect multiple levels of governments and organisations. This chapter will look at how vulnerabilities that exist in the Canadian Arctic have shaped, and continue to shape, the decisions that stakeholders make, as well as how they contribute to establishing a level of stakeholder interdependence both on the state and non-state level. It will consider how vulnerabilities influence decision-making related to domestic and international borderland policies through cross-scale linkages that are consistent with the increasingly globalised and interdependent world. Ultimately, it will discuss how co-management structures, such as the Beaufort Sea Partnership, are positioned well to manage and mitigate the vulnerability of Canada's coastal communities and their environment, while also acting as part of an important governance structure in a quickly changing region.

12.2. Defining Vulnerability

Vulnerability has been defined by the International Panel on Climate Change (IPCC) as 'the propensity or predisposition to be adversely affected', and vulnerability 'encompasses a variety of concepts and elements including sensitivity or susceptibility to harm and lack of capacity to cope and adapt'.8 The vulnerability of a system can be determined by its exposure to risk and its ability to adapt when exposed to change. Distinctive groups experience and perceive vulnerability differently over time and space, and this difference defines the actions that are ultimately taken by the group or individual within a system to mitigate their vulnerability. Case study research focusing on concepts of vulnerability, resilience and human security that took place as part of Canada's International Polar Year research programme from 2007–2008 suggests that individual views of well-being differ from regional and territorial standardised statistics that have been gathered on the quality of life in the Canadian Arctic. 10 Keskitalo has suggested that 'self-definition and prioritisation of risk become a large part of what renders a community

or group of actors vulnerable: the definition by the actors involved of what they see as risks or threats – and the prioritisation of these as more or less immediate – determines what they may act upon'. Ultimately, vulnerabilities of different actors are defined by context, and that context defines an actor's response.

Vulnerability assessments have become a typical approach to determining the vulnerability of a system to climate change in order to identify adaptation needs. Vulnerability assessment studies are an important form of research that attempts to define the vulnerability and adaptive capacity of a system. 12 Vulnerability assessments seek to understand 'who and what are vulnerable, to what stresses, in what way, and determinants' in order to reduce the negative impacts of climate change. 13 Adaptive capacity can be defined as 'the possibility to respond to change and undertake certain adaptations in the process... it describes the extent to which a system may decrease its vulnerability by learning and applying new economic, social, or political approaches to limit risks'. 14 As with vulnerability, the term 'adaptive capacity' takes on a broad range of concepts that can include 'adaptability, coping ability, management capacity, stability, robustness, flexibility, and resilience'.15 Vulnerability assessments and the determination of adaptive capacity of a system are complex due to the fact that the concepts are dynamic. They vary over time and space, and are determined by the types of change being experienced, the conditions that influence the sensitivity of a system, and the types of adjustments being made due to change.¹⁶ While these concepts are increasingly being discussed in terms of climate change, they can also be used to understand vulnerabilities brought on by other social, political and economic influences, as well as the power dynamics that exist within a specific region or interdependent relationship.

12.3. Climate Change Vulnerabilities in the Canadian North

The advancement of climate change is impacting multiple different levels of Arctic society differently. Climate change poses a challenging problem for the multiple different actors in the region, depending on the perspective of the stakeholder, as it raises various social concerns and potential economic opportunities for stakeholders within Canada and for other circumpolar state and non-state actors. The region's diverse group of stakeholders perceive vulnerability to social and climate change

in their own way and are naturally attempting to mitigate that vulnerability as they see fit.

Climate change is contributing to numerous global environmental issues and Canada's communities in the far North are typically more vulnerable to the impacts of climate change than their counterparts living in southern Canada.¹⁷ The evidence of climate change in the Arctic is becoming overwhelming, with temperatures increasing at twice the global average. 18 In a comprehensive overview of vulnerability assessments of Canada's Inuit population, key vulnerability findings across multiple case studies were synthesised that identify and examine policy 'entry points' to address vulnerabilities and increase adaptive capacity.¹⁹ It was found that due to the dependency of many Inuit communities on climate-sensitive resources, they are especially vulnerable to climate change. 20 Vulnerabilities include compromised food security, a changing hunting season and increased danger of engaging in traditional practices.²¹ An overall reduction in sea ice cover and thickness is having serious implications for a large portion of Canada's Inuit population who depend on hunting and fishing for their livelihoods.²² Municipal infrastructure and water supplies of some Inuit settlements are also being threatened due to increasing sea levels, coastal erosion and the thawing of permafrost.23

While the federal government recognises the issues that the Inuit are facing, some of their primary vulnerability concerns include security and sovereignty, as foreign states and other global state and non-state actors become increasingly active in the opening Arctic Ocean.²⁴ Growing accessibility to the Arctic Ocean due to climate change has triggered potentially significant economic opportunities for all bordering nations. With 40 percent of Canada's landmass in its northern territories and 162,000 kilometres of Arctic coastline, the government of Canada has a large stake in deciding how this fragile region will be developed and/or protected. As Arctic resources become increasingly available, so too could the demand to access them by various interested state and non-state actors. As the Arctic Ocean's levels of permanent sea ice continue to decrease, resources and passageways that were once blocked by ice will become increasingly available. This exposes significant vulnerabilities for the federal government when considering traditional safety and security concerns in the Beaufort Sea region as well as concerns surrounding future resource development.

Although climate change is causing a wide variety of significant changes to the Canadian Arctic, the more recent neoliberal restructuring of Canadian society has shaped both the context of these environmental changes and the types of responses to vulnerabilities that are currently available in Canada's northern borderland region. The challenges that the Inuit are facing 'reflect the sweeping socio-cultural changes in the second half of the 20th century, as former semi-nomadic hunting groups were re-settled into centralised communities and incorporated into a colonial relationship with the Canadian state'. This transformation of social and cultural interactions within many Inuit communities and their current social and economic conditions frame the context for how they will experience and respond to climate change, as well as other changes in northern society.

12.4. Vulnerability, Interdependence, and Multi-Level Governance in the Canadian Arctic

Vulnerabilities shape and constrain actors and their responses to change. They help to explain why states, organisations or individuals act the way they do, how they treat one another and how they organise themselves into relationships that increase their interdependence with one another. According to Keohane and Nye, 'vulnerability is particularly important for understanding the political structure of interdependence relationships'. Understanding vulnerability helps to recognise how interdependent relationships form. A clear and well-examined example is the level of interdependence that has grown to dominate the Canada-United States relationship in the last century. This interdependent relationship exists to mitigate vulnerabilities on both the domestic and the global levels.

The various historical economic, political and military vulnerabilities that have existed in the region have played a role in the development of Canada and the United States' interdependent relationship and their shared border that exists today.²⁸ Two examples of this interdependent relationship that have significantly influenced northern society are the signing of the North American Free Trade Agreement (NAFTA) in 1994 and the establishment of the Distant Early Warning (DEW) Line between 1954 and 1957.

NAFTA marked the shift towards the border becoming an instrument of neoliberalism that led both countries quickly towards a deeper form of continentalisation and interdependence. NAFTA encouraged border policies that further reinforced 'US hegemony in North America by implementing economic- and security-oriented border management processes that are increasingly diffuse'.²⁹ While these

neoliberal policies have benefited various aspects of the Canadian economy, it has further embedded Canada as a dependent state on its more powerful economic neighbour.³⁰ The United States, in return, has become moderately reliant on Canada's wealth of natural resources.³¹ This has implications for the North due to its economic dependency on resource development.

The perceived threat to North American security that arose from the USSR's military capabilities during the Cold War established a very clear example of military interdependence in the Canadian North on the state level between Canada and the United States. In order for the DEW line to be established, the United States was dependent on Canada to provide open access to its northern territories, while Canada was dependent on the military spending and capabilities of the United States.³² This interdependence helped to address the vulnerabilities of both parties: the lack of military security in North America's most undefended and exposed region. The effects of the United States' somewhat forceful actions to secure itself from a northern attack characterised the response of the Canadian government to allow the United States military access to its Territories.33 The acknowledgement of Canada's sovereignty in its northern Territories simultaneously addressed a perceived political vulnerability that was significant to Canada.³⁴ The interdependence that exists as described here has played into the way Canada has developed alongside the United States and as a global diplomatic player. This has implications for Canada's capacity to mitigate its vulnerabilities in the North, as it indicates Canada's level of reliance on outside powers.

The concept of interdependence, however, can also be applied to actors within countries and can be applied specifically to Canada's North. In such cases, it reveals other forms of vulnerability, but also avenues for improving adaptive capacity to changes in the region for domestic stakeholders. In the politics of interdependence, domestic and foreign policy become closely tied due to the fact that domestic, transnational and governmental interests are involved. The concept of interdependence, therefore, is also important on the domestic level. Actors on the community, territorial, regional and federal level in the North are mutually dependent on one another and the reciprocal effects of one level of governance on another characterise this interdependence. This concept helps to explain the importance of understanding the power relationships between different levels of Canadian society, how and why those relationships have formed in Canada's North, and how they can influence security policies in Canada's northern borderland.

The multiple stakeholders that exist in Canada's Arctic are experiencing the changes in their society, economy and environment based on their perspective and position in northern society. Domestic and foreign policy are becoming increasingly intertwined, and this can be seen in the case of the Beaufort Sea LOMA. In socio-political and politico-economic relationships, the vulnerability of an actor is dependent on its ability to adjust policies to deal with change and reduce the impacts of disruption.³⁶ Therefore, while northern communities are vulnerable to the environmental impacts of climate change, their level of vulnerability is also dependent on their ability to influence change in a changing political and economic atmosphere. Cross-scale linkages, in many ways, provide an approach for managing the complexity of change in Canada's North by increasing the political clout of local communities and regional organisations in the Arctic.

12.5. Reducing Vulnerability through Cross-Scale Governance Structures

Globalisation, the increasing recognition of multiple different stake-holders in the Arctic region through devolvement processes in Canada and the inclusion of indigenous groups in international organisations such as the Arctic Council have provided the opportunity for cross-scale linkages to be made through new partnerships that cross and connect different levels of governance and society. Much like the interdependence that exists on the state level to minimise vulnerability, similar relationships are being created that connect local governance bodies to federal and global governance structures. These relationships have the potential to address regional issues more effectively.

Though there are still significant strides to be made, new routes to self-affirmation as well as options for resistance to colonial institutional structures are becoming increasingly available through reconciliation and the devolution of governance from the federal government to indigenous communities through the modern land claim agreement process. Thanks to agreements such as the 1984 Inuvialuit Final Agreement that formed the Inuvialuit Settlement Region, various rights and jurisdictions of traditional Inuvialuit lands are being returned to the Inuit.³⁷ For example, by exploiting their ability to represent themselves in the globalised natural resource economy, there is an opportunity for the Inuvialuit Settlement Region to circumvent the colonial state and participate in transnational activities. This would be a form of resistance

to the social exclusion that indigenous peoples throughout Canada have historically and continually experienced.³⁸ While this opportunity may reduce certain forms of vulnerability and has the potential to increase others, it primarily signifies for local communities a changing relationship with the state.

While globalisation and neoliberal restructuring have changed the context for perceiving vulnerability, they are also creating the environment for a modern institutional network to assist in addressing and mitigating vulnerability both on the domestic and international scale. Hooghe and Marks (2003) outline two types of multi-level governance structures that exist in society today. Type 1 consists of general-purpose jurisdictions that have non-intersecting memberships and have jurisdictions at a limited number of levels.³⁹ In the North, this type of governance structure is expressed by the firm federal, territorial and community jurisdictions that have historically played a role in defining the colonial power relationships between different levels of society. Type 2 consists of task-specific jurisdictions that have intersecting memberships with no limit to the number of jurisdictional levels, and has a flexible design. 40 This second organisational design embodies the emerging cross-scale linkages and co-management groups that are producing the opportunity to increase local political clout and to overcome the various political, economic and environmental vulnerabilities in the North.

Cross-scale linkages can be seen as connections or relationships that connect multiple levels of society both horizontally (between similar levels of governments or organisations) and vertically (between different levels of governments or organisations).⁴¹ These linkages create a complex and multi-level jurisdictional system that produces additional capacity and, in some cases, additional resources to offset vulnerabilities related to managing issues that cross international borders and divide cross-border environments and communities, such as climate change. In a region with such a fragile and rapidly changing environment, there is recognition by researchers in the North that truly sustainable adaptation to climate change and other social vulnerabilities can only take place with the collaboration of all stakeholders.⁴²

Cross-scale linkages have been identified by various scholars as a necessary aspect of multi-level governance structures and are an inherent factor in the foundation of co-management institutions.⁴³ These institutions are meant to more effectively address issues that exist at several different scales. Berkes (2002) has identified various institutional forms that encourage cross-scale interactions and how they are designed.⁴⁴

These various forms of co-management bodies include *partnerships*, where cross-scale linkages connect local-level management institutions with government-level management institutions, and *multi-stakeholder bodies*, that connect multiple local and regional groups and interests with the government to 'provide a forum for conflict resolution and negotiation among users'.⁴⁵

Various authors have identified cross-scale linkages and comanagement institutions as important aspects in building resilience within a system. According to Berkes (2002), resilience is an important property in a system because it determines the system's capacity to adapt and is therefore an essential feature in adaptive management. Various studies have taken place that identify cross-scale linkages as an important feature in resilient systems. Since the signing of the Inuvialuit Final Agreement of 1984, multiple co-management institutions have emerged in the Canadian Arctic. While cross-scale linkages are an important aspect of resilience within adaptive management, it is also important to understand the vulnerabilities that exist within the system and how they impact and influence various Arctic stakeholders.

Partnerships meant to mitigate or adapt to vulnerabilities arise in multiple different levels of society and take different forms depending on the geopolitical context of their time. Throughout the Cold War, as discussed above, the Arctic was perceived as an exposed frontier that increased the vulnerability of Canada and the United States. What characterised this Cold War experience in the Arctic was the ability of the federal governments of Canada and the United States to take action to mitigate what it perceived to be the most critical and threatening form of vulnerability facing Canada's North. This perception led to the partnerships and policies that were created between the federal governments of Canada and the United States to secure North America's northern border at the time. The development of the DEW line and the additional security infrastructure that followed had a significant impact on northern society.⁴⁹ It is a clear example of the relationship that has existed between Ottawa and the Territories, as well as between Ottawa and Washington. The colonial power relationship that existed between Ottawa and the Arctic's local communities is evident, and this example expresses the social and political vulnerabilities of northern communities to southern decision-making.

More recently, however, a new degree of localisation, regionalisation and hybridity have come to characterise governance within the region. This has manifested in the formation of co-management structures among state and indigenous governance organisations, new multi-vocal

environmental governance projects, and private-public coalitions among business stakeholders, state governments and indigenous peoples. Since the development of organisations in the North such as the Arctic Council in 1996 that represent part of the post-Cold War liberalisation of international relations in the region, new partnerships that fit the current geopolitical context of the Arctic have begun to influence and dictate decision-making and jurisdictional enforcement in Canada's northern borderland region. The Beaufort Sea Partnership is one example of this new brand of regional cooperation.

12.6. The Beaufort Sea Partnership

The Beaufort Sea Partnership is a prominent example of a cross-scale regional organisation that is actively minimising multiple different forms of vulnerability that are arising from the changing climate and political dynamic in the Arctic. The Beaufort Sea Partnership was developed to be a regional governance partnership to advance the 'Beaufort Sea Integrated Ocean Management Plan' in the 'Beaufort Sea Integrated Management Area.'51 The Beaufort Sea Large Ocean Management Area (LOMA) is one of the five priority areas set forth in Canada's Oceans Strategy that was affirmed in the 1997 Oceans Act. The Act placed the Department of Fisheries and Oceans (DFO) as the primary federal authority on the management of Canada's Oceans. 52 The integrated management of the Beaufort Sea LOMA is intended to be a collaborative management and planning process that is managed by the Oceans Programs Division of the DFO.53 The Beaufort Sea LOMA is approximately 1,107,694 square kilometres, is located in the most northwestern corner of Canada that borders Alaska, and includes the coastal portion of the Inuvialuit Settlement Region.⁵⁴

The Beaufort Sea LOMA has a complex regional governance structure that is intended to improve sustainable development and stakeholder input within the region. The structure consists of four main components: The Regional Coordination Committee (RCC), the Beaufort Sea Partnership (BSP), four Working Groups (Ecosystem, Governance, Traditional Knowledge, and Social Cultural and Economic), and the Secretariat (DFO Ocean's Programme Staff). The RCC is co-chaired by the Inuvialuit Regional Corporation (IRC), the Inuvialuit Game Council (IGC) and the DFO, and its purpose is to provide leadership, coordinated planning, oversight and direction for the management of the Beaufort Sea LOMA.⁵⁵ The Beaufort Sea Partnership is at the core of the Beaufort

Sea LOMA as it serves as the primary forum for stakeholder engagement and has wide-ranging representation from 54 different regional level stakeholder organisations. ⁵⁶ The primary purpose of the Beaufort Sea Partnership is to make recommendations to the RCC that represent the perspectives and initiatives of its stakeholder groups. The Beaufort Sea Partnership is integral to the integrated ocean management planning process and is the voice of all stakeholders that are 'working together to promote economic development and support strong communities, while maintaining a healthy marine environment'. ⁵⁷

While agreements such as the Inuvialuit Final Agreement mark a changing relationship between indigenous communities and the state, it also raises jurisdictional issues in the Inuvialuit Settlement Region that the Beaufort Sea Partnership helps to address. The Inuvialuit Final Agreement was signed in 1984 between the Inuvialuit peoples and the Government of Canada, and transferred approximately 91.000 square kilometres of land to the Inuvialuit.58 The Inuit hold subsurface rights to oil, gas and minerals of 13,000 square kilometres and surface rights for hunting and harvesting in the remaining 78,000 square kilometres.⁵⁹ The federal government, however, retains multiple jurisdictions over waters in the Inuvialuit Settlement Region. It retains the right to manage and control waters, waterways, beds of rivers, lakes and water bodies for environment and ecosystem management, as well as for governmental functions that relate to 'navigation, transportation, flood control and similar matters'.60 The crown also retains control of the Beaufort Sea and any activities that include conservation and management as well as economic exploration and exploitation that occur within its waters. 61

The Inuvialuit Final Agreement, however, sets forth various requirements for consultation and the establishment of co-management bodies between the federal government and the Inuvialuit Settlement Region. Trainor *et al.* (2007) notes that the various co-management bodies established through the Inuvialuit Final Agreement create institutional cross-scale linkages 'through space (horizontal) and levels of organisation (vertical) that build adaptive capacity by connecting the local level to regional, territorial and federal resource decision-making institutions'. To name only a few, these co-management bodies include various community Hunting and Trapping Committees, Wildlife Management Advisory Councils and the Inuvialuit Joint Secretariat. Berkes *et al.* (2005) has noted that these co-management bodies have the potential to provide multi-level governance and they are 'instrumental in relaying local concerns across multiple levels of political organisation'. The Beaufort Sea Partnership brings together many of these co-management

bodies together into one over-arching partnership with industry representatives and territorial and federal government departments.

12.7. Discussion

Cross-scale linkages such as the Beaufort Sea Partnership are playing a role in shaping change in the power relationships that have existed between the multiple different stakeholders and levels of governance. Coastal states, such as Canada and the United States, have the responsibility to enforce their laws and regulations within their internal waters and territorial seas, as well as their extended jurisdictions at sea. Therefore, it has been a requirement of the federal government of Canada and other Arctic nations to implement the necessary national policies to ensure their sovereignty as a nation-state is maintained. Internally, these policies have raised issues for regional actors and local communities that have historically never recognised a limitation to their connection to their local geography and environment of the Arctic.

It must be considered that as nation-states lay down their boundaries and plan to enforce them, their borders may not reflect traditional or cultural boundaries. In the case of Canada and the United States in the Arctic, the existing borders and jurisdictions are a result of the pervasive colonial history of North America and the widespread historical disregard for indigenous connection to their land and waters. Indigenous peoples throughout the entire Arctic have a long and rich connection to the land that outdates the Westphalian boundary tradition, and this has historically raised jurisdictional issues for the management, usage and protection of Canada's Arctic coastal regions. Many of these issues, however, are being addressed in the various co-management groups that have emerged throughout the modern land claims process, as observed in the Inuvialuit Settlement Region.

Canada's portion of the Beaufort Sea coastline is home to many different communities within the Inuvialuit Settlement Region. The Inuit, who make up the majority of the population, have resided in the region beyond recorded history and have deep historical ties to the Beaufort Sea and its tributaries. This region comprises a large portion of North America's Arctic coastline; hence, the communities that exist along the coast are the closest point of contact to Canada's international maritime border and Canada's northern border with the United States. Due to the complex political, economic and environmental issues that have somewhat dictated policy on the state level of governance, the area

in which the Inuvialuit Settlement Region exists today has largely been constructed as a borderland that has legitimised Canada's formal maritime border policy. Brunet-Jailly (2007) has argued, for example, that 'culture, local political clout, market forces, and the multiple activities of government' influence the structure of a borderland. Hese can be seen as important factors that have shaped the way that actors in the region have historically responded to various vulnerabilities in Canada's Arctic coastal region. While the Inuvialuit Settlement Region has become increasingly involved in many aspects of the region's policies since its establishment in 1984, the question in the case of the Beaufort Sea is: can international boundaries in the Beaufort Sea be decolonised to better contribute to the well-being and security of local populations and to decrease their vulnerability to the rapid changes currently sweeping across the global North?

Cross-scale linkages that are consistent with the changing role of the state, such as the Beaufort Sea Partnership, have the opportunity to overcome the various vulnerabilities that are transpiring in the North by increasing the role of co-management institutions in domestic policy and, therefore, international policy as well. As argued earlier, domestic policy inherently has an influence on policies at the state level. Thus, due to their increased influence on domestic policy, regional organisations such as the Beaufort Sea Partnership are important as they increase the political clout of local and regional actors to dictate the direction of policy on both sides of this Arctic border. The Beaufort Sea Partnership and the co-management bodies involved are actively outlining the common interests and needs of the Arctic on a regional level. By defining the Arctic as an individual region, as the Beaufort Sea LOMA effectively does, one can better clarify the needs of the North through cross-scale linkages such as the Beaufort Sea Partnership.

The Arctic region contains an array of cultures, languages and experiences that transcend multiple borders and jurisdictions and define the dynamics that are characteristic of the circumpolar North. Local actors carry a significant amount of political clout in that local knowledge is becoming increasingly important for legitimising policy directions. Within the Arctic region, there are many different explicit views of reality that shape the decisions made on all levels of northern society. The knowledge that is contained in these perceptions has power, and this provides legitimacy. As Michel Foucault has argued: 'once knowledge can be analysed in terms of region... one is able to capture the process by which knowledge functions as a form of power and disseminates the effects of power'. 66 It can be seen that regional partnerships such

as the Beaufort Sea Partnership increase power as a whole, yet diffuse power within the system to multiple stakeholders at the same time.

In a region where military security is not currently a significant concern for Canada, governance of the region's marine environment is taking different forms. Cross-scale establishments such as the Beaufort Sea LOMA and its Beaufort Sea Partnership are an alternative form of governance that crosses and connects multiple levels of governments and organisations. These cross-scale linkages create the space for consultation and the inclusion of stakeholders in the organisation of authority over various environmental, social, economic and political issues of the Beaufort Sea. These cross-scale linkages create a complex and multi-level system that encourages multiple checks and balances by local and regional stakeholders on important vulnerability issues that include environmental, social and economic concerns. In organisational structures such as the Beaufort Sea LOMA, its influence in the region transcends multiple state and non-state actors and even international borders. While the LOMA is a federally mandated programme, governmental organisations, non-governmental organisations, businesses, local groups, regional co-management organisations and environmental groups make up only a few of the actors that contribute to the management of the Beaufort Sea LOMA through the Beaufort Sea Partnership. The Beaufort Sea Partnership and LOMA provide an alternative form of governance and jurisdictional enforcement that reduce unilateral decisions on any level of northern society.

The Beaufort Sea Partnership provides an arena for perspectives from all levels of northern society to be discussed. The partnership, though, possibly does more than this. It creates and reinforces the legitimacy of policy directions and a cross-scale governance structure that may not otherwise exist. It is a soft form of internal and external diplomacy that exists within and reinforces the Westphalian nationstate tradition. It provides cross-border and regional consolations, while further embedding a multi-level cross-scale form of governance within the nation-state by defining jurisdictional boundaries and sharing control. So, while regional borderland perspectives are being shared on all levels of northern society through the Beaufort Sea Partnership, they are becoming a part of the national and international discussion. Through these partnerships, the multiple forms of vulnerability that exist become recognised and legitimise the actions of actors that are working to mitigate these vulnerabilities. While a port development, for example, would meet the needs created by the federal government's security and sovereignty vulnerabilities, legitimacy for the project may be established

through the promotion of the multiple ways it could mitigate the various vulnerabilities of local communities to social, political, economic and environmental change as well. The vulnerabilities and needs of coastal communities help to define how Canada's maritime borders will be enforced. Whether or not local communities are 'for or against' resource development, infrastructure development and other forms of economic development, their perspectives will help to determine the policies that will be created within the Beaufort Sea LOMA.

12.8. Conclusions

The Beaufort Sea Partnership is effectively increasing the political clout of the Inuvialuit Settlement Region in Canada's northern borderland region due to the fact that the partnership is managing and influencing economic opportunities, contributing to the multiple activities of governments and is promoting the fundamental role of local culture and knowledge in sustainable development decision-making. Cross-scale linkages that exist within the Beaufort Sea Partnership are removing the divisions that have been established throughout Canada's colonial history by increasing the interdependence of northern actors to mitigate their vulnerability concerns. While it may be argued that new forms of colonialism and control have emerged, these partnerships have the potential to lessen the vulnerability of northern communities by increasing their adaptive capacity through their enhanced ability to adjust national policies and reduce their sensitivity to the colonial policy framework that has historically deprived Northerners of political power. The current cross-border interdependence that exists within the Canada-United States relationship will naturally influence domestic and local experiences as well. Therefore, domestic policies concerning environmental protection and economic development being discussed within the Beaufort Sea Partnership will have an influence on the foreign and cross-border policy represented by the Canadian federal government on the international stage.

Notes

- 1 International Panel on Climate Change (IPCC), Climate Change 2007: Impacts Adaptation and Vulnerability. Contribution of Working Group II to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change (Cambridge: Cambridge University Press, 2007), 1-976; James Ford, Tristan Pearce, Frank Duerden, Chris Furgal and Barry Smit, 'Climate change policy responses for Canada's Inuit population: The importance of and opportunities for adaptation', Global Environmental Change 20 (2010): 177-91; Lassi Heininen and Chris Southcott, 'Globalisation and the Circumpolar North: An Introduction'. Globalisation and the Circumpolar North. eds. Lassi Heininen and Chris Southcott (University of Alaska Press, 2010): John Warren, James Berner and Tine Curtis, 'Climate Change and Human Health: Infrastructure Impacts to Small Remote Communities in the North', International Journal of Circumpolar Health 64 (2005): 487-97.
- 2 Sarah F. Trainor, F. Stuart Chapin, Henry P. Huntington, David C. Natcher, and Gary Kofinas, 'Arctic Climate Impacts: Environmental Injustice In Canada And The United States', Local Environment 12 (2007): 627–43.
- 3 Emilie Cameron and Tyler Levitan, 'Impact and Benefit Agreements and the Neoliberalisation of Resource Governance and Indigenous-State Relations in Northern Canada', Studies in Political Economy 93 (2014): 25–52.
- 4 Heather N. Nicol and Ian Townsend-Gault, Holding the Line: Borders in a Global World. (Vancouver: University of British Colombia, 2005); Heather N. Nicol, The Fence and the Bridge: Geopolitics and Identity along the Canada-US Border (Waterloo: Wilfrid Laurier University Press, 2008); Emmanuel Brunet-Jailly and Bruno Dupeyron, 'Introduction: Borders, Borderlands, and Porosity', Borderlands: Comparing Border Security in North America and Europe, 1st ed., ed. Emmanuel Brunet-Jailly (Ottawa: University of Ottawa Press 2007).
- 5 Gabriel Popescu, Bordering and Ordering the Twenty-First Century: Understanding Borders (Lanham: Rowman & Littlefield 2011).

- 6 Heather N. Nicol and P. Whitney Lackenbauer, forthcoming.
- 7 Lassi Heininen and Chris Southcott, 'Globalisation and the Circumpolar North: An Introduction', Globalisation and the Circumpolar North, ed. Lassi Heininen and Chris Southcott (University of Alaska Press 2010).
- 8 IPCC, 'Climate Change 2007', 4.
- 9 Robert Chambers, 'Editorial Introduction: Vulnerability Coping, and Policy', IDS Bulletin 20(2) (1989): 1–7.
- 10 Brenda Parlee and Chris Furgal, 'Well-being and Environmental Change in the Arctic: A Synthesis of Selected Research From Canada's International Polar Year Program', Climatic Change 115 (2012): 13–34.
- 11 E. Carina H. Keskitalo, Climate Change and Globalization in the Arctic: An Integrated Approach to Vulnerability Assessment (London: Earthscan 2008), 10.
- 12 Keskitalo, Climate Change and Globalization in the Arctic.
- 13 Ford et al. 'Climate Change Policy Responses for Canada's Inuit Population', 180.
- 14 Keskitalo, Climate Change and Globalization in the Arctic, 10.
- 15 Keskitalo, Climate Change and Globalization in the Arctic, 11.
- 16 Keskitalo, Climate Change and Globalization in the Arctic.
- 17 Trainor et al., Arctic Climate Impacts: Environmental Injustice In Canada And The United States.
- 18 Ford et al., 'Climate Change Policy Responses for Canada's Inuit Population'.
- 19 Ford et al., 'Climate Change Policy Responses for Canada's Inuit Population'.
- 20 Ford et al., 'Climate Change Policy Responses for Canada's Inuit Population'.
- 21 Ford et al., 'Climate Change Policy Responses for Canada's Inuit Population'.
- 22 Ford et al., 'Climate Change Policy Responses for Canada's Inuit Population'; IPCC, 'Climate Change 2007'.
- 23 Ford et al., 'Climate Change Policy Responses for Canada's Inuit Population'.
- 24 Michael Byers, Who Owns The Arctic? (Vancouver: Douglas and McIntyre 2009); J. Higginbotham and M. Grosu, 'The Northwest Territories and Arctic Maritime Development in the Beaufort Area', CIGI Policy Brief, 40 (2014): 1–13.

- 25 Ford et al., 'Climate Change Policy Responses for Canada's Inuit Population', 179
- 26 Ford et al., 'Climate Change Policy Responses for Canada's Inuit Population'.
- 27 Robert Keohane and Joseph Nye, Power and Interdependence (Toronto: Pearson, 2001), 13.
- 28 Jim Stanford, 'Staples, Deindustrialization, and Foreign Investment: Canada's Economic Journey Back to the Future', Studies in Political Economy 82 (2008); Mel Watkins, 'Politics in the Time and Space of Globalization', Changing Canada: Political Economy as Transformation, ed. W. Clement and L. F. Vosko (Montreal and Kingston: McGill-Queen's University Press, 2003): 3-24; Nicol and Townsend-Gault, Holding the Line.; Ken Coates, P. Whitney Lackenbauer, William Morrison, and Greg Poelzer, Arctic Front: Defending Canada in the Far North (Toronto: Thomas Allen Publishers, 2008); Keohane and Nye, Power and Interdependence.
- 29 Nicol, The Fence and the Bridge, 164.
- 30 Geoffrey Hale, So Near Yet So Far: The Public and Hidden Worlds of Canada-US Relations (Vancouver: UBC Press, 2012).
- 31 Stanford, 'Staples, Deindustrialization, and Foreign Investment'.
- 32 Shelagh Grant, Polar Imperative: A History of Arctic Sovereignty in North America (Vancouver: Douglas & McIntyre, 2010); Coates et al., Arctic Front.
- 33 Coates et al., Arctic Front.
- 34 Coates et al., Arctic Front.
- 35 Keohane and Nye, *Power and Interdependence*.
- 36 Keohane and Nye, *Power and Interdependence*.
- 37 Inuvialuit Regional Corporation, 'The Western Arctic Claim: Inuvialuit Final Agreement (as amended)', accessed 12 September 2019, http://publications. gc.ca/collections/collection_2017/ aanc-inac/R74-34-1985-eng.pdf.
- 38 Vic Satzewich and Lloyd Wong,
 'Immigration, Ethnicity, and Race: The
 Transformation of Transnationalism,
 Localism, and Identities', in *Changing*Canada, ed. Wallace Clement and Leah
 F. Vosko (McGill-Queen's University Press,
 2003), 381.
- 39 Liesbet Hooghe and Gary Marks, 'Unraveling the Central State, but How? Types of Multi-Level Governance', The American Political Science Review 97 (2003): 223–43.

- 40 Hooghe and Marks, 'Unraveling the Central State, but How? Types of Multi-Level Governance', 223–43.
- 41 Fikret Berkes, 'Cross-Scale Institutional Linkages: Perspectives from the Bottom Up', The Drama of the Commons, ed. Elinor Ostrom et al. (Washington, DC: The National Academies Press, 2002); Oran Young, 'Institutional Interplay: The Environmental Consequences of Cross-Scale Interactions', The Drama of the Commons, ed. Elinor Ostrom et al. (Washington, DC: The National Academies Press, 2002).
- 42 See Kathrin Keil, Thilo Wiertz and Ilan Chabay, 'Engaging Stakeholders in Interdependent Arctic and Global Change: Developing the SMART Research Project', Institute for Advanced Sustainability Studies Working Paper, 2014.
- 43 Berkes, 'Cross-Scale Institutional Linkages'; Young, 'Institutional Interplay'.
- 44 Berkes, 'Cross-Scale Institutional Linkages'.
- 45 Berkes, 'Cross-Scale Institutional Linkages', 304.
- 46 Fikret Berkes, Nigel Bankes, Melissa Marschke, Derek Armitage and Douglas Clark, 'Chapter 11: Cross-Scale Institutions & Building Resilience in the Canadian North', Breaking Ice: Renewable Resource and Ocean Management in the Canadian North, Volume 1, ed. Fikret Berkes, Rober Huenert, Helen Fast, Micheline Manseau, and Alan Diduck (Calgary, Alberta: University of Calgary Press, 2005); David W. Cash, W. Neil Adger, Fikret Berkes, Po Garden, Louis Lebel, Per Olsson, Lowell Pritchard, and Oran Young, 'Scale and Cross-scale Dynamics: Governance and Information in a Multilevel World', Ecology and Society 11 (2006): 8.
- 47 Berkes et al. 'Chapter 11: Cross-Scale Institutions & Building Resilience in the Canadian North'.
- 48 Berkes et al. 'Chapter 11: Cross-Scale Institutions & Building Resilience in the Canadian North'.
- 49 Grant, Polar Imperative.
- Governance', Arctic Human Development Report: Regional Processes and Global Linkages, ed. Joan Nymand Larsen and Gail Fondahl (Denmark: Nordic Council of Ministers, 2014); Lassi Heininen, 'Circumpolar International Relations and Geopolitics', Arctic Human Development Report ed. Niels Einarsson, Joan Nymand Larson, Annika Nilsson and Oran

- R. Young (Akureyri: Stefansson Arctic Institute, 2004); Indigenous and Northern Affairs Canada (INAC), Canada's Arctic Foreign Policy Framework: Discussion Guide, accessed 10 August 2018, http://publications.gc.ca/collections/collection_2017/aanc-inac/R74-37-2017-eng.pdf.
- 51 Beaufort Sea Partnership, 'Integrated Ocean Management Plan for the Beaufort Sea: 2009 and beyond', accessed 25 April 2017, http://waves-vagues.dfo-mpo. gc.ca/Library/350719.pdf.
- 52 Beaufort Sea Partnership, 'Integrated Ocean Management Plan for the Beaufort
- 53 Beaufort Sea Partnership, 'Integrated Ocean Management Plan for the Beaufort Sea'.
- 54 Beaufort Sea Partnership, 'Integrated Ocean Management Plan for the Beaufort Sea'.
- 55 Beaufort Sea Partnership, 'Integrated Ocean Management Plan for the Beaufort Sea'.
- 56 Beaufort Sea Partnership, 'Integrated Ocean Management Plan for the Beaufort Sea'.
- 57 Beaufort Sea Partnership, 'Integrated Ocean Management Plan for the Beaufort Sea'.

- 58 Inuvialuit Regional Corporation, 'The Western Arctic Claim'.
- 59 Inuvialuit Regional Corporation, 'The Western Arctic Claim'.
- 60 Inuvialuit Regional Corporation, 'The Western Arctic Claim', 27.
- 61 Robert Dufresne, 'Canada's Legal Claims Over Arctic Territory and Waters', Parliament of Canada: Law and Government Division, 6 December 2007.
- 62 Trainor et al., Arctic Climate Impacts: Environmental Injustice In Canada And The United States, 629.
- 63 Berkes et al., 'Chapter 11: Cross-Scale Institutions & Building Resilience in the Canadian North', 225.
- 64 Brunet-Jailly and Dupeyron, 'Introduction: Borders, Borderlands, and Porosity', 4.
- 65 Carolyn M. Hendriks, 'Inclusive governance for sustainability', Tackling Wicked Problems Through the Transdisciplinary Imagination, ed. Valerie A. Brown, John Alfred Harris, and Jacqueline Y. Russell (London: Earthscan, 2010), 148–61.
- 66 Michel Foucault, Power/Knowledge: Selected Interviews & Other Writings 1972–1977 (York: Vintage Books, 1980), 69.

13

Reconciling the North: Transit Pipelines and the Pursuit of Self-Sufficient Self-Government in the Yukon

Nicholas Wilson

A version of this work has been published previously: Nicholas Wilson, 'Reconciling the North: Transit Pipelines and the Pursuit of Self-Sufficient Self-Government in the Yukon', *The Journal of Aboriginal Economic Development*, 11, no. 1 (2018): 43–57.

13.1. Introduction

The US Geological Survey has assessed that 22 per cent of the world's undiscovered petroleum resources currently reside underneath the Arctic. As such, the industrialisation of northern Canada will intensify. Canada's northern regions, adjacent to the vast and untapped material wealth residing underneath Arctic sea ice, present Canada with lucrative industrial and commercial opportunities for future economic growth – specifically, as sea ice retreats in and around the Northwest Passage (NWP). As the Arctic Council member states (Canada, US, Russia, Kingdom of Denmark, Finland, Norway, Iceland, Sweden), among other interested actors, vie for claims to extraction entitlements, land adjudication on the domestic front will also increasingly become a national security concern as Arctic exploration intensifies. Primarily, this concern is in regard to Canada's energy security priorities conflicting with land agreements negotiated with indigenous communities residing in Canada's North. As Arctic sea ice retreats, Canada will steadfastly invest

in energy resource development on territory surrounding the Northwest Passage. The Yukon Territory, sitting at the crux of Canada's oil and gas frontier, will play a leading role in northern economic development and security as it is the most heavily populated area in the North, and marks the entrance to the Northwest Passage on Canadian territory. As a result, the intensifying Arctic energy market poses a potential source of conflict between transnational energy companies/corporations (TNCs) on behalf of the Government of Canada and the indigenous communities residing in the Yukon. Self-Governing Yukon First Nations or 'SGYFNs' – entities setting the precedent for indigenous self-governance across the world – will play a critical role when frontiers necessitate borders.

In response to mounting disputes over pipeline projects between indigenous peoples and environmentalists against 'Big Oil', the Royal Canadian Mounted Police (RCMP) has labelled these demonstrations the 'anti-petroleum movement' and has implied that it represents a 'growing and violent threat to Canada's security'. Additionally, Canadian defence scholars have raised concerns about the possibility of an indigenous insurrection against energy development projects taking place across Canada. In lieu of the present tensions surrounding this polarised and highly passionate debate, which continues to make headlines in North America, this chapter develops a solution to the inevitable opposition pipeline development projects will face in the Yukon and Canada's North Arctic region. The chapter attempts to proactively carve out solutions to an enduring problem that has framed an aspect of Canadian society according to an 'us versus them' mentality. This mentality has disintegrated the borderlands between Canada and First Nations communities and has largely fostered tensions rather than cooperative flows that ease border hostilities and build relationships.

In response, this policy solution seeks to innovatively integrate borderlands by drawing upon recent literature concerning the evolving nature of borders within an increasingly globalised world. It then utilises these findings to resolve the contemporary opposition to pipelines under the framework of negotiated indigenous land agreements in the Yukon. The solution emphasises Canada's economic dependence on pipelines and natural resource development while formulating a legitimate avenue for Yukon First Nations to opportunistically enjoy unsanctioned autonomy by entering into concessionary agreements with TNCs. This avenue uniquely extrapolates international models of border porosity via natural resource development in developing countries and applies them to the Indigenous-Crown context. The consequence of the application of foreign concessionary agreement models manifests as the primary debate that

forms the core of this investigation's reconciliatory efforts; and as such, the solution employs the framework of the Umbrella Final Agreement (UFA)/Yukon Final Agreements to propose an incentive mechanism in the development of the 'incentive model' solution. Through the manipulation of SGYFN revenue, this mechanism legally compels pipelineopposed Yukon First Nations to negotiate an equitable reduction in their federal transfer payments if they steadfastly refuse innovative avenues to partner 'in the wealth generated from lands and resources as part of the broader Canadian economy'. This reduction is hypothesised to positively affect the pipeline decision-making outcome through the creation of porosity along SGYFN and Canadian borderlands. In forecasting the frictional problems related to the incentive mechanism/ model, the solution answers the following question: Are there legal rights and responsibilities in the UFA that could compel pipelineopposed SGYFNs to act on incentives and permit pipeline construction on Settlement Land?

Accordingly, the chapter will argue that the Yukon Final Agreements, through their negotiation, possess inherent economic incentives for SGYFNs to consent to pipeline construction on Settlement Land – incentives that create border porosity that will ultimately lead to their success in forging truly *self-sufficient self-governments* that are secure and self-determining. This proposition rotates under the assumption that SGYFNs distinctively share crucial features of the modern 'nation-state' entity. As such, the chapter will first draw upon contemporary theoretical models regarding the changing nature of borders, specifically in a world marked by globalisation. It then concludes that it is lawful, fair and just to incentivise Yukon First Nations to ease their borders and permit pipeline construction on Settlement Land, creating 'the conditions for reconciliation to flourish'.⁴

13.2. Challenging the Westphalian 'State' System

13.2.1. The Colonial Context

Security is about relationships.⁵ In Canada, longstanding conflicts over Treaty and Aboriginal land rights unremittingly define the steadfast opposition to pipeline projects by indigenous communities. These disputes underscore much of the public discourse surrounding 'Crown-Indigenous Relations' in Canada. Historically, the colonisation of what is now the 'Canadian' nation-state began in the 1600s, which effectively

appropriated the 'land' of prehistoric Native Americans, and carried out what can only be properly referred to as a 'cultural genocide'. Over two centuries, the land was parcelled and negotiated through the signing of Treaties with the Government of Canada on behalf of the British monarch. At present, these Treaties have largely been recognised through the 'assertion of Crown sovereignty' and are enforced by the Minister of Indian Affairs and the department of Crown-Indigenous Relations and Northern Affairs Canada. As such, the enforcement of the Treaties falls under the dominion of the Eurocentric Westphalian state system that has come to define the modern 'nation-state' entity. Under this prevailing narrative, the 11 Numbered Treaties (1871–1921) 'recognised Canadian sovereignty' and 'Indians were styled as subjects who surrendered the land on the basis of powerlessness'.8

Scholar, Tom Flanagan, has justified the colonial takeover of indigenous peoples in Canada throughout the 1600s (and onwards) by employing the protracted 'Doctrine of Discovery' and terra nullius (no man's land)9 – a 'legal and moral justification for colonial dispossession of sovereign Indigenous Nations'. 10 As such, Flanagan deduces that indigenous societies do not properly deserve the title of 'First Nations' because they do not possess the features of properly defined 'statehood' and 'nationhood.' He argues, tenably, that aboriginal societies cannot properly possess 'sovereignty' – the core feature of a state – because their societies 'were not organised into civil societies' and did not practice agriculture; they only possessed an 'uncertain occupancy of the land that did not amount to sovereign possession'. 11 To make this argument, Flanagan employs the 16th-century tenets of philosopher John Locke's writings on property, where 'civil society' – 'the chief end whereof is the preservation of property'12 – was created to protect private property. Private property was understood to be a function of mixing one's labour with the natural environment, where Locke's proposition asserts that 'Whatsoever then he removes out of the State that Nature hath provided, and left it in, he hath mixed his Labour with, and joyned to it something that is his own, and thereby makes it his Property.'13 This position argues that the establishment of the 'State', therefore, is justified on the concept that mixing one's labour with the natural environment legally makes it their property; and since the 'Doctrine of Discovery' concludes that 'these tribes cannot take to themselves more land than they have a need of or can inhabit and cultivate [...] the Nations of Europe which are too confined at home, come upon lands which the savages have no special need of and are making no present and continuous use of, they [Europeans] may lawfully take possession of them and establish colonies on them' as agricultural or 'civilised' societies. 14

13.2.2. Borders: A Reconceptualisation

In breaking to embed this investigation within contemporary border theory, the correlation Flanagan makes is entirely valid – that is, from an antiquated 16th-century justified belief set. In this way, Flanagan's reasoning is anachronistic; it is not a truth claim to knowledge about the nature of 'sovereignty', which makes its application flawed. The condition of indigenous civilisations prior to the assertion of Crown 'sovereignty' is undoubtedly distinguished by the absence of large-scale agricultural practices and a centralised governing authority. However, when this lack of 'statehood' is disparaged by the notion that 'there is only one political community at the highest level', where paternalistic presumptions conclude that certain communities and ethnic groups 'cannot be nations', 15 this reasoning trivialises the evolution of complex bordering practices among human societies over millennia. The Truth and Reconciliation Commision of Canada's Final Report (2015) notes that indigenous peoples had dynamic systems of governance that changed over time 'that were complete unto themselves and met their needs' and were 'capable of continued change'. 16 Accordingly, these systems have evolved alongside the industrial revolution and the onset of globalisation.

Today, proximity, not distance, marks the world, and while Flanagan criticises the notion of 'nation-to-nation' diplomacy between Canada and First Nations, such that indigenous societies cannot be 'states' with concomitant nationhood, his reasoning critically overlooks the contemporary fact that non-state actors are increasingly influencing political relationships on the international stage. Moreover, in theory, although self-governing Yukon First Nations share similarities with non-state actors, such as operating independently of a higher (state) authority, they coincidingly emulate features of Westphalian sovereignty and possess a defined territory with a population and [self-]government. This novel form of human organisation (the SGYFN) is therefore sufficient within the contemporary field of international relations to be functionally significant. By and large, the meaning of the terms 'nation' and 'state' are becoming diluted due to 'the multitude of flows and interactions produced by globalisation that cut across nation-state boundaries' and 'destabilise the paradigm of sovereignty'. 17

Recent literature on borders has pointed to a re-conceptualisation of the traditional understanding of the terms 'border' and 'state' within an increasingly globalised world. This is specifically being redefined through institutional conduits. Although colonialism and land treaties have physically (and socially) divided First Nations from the rest of

Canada, borders, in general, are increasingly becoming more porous due to contemporary market forces and trade flows, among other factors. 18 Modern border theory has argued that as governments 'pursue institutional arrangements to establish and recognise formal borders' for regulating activities across them, individuals will 'consider their own interests in determining whether or not to act in accordance with the intent of such regulations', whereby their decisions 'reflect the strength of the incentives leading to market transactions'. 19 In acknowledging the strength incentives have on individuals' or non-government groups' decisions, Emmanuel Brunet-Jailly at the University of Victoria argues that borders are defined by the expression of 'agent power within institutional structures', and that it is the human agency behind the incentives, interplay and interdependence of governments and market forces that is critical to understanding the porosity of borders in the modern era.²⁰ In this chapter, the term 'agency' is defined as the capacity to freely act on self-interest in a political relationship and relates to the United Nations Declaration on the Rights of Indigenous Peoples – specifically, the 'right of self-determination'. ²¹ The sparse literature on the topic of borders has largely focused on international bordering processes and the increasing porosity of borderlands between countries. As such, there is a research void concerning the process of bordering within colonial states; specifically, the absence of quasi-sovereign 'sub-state' indigenous self-governments with a latent capacity for agency or self-determination.

13.2.3. Borders in the Northern Context

Regarding the role of human agency in bordering processes, the official concept of indigenous 'self-government' in Canada is described by Crown-Indigenous Relations and Northern Affairs Canada (CIRNAC) as 'part of the foundation for a renewed relationship and is a pathway to development and economic growth that generates benefits for Indigenous peoples'.²² However, literature on Yukon self-governance has criticised the strength of the agency of SGYFNs by arguing that 'self-government' can only achieve the corresponding degree of agent power 'to the extent that it can be funded'.²³ In essence, SGYFNs are hindered by a lack of financial resources that encumbers their capacity towards achieving a strong degree of self-determination and self-sufficiency. Yet CIRNAC's description of self-government encourages 'negotiating a number of collaborative agreements with the private sector to secure benefits from resource development for their communities.²⁴ Accordingly, Canadian aboriginal scholar, Robert Anderson, has argued that mutually beneficial

alliances between indigenous and non-indigenous peoples in Canada and their institutions can play a role in the economic development process within 'the context of an increasingly flexible global capitalist economic system'. ²⁵ In other words, 'Corporate Aboriginal Alliances' ²⁶ can be constructed through the legal recognition of aboriginal land title as 'acts of reconciliation that form the foundation for ongoing relations'. ²⁷ This idea would suggest that Settlement Land agreements in the Yukon reasonably constitute institutional structures that could bolster indigenous agency. The self-governance frameworks underlying the Umbrella Final Agreement (UFA) and individual SGYFN Final Agreements may possess features that incentivise SGYFNs to enter into mutually beneficial partnerships with the private sector as a function of liberal market forces.

The literature on the growing prevalence of transnational energy corporations or TNCs, especially those conducting operations in Central Asia and northern Africa, has argued that transit pipelines 'became the central part of a framework for economic development and conflict resolution' and were essential in boosting the legitimacy of 'cash-starved and weak central governments'.28 These models, however, have not yet seen rigorous applications to quasi-sovereign 'sub-state' governments existing within colonial states. In relation to bordering processes, transit pipelines have been shown to empower weak governments to gain legitimacy and are viewed as a function of agent power within institutional structures interacting with market forces. Accordingly, the decision to permit Canadian energy development projects on Yukon Settlement Land will likely reflect what border theory identifies as the strength of economic incentives that lead to 'market transactions and trade flows. as well as to movements of people, capital and currencies'.29 Similar to the international level, the growth of TNCs has compelled some states to create new 'sub-state borderings' that facilitate economic networks and spur prosperity and international cooperation.³⁰ The void in the literature relating to bordering processes and supranational energy development projects has not yet acknowledged this application to quasi-sovereign 'sub-state' governments existing within colonial states. Accordingly, the innovative concept of the SGYFN presents a blank canvas upon which to embed the contemporary literature on bordering processes, and the porosity of borders in a world transformed by the forces of globalisation. Accordingly, the research undertaken for this chapter suggests that Yukon First Nations could partner with transnational energy companies to create 'sub-state' porous Special Economic Zones (SEZs) to attract foreign investment and generate economic

growth, all while strengthening cooperative relationships between First Nations peoples and the Canadian nation-state.³¹

13.3. The Incentive Model: Finding a Way

Necessary pipelines and other energy infrastructure will likely traverse some of the 11 SGYFN territories when Arctic oil and gas deposits are tapped by the end of the 21st century. In appealing to the intent of land regulations, there are conflicting ideologies among First Nations communities in Canada regarding the prospect of energy development projects taking place on indigenous land. At the core of this debate is the fact that some First Nations will exercise their right to permit pipeline construction on Settlement Land while others will strictly oppose it by exercising their right of ownership over the surface and subsurface. In referencing a current Canadian case study regarding these conflicting views among First Nations peoples, we can look to an ongoing dispute concerning pipeline construction in British Columbia's interior as a point of reference for potential conflicts in the Yukon. Eleven proposed pipelines passing through BC's interior (including the Enbridge Northern Gateway project which has since been rejected by the Trudeau government) has caused tense standoffs between First Nations clans and environmentalist activists occupying Wet's uwet'en traditional territory. As a result, energy companies in Canada have pre-emptively responded to 'the rise of pipeline activism' or the 'anti-petroleum movement' by meeting with the RCMP about their security concerns before the next pipeline might be approved in BC.32 Although the standoffs on Wet'suwet'en territory have been largely peaceful, they have garnered international attention as a symbol of resistance to the corporate domination of marginalised Indigenous groups by 'Big Oil'. Complicating matters is the fact that although Wet'suwet'en bands are bound by ancestral ties, they remain divided over the prospect of natural resource and energy development on Wet'suwet'en territory. Of particular importance is that some bands actively support pipeline development projects in BC because energy projects will offer jobs and skills training:

'We have the choice to either maintain the status quo in our community, keep things as they are, keep the social issues and people on high rates of income assistance, or we could look at this as an opportunity to move our nation forward.'

– Chief Karen Ogen, Broman Lake Indian Band, Wet'suwet'en. 33 In exercising their agency, pro-pipeline bands are appealing to the economic prospects that a partnership with a TNC or a consortium of energy companies would bring to their community. On the contrary, however, other Wet'suwet'en bands such as the Unist'ot'en clan have disputed the territory belonging to pro-pipeline clans and have claimed that the land belongs to them. Typically, pipeline-opposed indigenous groups such as the Unist'ot'en cite environmental hazards as the greatest concern relating to pipeline construction on indigenous territory. As such, the Unist'ot'en have argued that proposed pipelines will primarily impact water quality, fish habitats and wildlife abundance and that the potential risk of a rupture outweighs the suggested benefits.³⁴ Members have also argued that it threatens their way of life, culture and future, and have made conservationist statements arguing that 'we cannot teach the history as it used to be. Without the land, we cannot continue to live as we do today.'35 Although these justifiable objections are not rooted in formalised scientific risk assessments, they appeal to the notion that land rights and concern for the welfare of the land are the leading factors driving grievances with pipelines traversing indigenous territory. Although environmental concerns are beyond the scope of this particular chapter, the author has addressed these hazards and environmental criticisms in another work related to the thesis.

13.3.1. The Practice of Bordering

The objections above underlie the fact that the Wet'suwet'en conflict embodies what is referred to as 'the practice of bordering' which concerns how human beings organise space. This process of territorialisation involves the division of land between social entities and assigning specific symbolic meanings to those resulting spaces.³⁶ In contrast with the jurisdictional conflicts between Wet'suwet'en First Nation clans in BC, Self-Governing Yukon First Nation communities have successfully established legal zones of territorial ownership, whereby these zones are enshrined in the Yukon Final agreements. However, it is likely in the Yukon, as with the Wet'suwet'en conflict in BC, that some SGYFNs will support pipeline development projects while others will starkly oppose such projects taking place on Settlement Land. In essence, some Yukon First Nations will assign meanings to the land that value economic prosperity while others will assign meanings that value conservation of the land and the local environment. From a purely behavioural perspective, some will find economic incentives in Settlement Land agreements to permit pipeline construction, while others will find a basis

in the aforementioned land regulations to oppose energy development projects.

Nevertheless, the original intent of the Yukon final agreements – to define the rights and responsibilities of SGYFNs in regard to the land will remain steadfast. Consequently, the aforementioned opposing views pose challenges for potential pipeline projects that will likely traverse multiple SGYFN territories. This foreseeable duality in the Yukon will present the Government of Canada with an intensifying problem concerning the expeditious economic development of Canada's North as the Northwest Passage thaws and Arctic/northern energy development intensifies. At the core of the issue, pipeline-opposed SGYFNs will create zones of severely inefficient project development, and hostilities or insurrections by aggrieved indigenous clans could even threaten proposed or pre-existing pipeline infrastructure. As a result, pipeline decision-making processes 'may be both lengthy and costly' due to a number of factors including 'uncertainty with respect to Aboriginal rights and title claims'. 37 Thus, indigenous land claims under the UFA will likely hinder expedient solutions to transfer energy resources from Canada's North for export to foreign markets, specifically to the lucrative and growing economies of Asia. Consequently, staunch opposition to proposed pipelines will necessitate redirecting projects around pipeline-opposed territories which could cost unprecedented amounts in additional material and construction expenses. In most cases, redirection around entire territories would be time-consuming and severely cost inefficient.

13.3.2. Market Incentives and the Provision of Public Goods

This efficiency dilemma presents challenges to the Government of Canada for effectively regulating the delivery of public goods (fossil fuels) because natural resources are common goods (impure public goods), and according to the National Energy Board (NEB) of Canada, the delivery of public goods via pipelines is in the public interest and relates to a concept called 'energy security'. The NEB is an independent regulatory agency created by the Government of Canada in 1959 to 'oversee international and interprovincial aspects of the oil, gas and electric utility industries. The agency states 'it is the responsibility of the National Energy Board to consider all aspects of the project in order to determine if the pipeline project is in the public interest'. As a result, the development of pipeline projects by private companies is regulated by the Government of Canada in accordance with what the NEB determines is in the public interest.

In considering all aspects of the project, this policy solution holds that the NEB will acknowledge that borders can reflect 'the strength of incentives' to individuals that lead to market transactions and the movement of capital.41 Pipelines can mutually benefit SGYFNs and Canada's public interest due to the fact that economic incentives have been argued to create porosity within borderland communities, and that Canada relies heavily on the industrialisation of natural resources for international trade. Accordingly, the very nature of borders between SGYFN territories, the Yukon and Canada – as artificial barriers to the achievements and goals of human beings - possess the vital capacity for accommodating porosity. In overcoming the hurdle of conflicting values among Yukon First Nations, it is essential to emphasise the practicality of economic incentives – specifically, those contained within land agreements under the Yukon's UFA framework and how pipeline construction can benefit SGYFN's endeavour towards becoming truly self-sufficient self-governments. As stated in the background to this policy solution, the framework of the UFA and respective Final Agreements represent institutional regulations that offer pathways for capitalising off the market incentives offered by pipeline development projects traversing indigenous borders in remote regions of Canada. In essence, the UFA mechanises an economic incentive; it is the amalgamation of institutional and fiduciary regulations negotiated by the Government of Canada, the Yukon Government and the 11 SGYFNs.

13.3.3. The Umbrella Final Agreement and SGYFNs

As previously discussed, indigenous territory in the Yukon is comprised of 11 recognised self-governments termed 'Self-Governing Yukon First Nations' or SGYFNs. Yukon land claims within SGYFN territory are enshrined by the Umbrella Final Agreement (UFA), which was signed by the Government of Canada, the Government of Yukon and the Council for Yukon Indians in 1993, where 11 out of 14 Yukon First Nations signed on.⁴² The UFA 'forms the basis for the negotiation of each First Nation's Final Agreement', where the Final Agreement(s) provide for the negotiation of self-government agreements and allow SGYFNs to make decisions in relation to their lands, resources, governments and programmes.⁴³ In the Yukon, SGYFN territory has been negotiated through land claims, and those claims are enshrined by the Final Agreement(s) which entail the rights and responsibilities of various interested parties concerned with 'Settlement Land'. The parties include: the respective SGYFN, the Yukon provincial government and

the Government of Canada. 'Settlement Land' is defined as land that does not belong to the Yukon province or to Canada. The definition of 'Settlement Land' came to fruition as a result of the landmark 'Calder decision', a federal policy that was adopted in 1973. It was a ruling that essentially stated:

'[t]he Supreme Court of Canada in 1973 first recognised land rights based on Aboriginal title [and that] Aboriginal title is based on an Aboriginal group's traditional use and occupancy of that land.'44

As a result of the Calder decision, each Yukon First Nation is 'owner of the Settlement Land' and has a series of powers regarding the land's management. 45 Accordingly, Settlement Land falls under two designations in the Yukon, and is defined in the UFA as 'Category A Settlement Land, Category B Settlement Land or Fee Simple Land'. 46 In relation to Rights of Access and Mineral Rights to the land, Category A acknowledges that the First Nation has ownership of surface and the subsurface while Category B Settlement acknowledges that the First Nation has ownership of the surface but does not have ownership of Mines and Minerals nor the Right to Work Mines and Minerals. In distinguishing Category B Settlement Land from Category A, 'The Government of Yukon retains administration and control of the subsurface' in Category B designations.⁴⁷ In the Yukon, two-thirds of these lands are Category A Settlement Lands, and the remaining third are Category B Settlement Lands and Fee Simple Lands. 48 However, both designations of Settlement Land pose significant problems for northern development by private interests on behalf of the National Energy Board (NEB) and the Government of Canada. First, although Category B Settlement Land grants the Yukon Government 'administration and control of the subsurface', Section 18.6.0 of the UFA states that Access to Settlement Land for an Existing Mineral Right has a number of 'Conditions of Access'. Primarily, the UFA establishes Rights of Access that are subject to the following conditions: that there should be no significant damage to the Settlement Land or to improvements on the Settlement Land (18.6.1.1), and no permanent structures can be erected on the Settlement Land (18.6.1.3).⁴⁹ This requirement would conform to the Category B Settlement Land designation stating that the First Nation or SGYFN owns the surface land. As a result, any form of pipeline development without the proper/official consent of the SGYFN would be in direct violation of the UFA. Consequently, if a SGYFN refuses pipeline construction, there are no explicit lawful avenues contained in the UFA/individual

SGYFN Final Agreements to circumvent the legal restrictions regarding access to Settlement Land. Accordingly, solutions must appeal to the agreed-to principles contained in the UFA/self-government Final Agreements concerning Settlement Land and the rights and responsibilities of Yukon First Nations' self-government and their legislated relationship with the Government of Yukon and the Canadian Federal Government. Notably, SGYFNs possess the right of taxation.

13.4. The Incentive Model: Funding the Right of Self-Determination

13.4.1. The Power to Levy Taxes: A Lawful Solution to an Enduring Problem

Contained within the UFA and in the Final Agreements for individual SGYFNs is the power of these self-governments to tax Settlement Land. Self-governing Yukon First Nations share taxation powers with the Government of Yukon and the Government of Canada, and can tax interests on Settlement Land.⁵⁰ According to the UFA, Yukon Indian Self-Government Settlement Land is 'subject to the power of the Yukon First Nation to levy and collect fees for the use or occupation of Settlement Land, including property taxes'. 51 Importantly, the UFA and underlying Final Agreements also obligate SGYFNs to assume responsibility for the delivery of local government services.⁵² Accordingly, SGYFNs currently receive financial assistance from the federal government and the Government of Yukon to support the provision of these services to their respective communities under the UFA. Financial assistance comes in the form of government transfer payments to help SGYFNs fulfill these responsibilities. As part of individual self-government Final Agreements, there are Programs and Services Transfer Agreements (PSTAs) and Self-Government Financial Agreements that structure government financial assistance to SGYFNs.

PSTAs 'enable self-governing Yukon First Nations to assume responsibility for federal or territorial program areas falling within the SGYFN's law-making authority.'53 PSTAs effectively transfer and legislate the authority for providing services such as health, housing and social services from the federal government to the SGYFN. Self-Government Financial Transfer Agreements then assume that financing for SGYFNs under the UFA is a shared responsibility among federal, provincial/territorial and self-governing Yukon First Nation governments. These

agreements are the primary funding instrument between the Government of Canada and SGYFNs, and they 'provide the financial mechanism to flow funding to SGYFNs'. 54 The objective of self-government transfer agreements is to provide the SGYFN with resources to enable it to provide public services for which it is responsible at levels 'reasonably comparable to those offered elsewhere in the Yukon, at reasonably comparable levels of taxation'.55 In 2014-2015, the Ministry of Indian Affairs and Northern Development Canada allocated CA\$100,863,662 in transfer payments from PSTAs to the 11 SGYFNs. These figures are displayed in Figure 13.1. A 'transfer payment' was defined as a 'grant, contribution or other payment made by the Government for which no goods or services are received'.56 Of particular significance is that 'a self-government financial transfer agreement considers the revenue capacity of the SGYFN and reduces Government of Canada funding to the SGYFN according to agreed-to formula.²⁵⁷ In 2014–2015, on average, a Yukon First Nation received approximately CA\$4,584,712 in federal transfer payments to fund programmes and services previously managed by other governments.58

13.4.2. Historical Convention vs. Present Need

To assess the utility of this transfer funding, CA\$4,584,712 spread over a fiscal year would amount to CA\$382,059/month for previously administered INAC/AANDC programmes in health, social services and housing. When accounting for salaries, equipment and administration costs, it becomes apparent that PSTAs and Self-Government Financial Transfer Agreements provide a bare minimum to assist Yukon First Nations in maintaining even mediocre forms of programmes and services that are essential to sustain their respective communities. Unfortunately, the rationale behind the Government of Canada's decision to parsimoniously allocate funding is based on historical (and presumably, colonial) convention rather than present need. The historical approach to SGYFN funding 'assumes that programs and services for Yukon First Nations were adequately funded to meet their needs when they were under the Indian Act, 1876'59, a core piece of colonial legislation that continues to control most aspects of aboriginal life. 60 For the Government of Canada, however, it would follow that Yukon First Nations receive the same amount they received under the Indian Act (adjusted for inflation and population shifts) and, thus, 'INAC will not allow the transfer of programs and services to be an occasion for what it terms program enrichment.'61 On the contrary, however, Yukon First Nations have rejected this rationale

by stating that the appropriate level of funding is not being met to achieve reasonable goals in each programme and service area and 'that historical levels of funding do not provide for this'. Other modes of revenue generation to enrich social programmes and services, therefore, would present an opportunity to greatly increase the ability of Yukon First Nations to *govern effectively* and solve problems related to health, housing and other social issues that are markedly worse and suffer disproportionately higher rates of destitution than non-aboriginal communities in Canada.

Essentially, in moving towards self-sufficient self-governance, Yukon First Nations and other indigenous self-governments in Canada can only enjoy the right to self-determination in as much as there are the means to fund it. Accordingly, the historical limits placed on government funding presents a compelling case for economic development. Accordingly, it is true that the fiscal capacity of Yukon First Nations is directly related to their tax base and is a critical determinant of their level of self-determination. Economic self-sufficiency, therefore, is viewed as being critically important to self-government, and this sentiment is echoed by former Grand Chief, Ovide Mercredi's statement: If we gain [political] power for the community but we don't get the economy, we have power that cannot exercise itself. Therefore, exercising the right to levy taxes on Settlement Land unlocks the potential for economic growth and self-determination when pipeline taxation becomes the basis for economic development.

Since financing self-government is a shared responsibility among the federal, territorial and self-governing Yukon First Nation Governments, the Self-Government Financial Transfer Agreements are the primary funding instrument between the Government of Canada and SGYFNs; they provide the financial mechanism to flow funding to SGYFNs for programmes and services previously managed, administered or delivered by other governments.66 According to these agreements, 'the objective of self-government financial transfer agreements is to provide the SGYFN with resources to enable it to provide public services for which it is responsible at levels reasonably comparable to those offered elsewhere in the Yukon, at reasonably comparable levels of taxation'.67 Therefore, in ensuring the most efficient and effective use of those transferred financial resources from Canadian taxpayers, the Government of Canada believes that 'wherever feasible, Aboriginal governments and institutions should develop their own sources of revenue in order to reduce reliance, over time, on transfers from other governments'.68 Thus, self-government financial transfer agreements

incorporate the principle of SGYFN fiscal responsibility and cost-sharing. Of critical importance to the incentive model is that the Self-Government Financial Transfer Agreement has a built-in mechanism that considers the revenue capacity of the SGYFN and reduces the Government of Canada's funding to the SGYFN according to an agreed-to formula.⁶⁹ Accordingly, a Yukon First Nation is legally obligated to take opportunities 'wherever feasible' to generate revenue towards becoming less reliant on provincial/territorial and federal transfer payments, and, when failing to utilise the capacity to do so, has agreed to have its funding adjusted accordingly. In pursuing innovative avenues for revenue generation, Yukon First Nations could exercise their legal right to tax Settlement Land and apply that to 'foreign' entities seeking to conduct activities on that land. The taxation of foreign interests is inherently a revenue-generating capacity, and it is the logical extension of being in close proximity to a multi-trillion-dollar industry. Private pipeline routes in the North, therefore, represent a fiscal opportunity for SGYFNs to govern effectively and meet their legal responsibilities under the UFA.

13.4.3. Transit Fees: An Economic Model from Developing Countries

The practice of charging fees or taxes on 'foreign' energy companies' activities on sovereign territory is a well-established model for spurring economic growth in developing countries. In particular, this arrangement has been an ongoing phenomenon in the transit of natural resources throughout Central Asia and northern Africa. In the regions surrounding the Caspian Sea, transit pipelines 'became the central part of a framework for economic development and conflict resolution in the Caucasus [where] [e]nergy revenues and transit fees were essential in boosting the coffers and legitimacy of cash-starved and weak central governments'.70 Additionally, local communities were argued to reap the (contested) 'trickle-down' economic benefits that created energy-related service sector jobs and overall foreign investment.71 Transit fees exacted on foreign pipeline infrastructure were defined as 'a reward to the transit country for sacrificing its sovereignty.'72 These rewards came in the form of diverse contract formats regulating various transit fee arrangements. Forms include 'Fee per Barrel' contracts (a toll based on physical production); production-sharing contracts, in which the host country receives a reward in the form of the physical oil produced (as seen in the country of Georgia); or royalty contracts in which the foreign company 'receives a title to the property (resource)' and pays a stipulated

percentage of the value of production to the host country.⁷³ All three forms could see applications in the SGYFN-Canadian context.

Since weak First Nation self-governments may not possess the technology, funding and human capital to harvest the financial rewards from pipelines traversing Settlement Land, investment from 'foreign' energy companies could be a gateway to self-sufficiency for many if not all financially dependent Yukon First Nations. The 'ground-breaking' 1977 document *Together Today for our Children Tomorrow* spawned the negotiations for SGYFNs and acknowledged the limitations underlying economic development by First Nations governments. As such, an appeal within the document implored the Canadian Government to consider the outsourcing of expertise by arguing:

'Many successful companies and corporations are controlled by people who are not experts. They hire experts. Even the Government sometimes hires experts to advise them. The people in control have to separate good advice from bad advice, then make the right decisions. This we can do.'⁷⁴

In regard to making the right decisions, for example, according to the aforementioned 'Fee per Barrel' concessionary agreement, a SGYFN could grant an energy company the right to operate on the land if they pay a stipulated amount of the production revenue (% per barrel) to the self-government. Here, the company would assume all of the risks/returns for the transfer of raw energy while being taxed to assume those risks/returns.⁷⁵ Thus, a reluctant SGYFN could consent to 'foreign' pipeline construction on Category A or Category B Settlement Land, which could then be used to levy transit taxes on the production income from private pipeline companies' extraction projects. The following analysis will outline a hypothetical growth projection if an SGYFN entered into a 'Fee per Barrel' concessionary agreement with a 'foreign' energy company.

Take for example, the Norman Wells Pipeline that runs from Norman Wells, Northwest Territories, to Edmonton, Alberta. According to Enbridge Company, the subsurface pipeline has a capacity to produce 50,000 barrels per day. In making the simplifying assumption that the pipeline would pump at full capacity for 365 days, the Norman Wells Pipeline could produce 18,250,000 taxable barrels in a year. If a Yukon First Nation were to negotiate US\$0.46 per barrel, then the transit revenue generated would amount to US\$8,395,000 (CA\$10,003,387) per year. When compared to the current income from federal transfer payments, there is a phenomenal increase in revenue.

Potential Percentage Growth Rate with Transit Fees

= 118% increase in revenue (based on Federal assistance revenue alone)

Fig. 13.1 Revenue Growth Potential. Source: Author

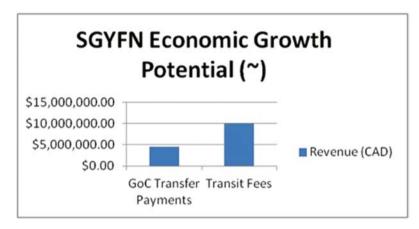


Fig. 13.2 SGYFN Economic Growth Potential. Source: Author

This significant percentage increase (118 per cent) in revenue would represent an approximately CA\$5.5 million increase from 2014–15 levels (based off a purely federal assistance alone). Revenue figures approximating this amount would theoretically solve the problem of underfunding from provincial and federal governments, and provide the much-needed levels of funding for 'programme enrichment' in order to far surpass reasonable goals for programmes and services areas. In theory, this could increase the social well-being of Yukon First Nations communities, assuming the revenue is distributed efficaciously and without corruption. Additionally, this magnitude of revenue could enable SGYFNs to enjoy a level of self-determination unhinged from the constraining conditions imposed by relying on colonially-inspired underfunded federal and provincial transfer payments. Unlike the Wet'suwet'en dispute in BC, given that some pro-pipeline First Nation self-governments would readily accept such an agreement, under the

UFA, those self-governing First Nations opposed to the pipeline would be legally obligated to take advantage of the economic opportunity. Under the Umbrella Final Agreement, SGYFNs could use the revenue generated from transit taxes/fees to provide public services for their communities at levels comparable to those offered elsewhere and at comparable levels of taxation. In other words, pipeline-opposed SGYFNs would be incentivised to provide at similar levels as pro-pipeline Yukon First Nation communities. In accordance with the government of Canada's fiduciary position, this incentive would enable aboriginal self-governments to develop their own sources of revenue to reduce their reliance on transfer payments from the government of Canada and government of Yukon.

13.4.4. Revisiting Border Porosity and the Strength of Incentives

In defending the strength of the independent variable in this regard (reducing government transfer payments), it is important to recall the theory that borders reflect the strength of incentives. As stated previously, institutional arrangements establish and recognise borders, whereby laws contained in those institutions regulate flows of capital, people, goods and other activities across them. 78 In deciding to act in accordance with these regulations, individuals or groups address their interests in which their decisions are directly related to the strength of incentives.⁷⁹ The institutional framework of the Final Agreements structures the capacity for Yukon First Nations to exercise their rights and regulate the porosity of their borders to the benefit of their communities. Accordingly, acting on incentives to consent to pipeline construction on Settlement Land, specifically to enjoy a level of self-determination as an independent, sovereign entity from Canada (in governance, culture and tradition), is a trivial undertaking for remaining autonomous, independent and in full control of the land. In heeding the endearing 1977 slogan for the Yukon Final Agreements, 'Together Today for our Children Tomorrow', 80 retaining the capacity to determine the future of the community and not relying on Canadian and Yukon governments is an unequivocal triumph not just for Yukon First Nations, but for First Nations peoples in Canada overall.

13.5. Concluding Remarks

This chapter has investigated Yukon land regulations and extrapolated contemporary border theory to a uniquely Canadian context. In its analysis, it was found that the framework of the Yukon Final Agreements

contains incentives that could encourage SGYFNs to consent to pipeline construction on Settlement Land. In doing so, it was determined that the Final Agreements represent institutional regulations that enhance a number of social processes for implementing innovative and flexible reconciliatory arrangements. These processes were argued to integrate the SGYFN-Canadian borderland through market forces, which include flows of capital, commodities and people. Likewise, the policy solution innovatively integrated concessionary revenue generation models from developing countries in Central Asia and northern Africa, and applied them to the Indigenous-Crown context. It was then determined that globalisation and the effects that TNCs have on border porosity in developing countries can have the same effects for strengthening agency and enabling the self-determination of sub-state, quasi-sovereign indigenous self-governments in Canada, presenting a possible new trend in Arctic security.

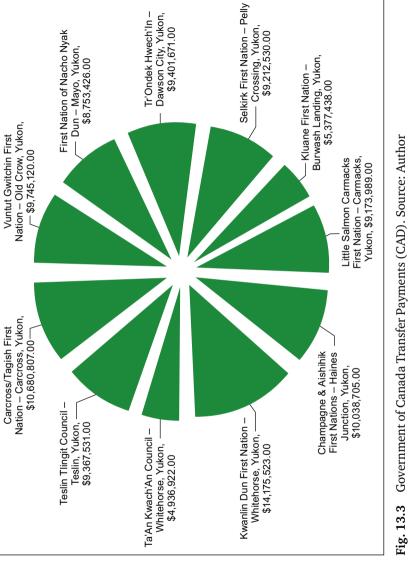
In essence, the chapter determined that transnational market forces incentivise positive agent action in response to energy development projects on sanctioned territory – specifically, by levying host governments' ability to tax foreign interests. As such, concessionary agreements signed with TNCs were found to be the keystone for creating border porosity in the northern Canadian context. Concessionary agreements ease border tensions by encouraging cooperative flows of capital between Canada and First Nations communities that spur economic prosperity; they create positive-sum circumstances in which the net gains and losses for all interests are outweighed by an overall shared increase in economic security. As such, the broader contribution the investigation makes to border theory is that quasi-sovereign governments existing within established state entities can also be the primary objects of analysis for analysing relations between human organisations. SGYFNs, by virtue of the Final Agreements, possess an inherent duality that the traditional paradigm of Westphalian sovereignty cannot incorporate. As a result, the investigation advocated that borders are no longer a wholly Westphalian enterprise; they are determined by human agency interacting within institutional structures rather than stagnant, isolated and immutable conceptualisations of space organisation.

Of particular importance is the fact that the incentive model for effective governance is crucial for transcending traditional views of space organisation due to the ultimate goal of self-sufficient self-government for Yukon First Nations. While much of the negative rhetoric on pipelines has unfairly lambasted them as being the antithesis to First Nations' capacity for self-determination and agency, the opposite, in fact, was

found to be true. Pipeline development projects instead offer enormous economic benefits for funding self-government to make the transition from being primarily dependent on federal assistance to being truly liberated from constraining and historically oppressive levels of funding for community programmes and services. Accordingly, the chapter supports the creation of a homogenous cross-borderland region that is defined by a shared interest in the generation of revenue flows to maintain Canada's energy security priorities – specifically, to lift Yukon First Nations onto a bona fide level of self-determination within the increasingly globalised, liberal international economy.

On a finer note, the investigation does not intend to trivialise the past. The contested and highly passionate debate over pipeline development projects in Canada is felt most by First Nations communities with an identity to the land prior to the misappropriation of the Huron-Iroquois' word 'kanata' meaning 'village or settlement'. 81 For First Nations peoples, pipeline development projects in Canada are a border issue that is deeply entrenched in the social and cultural underpinnings that define their exceptional relationship to the space assigned the term, 'Canada'. Consequently, the border debate itself cannot proceed without discussing and acknowledging truth: the historical legacy of culture genocide committed against First Nations peoples by the Crown, who enshrined the land under its 'dominion' for two centuries under the protracted and increasingly antiquated 'Doctrine of Discovery'. The coinciding land Treaties (Treaty promises that often went unfulfilled)⁸² are perhaps the most defining vestige of a colonial past, whereby land that was taken via domination was re-negotiated under the assumption that one group was more racially superior, powerful and worthy of the land than the other. Reasonably, and most unfortunate, this protraction of an 'in-group versus out-group' sentiment among First Nations communities and Canada has come to impede the possibilities for positive cooperative interactions across borders and the strengthening of relationships. The Truth and Reconciliation Commission defines reconciliation 'as an ongoing process of establishing and maintaining respectful relationships.'83 Optimistically. this chapter has suggested that pipeline development projects and the northern energy industry may be able to bridge this social divide by establishing mutually beneficial points of shared interest, community and economic security.

In summary, the chapter found that borders are institutions that can be dissolved by the very regulations and agreements intended to maintain their rigidity and exclusion. While the traditional political philosophy behind the structuring of borders is organised according to



difference rather than similarity, on the contrary, SGYFNs in Canada's North are primed for shifting away from the contemporary notion of borders that requires an in-group versus out-group mentality. In actuality. the existence of borders between 'nations' provide avenues for flows of prosperity and cooperation between indigenous Canadians and the cultural mosaic of subsequent immigrant waves to the land. Theoretically, the nuance underlying this way forward is the idea that the Westphalian state-system orthodox as the sole foundation of bordering processes is challenged by the existence and political legitimacy of the SGYFN model of governance. As such, the investigation revealed that Westphalianism is hypocritical in this indigenous context; that the security of the Canadian nation-state is only as secure as the relationships it maintains. In essence, therefore, the easing of borders around common economic goals produces security for indigenous and nonindigenous Canadians alike, under the shared and endearing slogan. 'Together Today for our Children Tomorrow'.

Table 13.1 Government of Canada Transfer Payments (CAD)

Yukon First Nation	Government of Canada Transfer Payments (CAD) [1]
Vuntut Gwitchin First Nation – Old Crow, Yukon	\$9,745,120.00
First Nation of Nacho Nyak Dun – Mayo, Yukon	\$8,753,426.00
Tr'ondek Hwech'in – Dawson City, Yukon	\$9,401,671.00
Selkirk First Nation – Pelly Crossing, Yukon	\$9,212,530.00
Kluane First Nation – Burwash Landing, Yukon	\$5,377,438.00
Little Salmon Carmacks First Nation – Carmacks, Yukon	\$9,173,989.00
Champagne & Aishihik First Nations – Haines Junction, Yukon	\$10,038,705.00
Kwanlin Dun First Nation – Whitehorse, Yukon	\$14,175,523.00
Ta'An Kwach'An Council – Whitehorse, Yukon	\$4,936,922.00
Teslin Tlingit Council – Teslin, Yukon	\$9,367,531.00

(Continued table 13.1)

(Continued table 13.1)

Yukon First Nation	Government of Canada Transfer Payments (CAD) [1]
Carcross/Tagish First Nation – Carcross, Yukon	\$10,680,807.00
Total	\$100,863,662.00
Average Transfer Payments per Yukon First Nation (2014/2015)	\$9,169,423.82
Average Yukon First Nation Transfer Payments per year	\$4,584,711.91

Transfer Payments: Indian Affairs and Northern Development Grants to implement comprehensive land claims and selfgovernment agreements

'To support increased authority, governance capacity and decision-making powers for Indigenous governments and other recipients with implementation obligations under modern treaties, financial arrangements need to provide maximum flexibility to set budgets and re-profile funds in order to meet community priorities and program and governance needs.' – INAC, 2018/12/21 [2]

- [1] Government of Canada, 'Detailed information on Transfer Payments, as per the Public Accounts of Canada', last modified 21 December 2018.
- [2] Indian Affairs and Northern Development Canada (INAC), 'Grants to implement comprehensive land claims and self-government agreements: Terms and Conditions', last modified 21 December 2018.

Source: Author

Notes

- 1 US Department of the Interior, US Geological Survey, '90 Billion Barrels of Oil and 1,670 Trillion Cubic Feet of Natural Gas Assessed in the Arctic', last modified 22 July 2008, https://www. usgs.gov/media/audio/90-billionbarrels-oil-and-1670-trillion-cubic-feetnatural-gas-assessed-arctic.
- 2 Shawn McCarthy, "Anti-petroleum" Movement a Growing Security Threat to Canada, RCMP Say', The Globe and Mail, 17 February 2015, last modified 12 May 2018, https://www.theglobeandmail. com/news/politics/anti-petroleummovement-a-growing-security-threat-tocanada-rcmp-say/article23019252/.

- 3 Department of Justice Canada, 'Principles Respecting the Government of Canada's Relationship with Indigenous Peoples', last modified 14 February 2018, http://www.justice.gc.ca/eng/csj-sjc/ principles-principes.html.
- 4 Truth and Reconciliation Commission of Canada (TRC), Honouring the Truth, Reconciling for the Future: Summary of the Final Report of the Truth and Reconciliation Commission of Canada (Winnipeg, MB: Truth and Reconciliation Commission of Canada, 2015), 186, http://nctr.ca/assets/reports/Final%20Reports/Executive_Summary_English_Web.pdf.
- 5 Dwayne R. Menezes and Heather N. Nicol, 'Introduction', *The North American Arctic: New Trends in Arctic Security*, ed. Dwayne R. Menezes and Heather N. Nichol (London: UCL Press, 2019).
- 6 TRC, Honouring the Truth, Reconciling for the Future, 1.
- 7 The Truth and Reconciliation Commission argues that the 'Crown's failure to keep its Treaty promises', alongside the 'destructive impacts of residential schools', have 'damaged the relationship between Aboriginal and non-Aboriginal peoples'. TRC, Honouring the Truth, Reconciling for the Future, 184.
- 8 Tom Flanagan, First Nations? Second Thoughts, 2nd ed. (Montreal: McGill-Oueen's University Press, 2008), 145.
- 9 TRC, Honouring the Truth, Reconciling for the Future, 46.
- 10 Assembly of First Nations, Dismantling the Doctrine of Discovery (Ottawa: Assembly of First Nations, 2018), 2, http://www. afn.ca/wp-content/uploads/2018/02/ 18-01-22-Dismantling-the-Doctrine-of-Discovery-EN.pdf.
- 11 Flanagan, First Nations? Second Thoughts, 155.
- 12 John Locke, Two Treatises of Government (London: Whitmore and Fenn, 1821; originally published in 1690), Chapter VII, Sec. 85.
- 13 Locke, Two Treatises of Government, Chapter V, Sec. 26.
- 14 Flanagan, First Nations? Second Thoughts, 55.
- 15 Flanagan, First Nations? Second Thoughts, 7.
- 16 TRC, Honouring the Truth, Reconciling for the Future, 49.
- 17 Richard Devetak, 'Post-Structuralism', Theories of International Relations 5th ed., ed. Scott Burchill et al. (Basingstoke: Palgrave Macmillan, 2013), 210.

- 18 Emmanuel Brunet-Jailly (ed.), Borderlands: Comparing Border Security in North America and Europe (Ottawa: University of Ottawa Press, 2007), 355.
- 19 Brunet-Jailly, Borderlands, 351.
- 20 Brunet-Jailly, Borderlands, 354.
- 21 TRC, Honouring the Truth, Reconciling for the Future, 187.
- 22 CIRNAC, 'Self-government: What is Indigenous Self-government?', last modified 27 August 2019, https://www. rcaanc-cirnac.gc.ca/eng/1100100032275 /1529354547314#chp2.
- 23 Gurston Dacks, 'Implementing First Nations Self-Government in Yukon: Lessons for Canada', Canadian Journal of Political Science/Revue canadienne de science politique 37, no. 3 (2004): 688.
- 24 CIRNAC, 'Self-government: Other Paths to Greater Self-determination', last modified 27 August 2019.
- 25 Robert Brent Anderson, Economic Development among the Aboriginal Peoples in Canada – The Hope for the Future (Concord: Captus University Press, 1999), 2.
- 26 Anderson, Economic Development among the Aboriginal Peoples in Canada, 97–98.
- 27 Department of Justice Canada, 'Principles Respecting the Government of Canada's Relationship with Indigenous Peoples'.
- 28 Fiona Hill, 'Pipelines in the Caspian: Catalyst or Cure-all?', *Georgetown Journal of International Affairs* 5, no. 2 (2004): 20.
- 29 Brunet-Jailly, Borderlands, 351.
- 30 Alexander C. Diener and Joshua Hagen, Borders: A Very Short Introduction (Oxford: Oxford University Press, 2012), 73.
- 31 Diener and Hagen, Borders, 73.
- 32 Kyle Bakx, 'Kinder Morgan Braces for Standing Rock-type Protests', *CBC*, last modified 5 November 2016, http://www.cbc.ca/news/business/tmx-kindermorgan-bc-oilpatch-pipelinestanding-rock-1.3836489.
- 33 Carlito Pablo, 'Wet'suwet'en People Disagree About Pacific Trail Pipelines Project', The Georgia Straight, last modified 7 April 2014, https://www. straight.com/news/621226/ wetsuweten-people-disagree-aboutpacific-trail-pipelines-project.
- 34 Office of the Wet'suwet'en, 'Your Voice, Our Future' [video file], last modified 19 May 2011, https://vimeo.com/ 23967735.

RECONCILING THE NORTH 257

- 35 Office of the Wet'suwet'en, 'Your Voice, Our Future'.
- 36 Diener and Hagen, Borders, 59.
- 37 Tim Van Hinte, Thomas I. Gunton, and J.C. Day, 'Evaluation of the Assessment Process for Major Projects: A Case Study of Oil and Gas Pipelines in Canada', Impact Assessment and Project Appraisal 25, no. 2 (2007): 131.
- 38 Energy security forms the nexus of national security and economic security. What the concept suggests is that the supply and utilisation of finite resources (both monetary and tangible) can produce security for a state overall. As such, national and international security measures are directly affected by the presence or scarcity of resources [1], which is governed by basic economic principles. Consequently, when external happenings such as 'the end of cheap oil' threaten the global supply of energy (a finite resource), global economic growth can be hindered which can generate instability [2]. [1] Chris Flaherty and Walter Leal Filho, 'Energy Security as a Subset of National Security', Global Energy Policy and Security, ed. Walter Leal Filho and Vlasios Voudouris (London: Springer, 2013), p.12/[2] Hugo McPherson, W. Duncan Wood, and Derek M. Robinson, Emerging Threats to Energy Security and Stability. North Atlantic Treaty Organization (NATO) Security through Science Series (Dordrecht: Springer, 2005), 3-4.
- 39 Government of Canada, National Energy Board, 'Who we are', last modified 1 December 2016, https://www.neb-one. gc.ca/bts/whwr/index-eng.html.
- 40 Van Hinte et al., 'Evaluation of the Assessment Process for Major Projects', 131.
- 41 Brunet-Jailly, Borderlands, 351.
- 42 Indigenous and Northern Affairs Canada (INAC), Building the Future: Yukon First Nation Self-Government (Ottawa: Indigenous and Northern Affairs Canada, 2008), 5.
- 43 INAC, Building the Future: Yukon First Nation Self-Government, 4.
- 44 Anderson, Economic Development among the Aboriginal Peoples in Canada, 57.
- 45 Umbrella Final Agreement between the Government of Canada, the Council for Yukon Indians and the Government of the Yukon, § 5.5.0 Yukon First Nation Management Powers (1993), 46, http://www.eco.gov.yk.ca/pdf/umbrellafinalagreement.pdf.

- 46 Umbrella Final Agreement, Chapter 1 Definitions, 7.
- 47 Mineral Resources Branch: Energy, Mines, and Resources, Interpretative Bulletin 2009–03 Administration of Mineral Claims in the Traditional Territory of First Nations with Final Agreements (Umbrella Final Agreement) (Whitehorse, YT: Yukon Government, 2009), 2, http://www.emr.gov.yk.ca/mining/pdf/ib_2009_03_settlement lands.pdf.
- 48 Environment Yukon, Yukon Hunting
 Regulations Summary 2019–2020
 (Whitehorse, YT: Yukon Government,
 2018), 15, https://yukon.ca/sites/yukon.
 ca/files/env/env-yukon-huntingregulations-summary_en.pdf.
- 49 Umbrella Final Agreement, §18.6.0 Conditions of Access, 211.
- 50 INAC, Building the Future: Yukon First Nation Self-Government, 15.
- 51 *Umbrella Final Agreement*, § 21.2.0 Application of Certain Laws, 245.
- 52 INAC, Building the Future: Yukon First Nation Self-Government, 13.
- 53 INAC, Building the Future: Yukon First Nation Self-Government, 13.
- 54 INAC, Building the Future: Yukon First Nation Self-Government, 14.
- 55 INAC, Building the Future: Yukon First Nation Self-Government, 14.
- 56 Government of Canada, 'Detailed information on Transfer Payments, as per the Public Accounts of Canada', last modified 5 October 2017, http://open.canada.ca/data/en/dataset/69bdc3eb-e919-4854-bc52-a435a3e 19092.
- 57 INAC, Building the Future: Yukon First Nation Self-Government, 15.
- 58 See Table 13.1.
- 59 Dacks, 'Implementing First Nations Self-Government in Yukon: Lessons for Canada', 679.
- 60 Isabelle Montpetit, 'Background: The Indian Act', CBC News, 30 May 2011, last modified 14 July 2011, https://www.cbc. ca/news/canada/background-the-indianact-1.1056988.
- 61 Dacks, 'Implementing First Nations Self-Government in Yukon: Lessons for Canada'. 679.
- 62 Dacks, 'Implementing First Nations Self-Government in Yukon: Lessons for Canada', 679.
- 63 Dacks, 'Implementing First Nations Self-Government in Yukon: Lessons for Canada'. 688.

- 64 Dacks, 'Implementing First Nations Self-Government in Yukon: Lessons for Canada'. 688.
- 65 Anderson, Economic Development among the Aboriginal Peoples in Canada, 11.
- 66 INAC, Building the Future: Yukon First Nation Self-Government, 13.
- 67 INAC, Building the Future: Yukon First Nation Self-Government, 14.
- 68 Indigenous and Northern Affairs
 Canada, 'The Government of Canada's
 Approach to Implementation of the
 Inherent right and the Negotiation of
 Aboriginal Self-Government Financial
 Arrangements' 1995, last modified
 15 September 2010, https://www.
 rcaanc-cirnac.gc.ca/eng/1100100031843
 /1539869205136.
- 69 INAC, Building the Future: Yukon First Nation Self-Government, 15.
- 70 Hill, 'Pipelines in the Caspian: Catalyst or Cure-all?', 20.
- 71 Hill, 'Pipelines in the Caspian: Catalyst or Cure-all?', 20.
- 72 Ekpen James Omonbude, Cross-border Oil and Gas Pipelines and the Role of the Transit Country: Economics, Challenges, and Solutions (Basingstoke: Palgrave Macmillan, 2013), 6.
- 73 C.R. Blitzer et al., 'Oil Exploration in the Developing Countries: Poor Geology or

- Poor Contracts?', *Natural Resources Forum* 9, no. 4 (November 1985): 300.
- 74 Council for Yukon Indians, Together Today for our Children Tomorrow (Brampton: Charters Publishing Company, 1977), 22, https://cyfn.ca/wp-content/uploads/2013/10/together_today_for_our_children_tomorrow.pdf.
- 75 Blitzer et al., 'Oil Exploration in the Developing Countries: Poor Geology or Poor Contracts?', 302.
- 76 Note: This is a rough approximation based on federal assistance alone.
- 77 INAC, Building the Future: Yukon First Nation Self-Government, 14.
- 78 Brunet-Jailly, Borderlands-Comparing Border Security in North America and Europe, 351.
- 79 Brunet-Jailly, Borderlands-Comparing Border Security in North America and Europe, 351.
- 80 Council for Yukon Indians, *Together Today* for our Children Tomorrow.
- 81 Government of Canada, 'Origin of the Name "Canada"', last modified on 11 August 2017, https://www.canada.ca/ en/canadian-heritage/services/ origin-name-canada.html.
- 82 TRC, Honouring the Truth, Reconciling for the Future, 45.
- 83 TRC, Honouring the Truth, Reconciling for the Future, 16.

259

14

'That happens up there?' Human Trafficking and Security in the North American Arctic

Mike Perry

 Δ የታነባርነው Δ Δ ያው Δ ያንበት ነታሪት ህወና Δ ያ

14.1. Introduction

'You mean, that happens up there?' is the familiar refrain when raising the issue of human trafficking in the Arctic. The unfortunate answer is yes, human trafficking happens in the North American Arctic. Nicole Bromfield's 2008 admonition remains relevant today: 'human trafficking may not be the most pressing issue in Arctic areas... [A]s globalisation and increased migration continue to impact Arctic nations, so too will human trafficking.'

The International Labour Organization estimates that some 2.5 million people worldwide live in slavery.² Human trafficking has been assessed to rank equal with the illegal arms trade as the world's second most profitable criminal enterprise.³ Additional estimates hold that more than 500,000 women and girls are trafficked into the United States for forced sex work each year,⁴ with 1,500–2,000 people being trafficked in or across borders through Canada annually.⁵ The Arctic is not immune.

In 2015, authorities expressed concern that victims of human trafficking may have been transiting using a remote Arctic border post in Norway on bicycles.⁶ More specific to the North American Arctic, while there has been little evidence of human trafficking in Greenland,⁷ human trafficking has been documented in northern Canada and the United States.

14.1.1. It Happens Up There

Human trafficking has been a concern and reality in the Canadian North for several years now. Canada's Department of National Defence in 2013 documented the suspected involvement of several Northern politicians in human trafficking, with the first charges of human trafficking in Canada's North laid in a separate case(s) the same year. A major research report has estimated that up to 30 per cent of young people in Nunavut could be victims of trafficking, and there have been documented reports of Inuit families being offered CA\$15,000–20,000 for their underage daughters. An intelligence assessment has also concluded that organised crime has made efforts to traffic people in the Canadian Arctic, and a national defence planning analysis has included reference to human trafficking through the North American Arctic.

In the United States, in Alaska, 19 convictions of sex trafficking were obtained between 2007 and 2012, ¹⁵ and some 40 additional cases of both sex trafficking and human trafficking for forced labour were reported from 2012 to 2017. ¹⁶ Homeless youth in Anchorage, Alaska, have been identified as being disproportionately vulnerable to trafficking, and the results of a study last year in 10 US and Canadian cities revealed Anchorage as having the highest prevalence of trafficked homeless youth in the United States. ¹⁷ The same study indicated that 28 per cent of young people in Anchorage who were surveyed met the definition of human trafficking, and 27 per cent of the city's homeless young women interviewed had been trafficked for sex; 17 per cent of men. ¹⁸ This past year, a young female – allegedly the victim of human trafficking – was detected on an Air Alaska flight from Seattle to San Francisco. ¹⁹ Alaska residents recently held a march to raise awareness of human trafficking in their state. ²⁰

Transnationally, a comprehensive report on human trafficking in Nunavut released in 2016 concluded that: 'vulnerable Inuit are already known targets for traffickers... internationally to the United States and potentially through Europe through Greenland.'²¹ But what is human trafficking?

14.2. Human Trafficking

Abolishing slavery globally has been the stated goal of the international community through treaty-making literally for centuries.²² The Protocol to Prevent, Suppress and Punish Trafficking in Persons Especially Women

and Children (Trafficking Protocol) was concluded in 2002.²³ The Trafficking Protocol, now ratified by 170 countries,²⁴ states the currently internationally accepted definition of human trafficking. Article 3(a):

"Trafficking in persons" shall mean the recruitment, transportation transfer, harbouring or receipt of persons, by means of the threat or use of force or other forms of coercion, of abduction, of fraud, of deception, of the abuse of power or of a position of vulnerability or of the giving or receiving of payments or benefits to achieve the consent of a person having control over another person, for the purpose of exploitation."

The Trafficking Protocol also requires States Parties to criminalise human trafficking within their national legal systems, ²⁵ provide assistance to victims²⁶ and prevent trafficking.²⁷ Fulfilling their obligations of the Trafficking Protocol, North American Arctic nations – Canada, Greenland (Denmark) and the United States – have implemented measures to combat human trafficking, both at the national and regional levels.²⁸

14.2.1. Anti-Trafficking Law in the North American Arctic

Sub-section 279.01(1) of the Canadian Criminal Code²⁹ states:

'Every person who recruits, transports, transfers, receives, holds, conceals or harbours a person, or exercises control, direction or influence over the movements of a person, for the purpose of exploiting them or facilitating their exploitation is guilty of an indictable offence...'

Just last year, the government of Canada introduced legislation to strengthen the Criminal Code to give 'law enforcement and prosecutors more tools to better fight human trafficking'.³⁰ Canada also proscribes human trafficking pursuant to its Immigration and Refugee Protection Act:³¹

'No person shall knowingly organise the coming into Canada of one or more persons by means of abduction, fraud, deception or use or threat of force or coercion.'32

In addition, anyone who tampers with or withholds travel or identification documents, including immigration status documents, is guilty of an indictable offence.³³

In the United States, sex trafficking and labour trafficking are distinguished, defined and criminalised under the Victims of Trafficking and Violence Protection Act of 2000 (Trafficking Act).³⁴ Incorporating the language of the Trafficking Protocol, the Trafficking Act defines sex trafficking as:

'... the recruitment, harboring, transportation, provision, obtaining, patronizing, or soliciting of a person for the purposes of a commercial sex act, in which the commercial sex act is induced by force, fraud, or coercion, or in which the person induced to perform such an act has not attained 18 years of age;'³⁵

Labour trafficking is defined as:

'... the recruitment, harboring, transportation, provision, or obtaining of a person for labor or services, through the use of force, fraud, or coercion for the purposes of subjection to involuntary servitude, peonage, debt bondage, or slavery.'³⁶

Similar to Canadian immigration law, US law prohibits entry into the United States specifically of any non-US citizen or non-US national who: commits, or conspires to commit, human trafficking inside or outside the United States pursuant to the Trafficking Act; has abetted traffickers; or is a family member beneficiary of human trafficking.³⁷ United States law also prohibits the forgery, alteration, use or supplying of altered US passports.³⁸

Human trafficking in Greenland is prohibited by Denmark's Penal Code³⁹ which was amended to combat human trafficking and protect victims, consistent with European Union anti-trafficking directives.⁴⁰ Section 262(a):

- '(1) Any person who recruits, transports, transfers, houses or subsequently receives a person, using or following the use of:
 - 1) unlawful coercion pursuant to Section 260 of this Act;
 - 2) deprivation of liberty pursuant to Section 261 of this Act;
 - 3) threats pursuant to Section 266 of this Act;
 - 4) unlawful induction, corroboration or exploitation of a delusion; or
 - 5) other unseemly conduct;

for the purpose of exploitation of the individual through sexual immorality, forced labour, slavery or slavery-like conditions, or

removal of organs, shall be guilty of trading in human beings and liable to imprisonment for any term not exceeding eight years.'

The maximum penalty for human trafficking in Greenland has been raised to 10 years of imprisonment, and section 7(1)(2)(a) of the Penal Code extends Danish criminal jurisdiction for alleged human trafficking committed outside Denmark and Greenland.

Greenland, under Danish law, also addresses human trafficking by offering survivors temporary residence and permitting survivors who assist in investigations to remain in the country. Section 9(c) of Denmark's Aliens Act⁴¹ states:

'(5) A residence permit may be issued to an alien whose presence in Denmark is required for the purpose of investigation or prosecution.'

Further, in terms of immigration law and policy, Denmark has been delivering a programme in collaboration with the International Organization for Migration to fund the repatriation of survivors to their home countries. ⁴² Canada, the United States and Greenland have also undertaken action to combat human trafficking through public policy and related initiatives.

14.2.2. North American Arctic States' Policies

Canada's policies against human trafficking are set out in its National Action Plan to Combat Human Trafficking ('Action Plan'). ⁴³ The Action Plan includes undertakings to: promote training to front line providers; provide targeted training to prosecutors and law enforcement officers; and identify victims and populations vulnerable to human trafficking. ⁴⁴ The Prime Minister of Canada reaffirmed his government's commitment to combating human trafficking again last summer. ⁴⁵ In terms of the North American Arctic, Canada's Northern Strategy references human trafficking, recognising that future 'problems' in the region will include illegal trafficking in people. ⁴⁶ Action to combat human trafficking is a priority at the highest level of government in the United States as well.

In February 2017, the President of the United States committed the 'full force and weight' of the US Government to combating the 'epidemic' of human trafficking.⁴⁷ This executive directive affirms the primary source of US anti-trafficking policy: its National Strategy to Combat Human Trafficking ('National Strategy').⁴⁸ More action inventory than clear strategy, the document includes discernable approaches and identified

priorities for combating human trafficking led by the Department of Justice. Stressing intra-agency and cross-sector collaboration, the National Strategy adopts a primarily prosecutorial, institutional approach⁴⁹ centred on: conducting investigations; prosecuting cases; providing services to victims; preventing human trafficking; and increasing the capacities of state, local, tribal and non-governmental organisations to combat human trafficking.⁵⁰ The US National Strategy also focuses on increasing awareness and providing training to prosecutors and government officials on best practices for identifying victims and providing care to survivors.⁵¹ Most recently, the United States acknowledged the 'urgent need' to enhance multilateral efforts against human trafficking in the Arctic.⁵²

In terms of public policy, Greenland combats human trafficking under Denmark's Action Plan to Combat Trafficking in Human Beings 2015–2018.⁵³ Denmark also maintains an anti-trafficking centre.⁵⁴ The Danish Action Plan focuses on preventing human trafficking; prioritising the needs of victims; prosecuting alleged traffickers; and enhancing inter-agency, multilateral and organisational cooperation.⁵⁵ Training law enforcement and promoting public awareness of human trafficking are also activities undertaken by Denmark to combat human trafficking.⁵⁶ Denmark has passed spending resolutions to increase funding for countertrafficking efforts to the year 2020.⁵⁷

14.2.3. Regional Efforts

At the regional level, engaging North America pursuant to the Ottawa Declaration, ⁵⁸ the Arctic Council – the leading intergovernmental forum on Arctic policy comprised of Canada, Denmark, Finland, Iceland, Norway, Russia, Sweden and the United States – has been seized of the issue of human trafficking. As early as 2002, the Arctic Council's Conference on Women in the Arctic included human trafficking. ⁵⁹ The Arctic Council also held a conference in 2005 to aid in increasing cooperation to combat human trafficking ⁶⁰ and has engaged with the Council of Europe's Group of Experts on Action against Trafficking in Human Beings. ⁶¹

Canada and United States also jointly conduct surveillance – including for human trafficking – under the North American Aerospace Defence Command (NORAD), relaying information to local law enforcement agencies of suspicious air and sea vessels. 62 Coordinating to combat human trafficking is also a priority of the North Pacific Coast Guard. 63

The evolution, if not transformation, of the environment, economy and communities – and therefore the security – of the North American

Arctic is anticipated to expand exponentially. Safe human activity, especially in the face of changing external influences, requires security. This increase will make human trafficking – and approaches to security – increasingly pressing issues in the North American Arctic in the short, intermediate and long terms.

14.3. What's happening 'up there'

The North American Arctic is undergoing unprecedented and disruptive change. The fundamental driver of this change is the environment. Climate change is impacting the physical geography, vegetation and animal life – and affecting human activity – in the region in direct and profound ways. More specifically, melting ice is creating and increasing military, economic and social challenges in the region. And while the prediction of an 'Arctic scramble' may yet be premature given the unavailability and cost of the technology needed to work in ice as well as fluctuating commodity and resource prices, it has been estimated that the influx of opportunity-seeking economic migrants coming with the increased access to the region due to environmental changes, could number in the tens of thousands across the Arctic in coming years.

14.3.1. Climate Change

'The Arctic is melting, and with the melting have come changes: warming temperatures; rising waters; ecosystem changes; and altered animal, bird, and sea mammal migrations, to name a few. Because of these changes, investors now find the Arctic an attractive location for new business ventures, tourism, and other economic activities.'67

As with most things in the Arctic's past, current and future, many of the causes, concerns and consequences of human trafficking – in addition to the well-known root cause of poverty, gender inequality and corruption⁶⁸ – can be traced to a single source: climate change. As reported in 2011 by the US National Academy of Science, 'Climate change in the Arctic occurs at twice the rate in more southernly locations.'⁶⁹

Canada, Greenland and the United States have acknowledged that the climate of the North American Arctic is changing. ⁷⁰ In fact, its climate is changing more rapidly than anywhere else on earth. That the North American Arctic is facing an unprecedented change in environment,

weather and related human activity is an accurate – however in no way new – forecast.⁷¹ Temperatures have been rising at double the rate of anywhere else on earth over the past 20–30 years.⁷² Scientists have been studying these phenomena – and their impacts on ecosystems, wildlife and people – for decades; militaries have been operating in the Arctic literally for centuries; and rapid – if not transformative – development is commonplace in today's world. 'We have heard all this before.'⁷³ What has not been heard much before is how environmental phenomena and climate change may contribute to people being, and their vulnerability to being, bought and sold: trafficked. The environment and climate are consequential to human trafficking primarily due to human activity responding to their changes.

Climate change is increasing and extending maritime access to the North American Arctic by thawing the region's once-ubiquitous pack ice. This expansion of the Arctic waters is opening new shipping lanes through the Northwest and Northeast passages and is the direct result of melting sea ice with longer seasonal warmth.⁷⁴ Occurring in a culture of free market, economic determinism, such changes are perceived as natural opportunities for economic growth and financial increase. A fully navigable Northwest Passage, for example, would cut nautical travel time from Europe to Asia by 4,500 nautical miles. The Northern Sea Route – traversing the ice and waters above Russia – is now open with a fleet of at least 15 ice-breaking tankers being built to engage the harsh Arctic seas.⁷⁵ This time- and money-saving routing has been noted to have the potential to lead to a rise in human trafficking in the region,⁷⁶ as the related human activities of commercial development and tourism ensue and expand. As the new waterways being opened by the warming climate of the North American Arctic increase opportunities for shipping, fishing and resource extraction, 77 corporate interests and national governments are undertaking efforts to ensure that the North American Arctic is open for business, with extended hours.⁷⁸ However, climate change migration – both to and from the region – is considered a threat to both national and international security.⁷⁹

14.3.2. Business, Migration and Borders

Lloyd's of London has estimated more than US\$100 billion will be invested in the Arctic by 2022.80 The current – and predicted – transformation of the North American Arctic has been viewed mainly through the lens of economic growth. Melting ice is seemingly contextualised intuitively as first and foremost presenting opportunities for increased

hydrocarbon exploration and infrastructure development.⁸¹ Indeed, high commodity prices and depleting resources elsewhere, combined with decreasing costs of access and operations, make Arctic projects particularly attractive to investors. 82 As melting pack ice and rising temperatures open new maritime transit and access routes, they also increase human inhabitation and construction capacity. Oil and gas, mining and shipping - and accompanying infrastructure - have been identified as primary investment opportunities in the North American Arctic. 83 The estimated deposits of oil and gas in the Arctic are truly staggering: 90 billion barrels and 46 trillion cubic metres respectively.84 Oil and gas exploration in Greenland has cost US\$1.7 billion since 2002, with an anticipated investment of US\$20 billion over coming years.85 Expanded access to fish in the North American Arctic is also a significant economic and infrastructure issue. Fisheries comprise 90 per cent of Greenland's exports. 86 and 5 per cent of the world's catch comes from the Arctic. 87 And with more ice melting and waters warming, fish are increasingly moving north.88 Canada, Greenland and the United States also have zinc, gold and diamond mines in their Arctic regions.

Expanded oil and gas exploration and extraction, and increased fisheries – their required infrastructure – pose critical challenges to the security of communities, affecting local economies, traditional livelihoods, health, food and the environment.⁸⁹

Major economic projects are being planned in an area where large numbers of indigenous peoples reside, often in rural and remote villages. These communities will bear the brunt of the negative impacts associated with development projects, including the rising risk of crimes like human trafficking.⁹⁰

The US and Canadian governments have acknowledged the links between the extractive sector and human trafficking,⁹¹ and remote communities may be exceedingly vulnerable to the negative impacts of development projects⁹² that require influxes of large-scale external workforces.⁹³ The albeit limited evidence links the large non-resident male worker populations that come to communities – sometimes in camp-like accommodation – for large-scale infrastructure projects and resource extractive activities to increased demand for commercial sex and, thereby, potentially human trafficking.⁹⁴

Outside criminal elements have also been cited as moving in to communities expanding with industrial development. 95 Williston, North Dakota, and Fort McMurray, Alberta, have been cited as examples demonstrating significantly increased crime, including sexual offences, corresponding to the growth of the mining and oil extractive sectors

locally. Residents of Williston reportedly knew of instances of human trafficking in their community; however, records were not maintained. As climate change increases access to the North American Arctic for extractive and infrastructure development – with implications for human trafficking, the region's newly thawed passages, destinations and warmer season enhance another sector linked to human trafficking.

Tourism is one of the world's most profitable industries and the now more open – and open longer – Northwest Passage is an increasing tourist attraction. The demand for remote, experiential tourism and the popularity of vacation cruising, as well as more aggressive marketing by countries and tour operators, have increased over the past decade. This past summer, for example, a luxury cruise ship sailed the Northwest Passage from Alaska to New York with 665 staff tending to more than 1,000 passengers paying up to US\$120,000. Lloyd's of London has noted that changes in the Arctic are providing business opportunities in the tourism sector. Tourism has also been cited as a component of the North American Arctic's long-term economic sustainability and a key factor implicated in the security of the present and future North American Arctic. But travel and sex have a long history.

The development of tourism and sex work seem to have an interdependent relation as the tourism 'supra-structure' – hotels, bars, night clubs, etc. – supports the start-up and co-existence of sex work. ¹⁰⁵ Transportation companies and hotels become – sometimes unwittingly – complicit. ¹⁰⁶ In this way, the North American Arctic may attract individuals seeking to exploit the growth of tourism at existing and new destinations by offering sex for sale. Demand for sexual services has been correlated to sex trafficking ¹⁰⁷ due to price competition and the need for continuous, new and novel supply. As tourism destinations become more popular and commercialised, traffickers may come to compete with the demand for commercial sexual activity. ¹⁰⁸ The United Nations has called upon the hospitality and tourism sectors to help stop human trafficking for commercial sex. ¹⁰⁹ This potential impact for victimisation, crime and security has particular impact in the region.

Indigenous women in the North American Arctic are already disproportionately the victims and survivors of sexual violence. Social-economic conditions in the region enhance the existence of a vulnerable population as supply for traffickers. The experiences of residential schools, racism, poverty, addiction and mental health issues, and family violence already make indigenous females 'extremely vulnerable' to human trafficking.¹¹⁰ Indigenous women experience extremely high rates of sexual violence and are over-represented in the sex trade.¹¹¹

Climate change is regarded in human terms as vulnerability; the potential to cause 'loss and harm'. 112 As climate events and environmental changes increase the displacement and migration of populations, 113 the albeit untested logic holds that their vulnerability is increased. Human trafficking is linked to vulnerability. In this way, the environment – especially climate change – is considered a 'push' factor of human trafficking. In addition to moving to seek increased income, better lives and education opportunities – all of which can make residents of the North American Arctic increasingly at risk to human trafficking – environmental changes can cause people to have to move, including moving unexpectedly. Migration – especially unexpected migration – heightens people's vulnerability. People experiencing vulnerability can be at increased risk of being trafficked.

Raising temperatures in the North American Arctic are causing a retreat of the sea ice and affecting seasonal length, weather patterns and fragile, centuries-old ecosystems. 114 Diminishing sea ice, ocean acidification, increasing storm surges and increased coastal flooding and erosion hold direct implications for the security of the residents of the North American Arctic. 115 While the melting ice has a 'potential impact on vulnerable ecosystems, [and] the livelihoods of local inhabitants and indigenous communities', 116 so can human activity. For example, the heat from drill bits can melt permafrost, thereby destabilising operations and increasing the risk of environmental degradation by oil well blow-out. The Arctic's harsh climate, storms, icebergs and ice flows can destabilise offshore drilling platforms. 117 Another risk of environmental catastrophe that could cause immediate migration stems from increased maritime traffic. A staggering 90 per cent of Arctic-traded goods are delivered by ships. 118 Cruise ships also contribute to increased marine traffic in waters not yet sufficiently charted in many areas that include shallow channels, 'growlers' of floating chunks of ice and the risk of exceptionally bad weather. The hulls of cruise ships are often not designed to withstand high pack ice pressure. These realities contribute to increased risks of oil spill and other contamination by leaked pollutants, causing local residents to be displaced and move. While root causes may be exacerbated and human trafficking more encountered following post-disaster migration, no scholarly research has demonstrated a clear link between increased vulnerability and human trafficking at the locations of environmental catastrophes. 119

However, environmental crises, whether naturally occurring such as earthquakes and flooding or as the result of human activity such as oil spills, can impoverish individuals and communities and cause people to flee their homes.¹²⁰ Sudden-onset environmental disasters in the North American Arctic cause loss of land, income and livelihoods which may create on-site 'hot spots' for human trafficking or result in immediate displacement, heightening susceptibility to human trafficking of 'climate migrants' – or 'environmental refugees'¹²¹ – moving to humanitarian camps or urban locations in the South with little money; a lack of established, safe social resources; and few skills gainfully employable in cities.¹²² Research indicates that already growing rates of migration from rural communities to urban areas may accelerate in response to extreme weather events and environmental conditions, especially where people's local economic livelihoods are connected to land and natural resources.¹²³

More frequently, and perhaps more traceable to a human trafficking slow-onset environmental transformations displace local inhabitants due to food, income and culture insecurity as livelihoodproducing geographies disappear as they are eroded by changes in the sea-level, seasonal temperatures and soil quality. A consequence of the changing North American Arctic environment is that 'the shifting of animal ranges and [herd] migration routes... may affect food sources and livelihoods for many indigenous people with serious consequences for... community survival.'124 The North American Arctic is already seeing changes in vegetation zones, wildlife ranges, shrinking marine habitat, altered migration and breeding routes and patterns and increasing instances of disease. 125 Indeed, changes to ice conditions and permafrost are impacting the livelihoods and well-being of Arctic residents. ¹²⁶ Unable to endure the declining availability and yields of the land and wildlife, individuals engaged in traditional hunting, herding and agriculture for sustenance and identity tend to move to urban areas to survive. While, as of 2011, no data existed indicating people leaving the Arctic due to climate change or for related reasons, ¹²⁷ as other authors in this book have noted, Alaska, for example, is grappling with climate-induced relation within its boundaries. The words of Isaac from Tikigaq, Alaska – the most northwestern community in North America, occupied since 500 BCE and home to the Iñupiat people – are especially compelling:

'Our home is drowning. The Point used to be way out. Water came one day, and everything was gone afterward. All gone. The life in Old Town was a pretty good life. Clean. Everything was under the snow in the winter and the grass in the summer. Now we are all on the gravel in New Town everything is dusty and bumpy. Nothing was like this when I was growing up.'128

In 2011, scientific data indicated that increased coastal and riverine erosion was being experienced by 26 Alaskan villages with an additional 69 communities witnessing climate change impacts that could force their relocation. ¹²⁹ Kivalina and Newtok, Alaska, are two cases in point. Both indigenous communities have been working to save their culture, land and livelihoods from climate change impacts since at least 2012. Both communities may be permanently displaced due to climate change and face challenges in obtaining safe relocation. ¹³⁰ Environmental changes – and disruptions – can also lead to the food insecurity and cultural alienation which can cause migration, especially as the North American Arctic continues to warm and develop. 'Indigenous peoples across the Arctic are having to make adjustments to their traditional hunting, fishing and food gathering systems.'¹³¹

Declining reindeer populations in the Arctic, for example, is severely impacting the Sami people, many of whom engage in semi-nomadic reindeer herding full-time. Their food supply and culture revolve significantly around reindeer husbandry. 132 Similarly, fishing – due to increased access - and traditional hunting are becoming increasingly difficult in the North American Arctic involving further distances. 133 Peerreviewed research has linked climate change to poverty – a root cause of human trafficking.¹³⁴ According to a review of the literature recently compiled by the Arctic Domain Awareness Centre at the University of Alaska: 'subsistence lifestyles proudly continue... threatened by increased global activity (such as marine shipping and resource extraction)... Correspondingly, Arctic residents strive to retain... traditional ways of life... Migration is also an issue.'135 Impacts on the environment from human activities also contribute significantly to the deterioration of the land, food supply and culture of the region's Arctic's inhabitants, which drive migration. Delicate life and livelihood-sustaining ecosystems are also being disturbed by the construction of pipelines and roads, noise pollution from drilling and shipping, and disturbance of the seabed by drilling.¹³⁶ Increased marine traffic can also bring foreign, invasive species into the North American Arctic marine environment.

While there is not an abundance of data on climate migration, ¹³⁷ the Bay of Bengal is a well-known instance where raising sea levels have destroyed farmland. Families have moved – and young people sent away – to find work in cities and encountering increased risks and experiences of human trafficking. ¹³⁸ In Nigeria, it has been documented that many farmers who move to southern cities during the dry season – 'cin rani' – to earn income, wind up being trafficked. ¹³⁹ Like in the Sundarbans and Nigeria, the North American Arctic's environmental

changes may produce 'climate migrants' leaving their home communities to find better lives in the South¹40 and becoming similarly prone to human trafficking. The United Nations Intergovernmental Panel on Climate Change (UNIPCC) has just warned that 'urgent changes are needed to cut [the] risk of extreme heat, drought, floods and poverty'.¹4¹ The UN IPCC's report specifically cites the Arctic as being 'disproportionately at risk' of these effects, especially populations with agricultural and coastal livelihoods.¹4² Pollution can also be an environmental factor driving slow-onset, yet still vulnerable, migration.

In addition to the risk of displacing local residents due to oil spills, shipping vessels and cruise ships also emit carbon dioxide into pristine Arctic air. 'Adventure tourism' also brings an increased environmental footprint¹⁴³ with previously remote ecosystems being exposed to human contact. In this way, pollution has significant impact on traditional lifestyles and culture¹⁴⁴ in the North American Arctic, which can enhance vulnerability both at home and in migration. In addition, while vulnerability is traditionally associated with financial circumstance, environmental factors can create conditions of community instability, cultural displacement and personal anxiety that traffickers may exploit.¹⁴⁵ The multitude of interrelated environmental factors in the North American Arctic, begs the question: What else in the region impacts human trafficking? Border security has been a traditional answer.

Borders and increased border security have been identified primarily by governments and law enforcement agencies – as providing exclusive opportunities to identify and protect victims and survivors of human trafficking. 146 Virtually open borders in the Arctic foster concerns about trafficking in people.¹⁴⁷ The ways individuals act – and are acted upon – at borders are increasingly giving rise to important questions, including their impact on human trafficking in the North American Arctic.¹⁴⁸ Human trafficking has been directly linked by US policy to 'threats to the homeland'; 149 a perspective which inherently implicates borders and situates them - problematically - within a traditional security and enforcement regulatory orthodoxy in relation to human trafficking. Borders tend to be places of enforcement over protection and care and are inherently reactive; being encountered once victims are already within trafficking chains. Borders have, historically, been a policy and funding focus of efforts to combat human trafficking, diverting awareness and resources from more proactive, preventative measures. Borders also do not stem human trafficking within countries or over non-enforced areas of states' boundaries and may be evaded with high-quality false identification and migration paper work.

The United States Customs and Border Enforcement is responsible for approximately 7,000 miles of land border with 328 ports of entry, including official crossings by land, air and sea, employing some 42,000 frontline officers and Border Patrol agents. ¹⁵⁰ The Canadian border with the United States is 3,978 miles long, of mainly rural lands, with the Canada-US Alaska border being 1,933 miles in length. ¹⁵¹ With more than 6,500 uniformed officers, the Canadian Border Services Agency (CBSA) provides services at 39 international locations, managing 117 land-border crossing sites, 13 international airports and 27 rail sites nationwide. ¹⁵²

Given their sheer size and nature of their boundaries, legitimate concerns arise as to whether focusing on borders in Canada and the United States can ever be an effective – or even legitimate – strategy to combating human trafficking. It has been suggested that there will never be full enforcement of the world's borders, ¹⁵³ especially those in North American Arctic temperatures and terrains. A singular limitation has been noted on the capacity of borders to combat human trafficking, however: 'Most state border controls... worldwide fail to prevent and detect trafficking in persons.' ¹⁵⁴

As elements of traditional security, borders assign human trafficking the status of threat; 155 privileging sovereignty and security actions – such as enhanced border security, swift deportations and migrationrelated offences and/or criminal charges¹⁵⁶ - over people-centred measures. Human trafficking border efforts are driven not by personcentred human security concerns but rather states' needs to protect borders from the perceived threat to the economy and rule of law by the undocumented migrants resulting from unauthorised border crossings. 157 Accordingly, human trafficking primarily attracts disruption tactics, investigations and prosecutions at the border. As such, borders tend to criminalise – or regulate race and sexuality¹⁵⁸ – rather than conceptualise people arriving at their gates as victims. Borders become more state functionaries keeping 'undesirable' people out rather than protecting the people in conditions of vulnerabilities who transit them: a culture of 'disbelief and refusal'. 159 As a result, instead of being freed from trafficking, certain groups may be less invisible or more easily dismissed at the border on the basis of their gender, sexuality and race. 160 This reality is important in the North American Arctic as racial stereotypes of indigenous people can result in their being marginalised, dismissed and neglected at the border, thereby enabling rather than combating human trafficking while exacerbating the plight of victims, especially indigenous women¹⁶¹ by limiting their transnational options to escape and elude traffickers.

Finally, the traditional approaches to security of protecting borders are inherently patriarchal and may threaten the security of predominantly women trafficked transnationally. ¹⁶² Border-centric considerations can undermine the utility of broader approaches to combating human trafficking that shift considerations away from the state and focus instead on the needs of the person allegedly being trafficked and the person's safety. Traditional approaches to borders also tend not to account for the possible threats to trafficking victims and the well-being of survivors posed by the state itself in the form of unintentionally consequential laws, regulations and policies and potential abuses of power or insensitive conduct on the part of border control agents and law enforcement officials engaged in border processes.

Border-centred anti-trafficking measures also tend to focus on sex trafficking at the expense of trafficking for forced labour, which accounted for close to 20 per cent of human trafficking cases reported in Alaska since 2012, for example. Labour trafficking may be the prevalent form of transnational trafficking in the North American Arctic, as general labourers move – or are moved – across borders as construction workers for the region's increasing infrastructure development. In addition, borders may be far removed temporally and spatially – to be an effective point of efforts against human trafficking.

In addition to these concerns, as mentioned, an important opportunity cost of security focusing on borders is that the border lens blurs a vision of addressing the root causes that can result in the most important action of combating trafficking: prevention. The environment – most importantly climate change – and environmental security in the Arctic also has implications for human trafficking.¹⁶⁴ So what is to be done?

14.4. Recommendations

Short of ending climate change and transforming the free market economic system to end human trafficking, initial measures related to communities, borders, commercial development, tourism and the environment may be offered. First and foremost, any security measures to combat human trafficking in the North American Arctic – and their development, tourism, migration and border components – must include a legitimate, good faith inclusion of local communities and indigenous bands as partners, duly recognised, empowered and engaged as such.¹⁶⁵ Engaging indigenous peoples and communities as autonomous and

self-determined is the most fundamental aspect for sustained security in the North American Arctic. ¹⁶⁶ This established, a human security paradigm must be adopted to future approaches and action.

In order to safeguard the North American Arctic and its inhabitants – current and future – from human trafficking, increased research and reconsidered paradigms must be developed and applied, including in the areas of security, borders and development. Arguably, second only to its over-conceptualisation as a criminal matter, is the ubiquitous identification of human trafficking as a security issue. The contemporary environmental changes in the North American Arctic and their accompanying natural impacts and increased human activities hold important implications for security. Arctic security discussions are incomplete without a discussion of human trafficking. 168

Traditional conceptions of state security are a necessary but not sufficient condition of human welfare. 169 An inherently amorphous and often intellectually illusive concept, security has historically been composed exclusively of exercises of military and state functions to maintain and defend territorial sovereignty from external threats. 170 State security has not historically focused on people and communities; marginalising at best, ignoring at worst, their most important, immediate security interests including being secure from threats such as hunger, disease, pollution and crime.¹⁷¹ At the local level, especially in smaller, more vulnerable communities, security certainly entails protection from such threats and dangers. Writing in Canada's The Globe and Mail newspaper in 2010, journalist Nathan Vanderklippe noted that '[t]o those living in the North, security concerns are likely to focus on the capacity of communities to meet the basic needs of their inhabitants and to become more resilient.'172 The greatest security needs for most people and communities entail gainful employment, affordable housing, safe food and drinking water, accessible health care and education opportunities;¹⁷³ perhaps more from a premise of vulnerability than the threat orientation of traditional security. 174 Indeed, residents of the North American Arctic '...face serious threats – ones which require extraordinary and emergency measures to address - that would be ignored under a traditional, state-centered... model of security'. 175 Albeit imperfectly, human security strives to fulfill this goal.

Human security seeks to realise the opportunities of development while ensuring people's needs are met.¹⁷⁶ Currently a 'hot topic' in the Arctic,¹⁷⁷ human security departs from the narrow, military-focused conceptions of security.¹⁷⁸ The United Nations defines human security as safety from chronic threats such as hunger, disease and repression, and

protection from sudden and hurtful disruptions in the patterns of daily life whether in work, homes or communities.¹⁷⁹ This definition was developed in relation to seven aspects of keeping individuals and communities secure: personal, environmental, economic, political, community, health and food security.¹⁸⁰

Not a new concept, human security addresses long-persistent issues. Human security strives to provide a conceptual and narrative framework to much of what the United Nations and national governments have been doing for years. ¹⁸¹ As Sabina Alkire astutely notes, the origins of the concept of human security date back to ancient times. Threats of famine, drought, flood and slavery appear in writings as early as 2,000 BCE. ^{182,183}

Contemporarily, the 1945 conference of world nations held in San Francisco concluded that:

'The battle of peace... [includes] the economic and social front where victory means freedom from want. No Provisions [will]... make the world secure from war if men and women have no security in their homes and their jobs.'184

More recently, UN Secretary-General Kofi Annan's 2000 Report to the United Nations, *We the People*, gave the following broad description of human security:

'Human security... encompasses human right, good governance... [and] access to education and health care... towards reducing poverty, achieving economic growth and preventing conflict. Freedom... of future generations to inherit a healthy natural environment – these are the interrelated building blocks of human – and therefore national security.'

In 2001, the International Commission on Intervention and State Sovereignty's report *The Responsibility to Protect* acknowledged that human security is an emerging concept meaning:

'...the security of people – their physical safety, their economic and social well-being, respect for their dignity and worth as human beings, and the protection of their human rights and fundamental freedoms.'¹⁸⁵

In these ways, human security focuses on the socioeconomic downsides of globalisation that have long-threatened the security of both people and states, especially in developing nations, ¹⁸⁶ including globalisation's contributions to the illegal drug trade, epidemiology and human trafficking. ¹⁸⁷ Indeed, security need not be exclusively the domain of the state. As Professors Gunhild Hoogensen et al. maintain: 'individuals and communities will always have a significant role to play in the provision of security'. ¹⁸⁸ Significantly, the Arctic Council's mandate specifically states it will not deal with issues of military security, intentionally – and unanimously – selecting to be an organisation focusing on issues of human security including sustainable development, environmental protection and cultural vitality. ¹⁸⁹ Purposeful and committed privileging of a human security approach – over a traditionally statist, military and law enforcement approach – to the North American Arctic is key to keeping the region and people free from human trafficking.

Human trafficking is certainly rooted in traditional security. As affirmed by Eleanor Kennelly Gaetan, US Department of State's Office to Monitor and Combat Trafficking in Persons: 'Every time you have trafficking, you have massive corruption, you have documented fraud, you have corrupt cops, corrupt customs agents looking the other way... it undermines the rule of law.'190 Given its potential immense profits, human trafficking is a magnet for individuals, groups and organisations engaged in national and transnational crime. However, factors including high inflation, unemployment, suicide, food insecurity, and inadequate support systems and infrastructure have been implicated, contributing to vulnerability to trafficking in the North American Arctic. Human trafficking transcends traditional military and law enforcement solutions, requiring the more holistic re-address available through the application of a human security approach.

But human security is a contentious concept, criticised as simply an overly-ambiguous – if not revisionist – constructivist and non-quantitative slogan, broad to the point of being unhelpful in developing a research agenda to articulate a progressive approach to reorienting military and national security. ¹⁹³ Additionally, human security is still inherently state-oriented. ¹⁹⁴ The human security paradigm is also essentially problematic from colonial perspectives, especially where the state is implicated in the violations of security, such has been allegedly in the case of violence against indigenous women in Canada. ¹⁹⁵

This said, human security does have a 'vital core'. It does not implicate or encompass every aspect of human life, ¹⁹⁶ but rather offers a counter framework to military and state security-centred approach, privileging the individual and including important views and interests traditionally marginalised, if considered at all. ¹⁹⁷ But adopting a human

security perspective is not a simple matter of needing to 'worry less about focusing on protecting the state and more about protecting individual citizens.' They are interrelated, if not interdependent. Focusing on both the needs of the state and people's rights and interests may be – albeit in an admittedly liberal way – the best guarantee of security. Adopting a human security approach to threats and dangers in the North American Arctic will be determinative in providing freedom from human trafficking.

Research indicates that the concept of human security may produce wider 'buy in' by a greater diversity of anti-trafficking actors and engender a more cogent, interdisciplinary rationale to human trafficking at local levels. ²⁰⁰ In addition, in disrupting the statist approach of traditional military and national security discourses, a human security approach may prioritise attention and action on the root causes of human trafficking, including poverty, crime, gender inequality, corruption and forced migration. ²⁰¹ A human security approach may also put less emphasis on legal remedies exclusively for 'innocent victims' ²⁰² and place more focus on the structural nature and systemic causes of human trafficking. Human security also goes beyond the traditional military and law enforcement perceptions and approaches to security which tend to identify trafficking victims and survivors exclusively as the 'risky subjects' ²⁰³ of irregular migration, anti-crime and threats-to-health contexts. ²⁰⁴

North American Arctic communities also need assistance to begin – or increase – public awareness of human trafficking, especially in communities experiencing expanded development and tourism.²⁰⁵ Awareness of human trafficking in the North American Arctic must be promoted not only within communities, but with military, law enforcement, policy-makers and business leaders. An anti-trafficking lens must inform commercial development and public planning, projects and policy. Increased funding – especially for local communities and bands – is needed to train law enforcement, social workers and victims services.²⁰⁶ Similarly, enhanced intelligence, surveillance and reconnaissance capacities – including engaging the Canadian Rangers and community-level assets – are needed to detect and deter threats and harms, including human trafficking.

Combating human trafficking in the transforming Arctic also needs to address freedom from harm by corporate actors and interests. Governments must ensure public contracts for infrastructure development and resources extraction are not entered into with companies with negative human rights records²⁰⁷ or who lack supply chain transparency, shield owners and executives from corporate liability, demonstrate

anti-union animus, pay low wages or do not adhere to North American workplace health and safety standards. This could be done through the processes and penalties of, or similar to, current Canadian and US Social Impact Assessments. Similarly, environmental assessment processes in Canada, the United States and Greenland could be expanded to ensure that consideration of the impacts of projects on the social environment – including elements of human security – are assessed.²⁰⁸ Companies' licences to conduct business in the North American Arctic could also include provisions requiring that they respect human rights and the well-being of local residents and communities.²⁰⁹ Also, internally, compelling corporate governance to include disclosing their measures to prevent or remedy human trafficking can create an enforceable breach of fiduciary duty if suitable actions are then not taken.²¹⁰ The Code of Conduct for the Protection of Children from Sexual Exploitation in Travel and Tourism, 211 a multi-sectoral statement of six voluntary business commitments drafted in collaboration with the United Nations World Tourism Office, must also be made more comprehensive and enforceable.

In addition, companies need to include human rights and security plans as part of their development due diligence process, similar to those measures currently undertaken to ensure that environmental standards, zoning requirements and building code specifications are met. Implementing these procedures 'should be a best practice when bringing large development projects into communities'.²¹² The major differences recognised in the regulatory regimes, standards and governance across Arctic nations²¹³ present unique harmonisation opportunities to implement these measures as best practice frameworks. Addressing these vulnerabilities of anticipated development in the North American Arctic assists in preventing and combating human trafficking.²¹⁴

In terms of borders, foremost to ensure best results, border controls and human trafficking need a questions-approach discourse of empirical and analytical consideration, not an intuitive, 'polemical' engagement centred on a false threat and security binary. In a related way, legal and public policy formulations and considerations must begin to transcend state traditional security hegemonies toward prioritising human security approaches. Border controls must better balance their inherent, continuous tension between the interests of state and the rights and well-being of people. Practically, in this manner, currently essentialist border control processes must transform from status-based determinations into identifications and assessments of vulnerability.²¹⁵

At a more pragmatic level, capacity for and commitment to collecting accurate data must be increased regarding cross-border human

trafficking victims,²¹⁶ including their identifiers, origin of trafficking, destinations and the nature of their recruitment. Further research is required not only into the facts of human trafficking at borders to better craft anti-trafficking responses, but proactively into the nature and causes of vulnerability and the structural socio-economic causes of human trafficking toward its eradication through prevention. At the same time, improved capacity to identify victims of trafficking at borders is urgently needed.²¹⁷ Continued and enhanced resource and specialised training are also required. Additional resources must be dedicated to extensive and appropriate aftercare for victims of human trafficking identified at borders. Increased and enhanced training must build the core competencies of border officials to uphold the rights and dignity of all migrants and ensure they have access to the protection and assistance services they need, regardless of their migration or victim status.²¹⁸

With regard to the environment, anti-trafficking measures need to be incorporated in Arctic emergency planning and environmental disaster response plans.²¹⁹ More ice breakers are urgently needed to guard against dangerous pack ice flows, thereby facilitating safer passage of tanker ships carrying oil and gas. In addition, environmental and extractive sector policy must include aspects of ensuring trafficking-proof local and traditional livelihood including potable water and water supply solutions, accessible green technology applications and credit for residents engaged in agriculture, herding and fishing.

In addition to indigenous and resident voices, women must be included in climate adaptation, policy-making and mitigation strategies, including culturally-appropriate diversification, fish stock management, alternative agricultural practices and animal husbandry. Finally, additional, methodologically-rigorous research is urgently needed to produce more data on the relationship, if any, between climate change and human trafficking in the North American Arctic and these data used to inform policy and decision-making.

Overall, a comprehensive multilateral agreement – with concrete action items, including deadlines – must be concluded on human trafficking in the North American North based on indigenous experience and knowledge, commercial best practices, migration drivers, human security and environmental stewardship.²²¹

All this is to say: 'yes, human trafficking happens up there'. This chapter is a modest attempt to demonstrate this point, identify key issues unique to place and offer some considerations to help prevent and combat human trafficking in the North American Arctic.

Notes

- * Stop Human Trafficking
- Nicole Bromfield, Human Trafficking as a Human Rights Issue and Policy Responses of Arctic (Anchorage, Alaska: Fifth National Research Forum Open Assembly, 2008), 1.
- 2 International Labour Organization (ILO), 'Statistics on Forced Labour, Modern Slavery and Human Trafficking', https:// www.ilo.org/global/topics/forcedlabour/policy-areas/statistics/lang--en/ index.htm.
- 3 ILO, 'Statistics'.
- 4 Stephanie Hepburn and Rita Simon, Human Trafficking Around the World: Hidden in Plain Sight (New York: Columbia University Press, 2013).
- 5 Royal Canadian Mounted Police, Human Trafficking in Canada (Ottawa: RCMP Criminal Intelligence, 2010).
- 6 'The Road Less Travelled: Migrants Traverse the Arctic on Bicycles', *Toronto Star*, 5 September 2015, WD5.
- 7 Bromfield, Human Trafficking as a Human Rights Issue, 10.
- 8 See 'Canada's North at Risk for Terrorism, Human Trafficking', *The Globe and Mail*, 15 November 2010; 'Nunavut Inuit Exposed to Human Trafficking, Child Exploitation Report', *Nunatsiaq News*, 4 February 2014; 'Canada's Inuit Face Human Trafficking Fears', *Al Jazeera*, 14 March 2014; 'Human Trafficking Still Happening in Nunavut, Researcher Says', *CBC*, 4 January 2016.
- 9 Department of National Defence, Arctic Planning Scenarios. Scenario #2 – Safety and Security Scenario (Ottawa: Defence R&D Canada, Centre for Operational Research & Analysis. Strategic Analysis Section, 2011).
- 10 Royal Canadian Mounted Police, Domestic Human Trafficking for Sexual Exploitation in Canada (Ottawa: Human Trafficking National Coordination Centre, 2013), 31.
- 11 'Human Trafficking Still Happening in Nunavut', *CBC*, 4 January 2016.
- "Start Waking Up": Report Warns of Inuit Child Selling, Cites Anecdotal Evidence of Abuse, Trafficking', National Post, 30 January 2014. See also Heather Roos, Phase I: Service and Capacity Review for Victims of Sexual Exploitation and Human Trafficking in Nunavut (Ottawa: Roos-Remillard Consulting Services, 2013), 137.

- 13 'Far North at Risk for Terrorism, Human Trafficking', The Globe and Mail, 15 November 2010, A12.
- 14 Department of National Defence, *Arctic Planning Scenarios*, 19.
- 15 State of Alaska, Final Report and Recommendations (Anchorage, Alaska: Task Force on the Crimes of Human Trafficking, Promoting Prostitution and Sex Trafficking, 2013), 15.
- 16 Polaris Project, '2016 Hotline Statistics', https://polarisproject.org/resources/
 2016-hotline-statistics, cross-referenced to: Human Trafficking National Hotline, 'Alaska', https://humantraffickinghotline. org/state/alaska. Based on number of individuals' contacts with the US National Human Trafficking Resource Centre 2012–2017 that referenced Alaska; Human Trafficking National Hotline, 'Alaska'.
- 17 Laura Murphy, Labor and Sex Trafficking Among Homeless Youth. Report no. A 10 City Study Full Report (New Orleans: Loyola University, 2017). The cities surveyed were: Anchorage; Atlanta; Detroit; Fort Lauderdale; Los Angeles; New Orleans; Oakland; St. Louis; Toronto; and Vancouver; Murphy, Labour and Sex Trafficking, 3.
- 18 Murphy, Labour and Sex Trafficking, 3.
- 19 'Flight Attendant Saves Teenage Girl From Human Trafficking After Seeing Secret Note', The Independent, 6 February 2017.
- 20 'Alaskans Walk Barefoot Through Anchorage to Raise Awareness About Human Trafficking', Alaska Dispatch News, 20 March 2017.
- 21 Roos, Phase I, 137.
- 22 See e.g., Article 4 of the Universal Declaration of Human Rights, GA res. 217A (III), UN Doc A/810 states: 'no one should be held in slavery or servitude, slavery in all of its forms should be eliminated'. Article 8 of the International Covenant on Civil and Political Rights, GA res. 2200A (XXI), 21 UN GAOR Supp. (No. 16) UN Doc. A/6316 (1966) states: 'no one shall be held in slavery; slavery and the slave trade in all their forms shall be prohibited. No one shall be held in servitude. No one shall be required to perform force or compulsory labour'.
- 23 Supplementing the United Nations Convention Against Transnational Organised Crime, GA Res. 25, annex II,

- UN GAOR, 55th Sess., Supp. No. 49, UN Doc. A/55/49 (Vol. I) (2001), entered into force 24 December 2003.
- 24 United Nations Office on Drugs and Crime, 'Signatories to the United Nations Convention against Transnational Crime', https://www.unodc.org/unodc/en/ treaties/CTOC/signatures.html.
- 25 Trafficking Protocol, Art. 5.
- 26 Trafficking Protocol, Art. 6.
- 27 Trafficking Protocol, Art. 9.
- 28 For a brief summary of national policy initiatives in Canada, Finland, Greenland, Iceland, Norway, Russia, see Bromfield, Human Trafficking as a Human Rights Issue, 8–13.
- 29 RSC, 1985, c. C-46.
- 30 Department of Justice Canada, 'Strengthening Canada's Criminal Law Response to Human Trafficking', 2017.
- 31 S.C. 2001, c. 27.
- 32 Immigration and Refugee Protection Act, s. 118.
- 33 Criminal Code of Canada, s. 279.03(1).
- 34 Public Law 106-386 [H.R. 3244].
- 35 22 USC § 7102.
- 36 22 USC § 7102(8).
- 37 8 US Code § 1182 (2)(H)(i), (ii).
- 38 18 US Code § 1543.
- 39 Order No. 909, as amended by Act Nos. 1389 and 1400 (2005).
- 40 Directive 2011/36/EU of the European Parliament and of the Council of 5 April 2011 on preventing and combating trafficking in human beings and protecting its victims, and replacing Council Framework Decision 2002/629/JHA.
- 41 Consolidation Act, No. 945 (2006).
- 42 International Organization for Migration, Country Office in Denmark, 'Counter-Trafficking', https://denmark.iom.int/ counter-trafficking.
- 43 Department of Public Safety, National Action Plan to Combat Human Trafficking, (Ottawa: Government of Canada, 2012).
- 44 Department of Public Safety, *National Action Plan*, 11, 18, 13.
- 45 Office of the Prime Minister, 'Prime Minister Underlines Commitment to Fight Sex Crimes and Trafficking', 9 June 2017, https://pm.gc.ca/eng/news/ 2017/06/09/prime-minister-underlinescommitment-fight-sex-crimes-andtrafficking.
- 46 Global Affairs Canada, Statement on Canada's Arctic Foreign Policy: Exercising Sovereignty and Promoting Canada's Northern Strategy Abroad (Ottawa: Government of Canada, 2017).

- 47 "Trump Vows to Fight "Epidemic" of Human Trafficking', Associated Press News, 23 February 2017. But see "Trump Administration's Talk on Human Trafficking Must Be Matched By Deeds', CNN, 1 July 2017.
- 48 US Department of Justice, National Strategy to Combat Human Trafficking (Washington, DC: US Government, 2017).
- 49 The US National Strategy focuses extensively on actions and approaches to combat human trafficking undertaken by its Human Trafficking Prosecution Unit, the US Attorneys' Offices, the Federal Bureau of Investigation, Department of Justice: US Department of Justice, National Strategy.
- 50 US Department of Justice, *National Strategy*, Introduction.
- 51 US Department of Justice, *National Strategy*, 3.
- 52 Joint Statement of the United States-Nordic Leaders Summit, Washington, DC, 13 May 2016. 5.
- 53 Ministry for Children, Gender Equality, Integration and Social Affairs, Action Plan to Combat Trafficking in Human Beings 2015–2018 (Copenhagen: Skabertrang, 2015).
- 54 Danish Centre Against Human Trafficking, "The Danish Efforts Against Human Trafficking", http://www.cmm.dk/ in-english.
- 55 Ministry of Children, *Action Plan*, 15, 21, 31, 35.
- 56 Group of Experts on Action Against
 Human Trafficking in Human Beings,
 Report Concerning the Implementation of
 the Council of Europe Convention on Action
 against Trafficking in Human Beings by
 Denmark. Second Evaluation Round
 (Strasbourg: Secretariat of the Council of
 Europe Convention on Action against
 Trafficking in Human Beings, Council of
 Europe, 2016), 10, 13.
- 57 Office of the Under Secretary for Civilian Security, Democracy, and Human Rights, *Trafficking in Persons* (Washington, DC: US Department of State, 2017), 151.
- 58 Arctic Council, Declaration of the Establishment of the Arctic Council. Joint Communique of the Governments of the Arctic Countries on the Establishment of an Arctic Council (Ottawa, 19 September 1996).
- 59 Lassi Heininen, Heather Exner-Pirot, and Joel Plouffe, 'The Arctic Council: 20 Years of Regional Cooperation and

283

- Policy-Shaping', *Arctic Yearbook* (2016): 336, 336.
- 60 Arctic Council, Joint Statement, 11th Session. Document 55, Harstad, Norway, 9/10 November 2005, in The Arctic in International Law and Policy, ed. Kristina Schonfeldt (Portland: Hart Publishing, 2017), 495.
- 61 Ministry of Foreign Affairs of Finland, 'Group of Experts on Action Against Trafficking in Human Beings Visited Finland's Presidency of the Arctic Council' (2014).
- 62 Department of National Defence, Department of National Defence and the Canadian Armed Forces. 2015–16 Report on Plans and Priorities (Ottawa: DND, 2015), 29.
- 63 North Pacific Coast Guard Forum, last modified 5 September 2017, www. ccg-gcc.gc.ca/Home/NPCGF, cited in Andrea Charron, 'Canada and the Arctic Council', International Journal 67 (2012): 765, 778.
- 64 Charles Ebinger and Evie Zambetakis, 'The Geopolitics of Arctic Melt', International Affairs 85 (2009): 1215, 1217.
- 65 Ebinger and Zambetakis, 'The Geopolitics of Arctic Melt', 1217, 1220, 1231.
- of Arctic Melt', 1217, 1220, 1231.

 66 McLeman, Climate Change, 23.
- 67 Victoria Sweet, 'Raising Waters, Rising Threats: The Human Trafficking of Indigenous Women in the Circumpolar Region of the United States and Canada', Yearbook of Polar Law 6 (2014): 162, 162–63.
- 68 United Nations Interagency Framework Team for Preventive Action, Toolkit and Guidance for Preventing and Managing Land and Natural Resources Conflict: Extractive Industries and Conflict (New York: UN, 2012).
- 69 Robert Kates et al., "Transforming Adaption When Incremental Adaptations to Climate Change Are Insufficient', Perspective, Proceedings of the National Academy of Sciences of the United States of America Early Edition (2011): 2.
- 70 Ilulissat Declaration, Arctic Ocean Conference, Ilulissat, 28 May 2008.
- 71 Arctic Domain Awareness Center, Assessing Concern ... Advancing Collaboration. Lit. Rev., Anchorage, 2018, 3.
- 72 Nordic Council of Ministers, Arctic Human Development Report. Regional Processes and Global Linkages (Copenhagen: Nordic Council, 2016). See also Anneta

- Lytvynenko, Arctic Sovereignty Policy Review: Prepared for the Ad Hoc Committee of Deputy Ministers on the Arctic (Ottawa: Carleton University, 2011), 2, cited in Ashton Cunje, 'Canada's Defence and Security in the Maritime Arctic', MA diss., University of Ottawa (2014), 24.
- 73 Nikolas Sellheim, Review of Arctic
 Opening: Insecurity and Opportunity,
 by Christian LeMiere and Jeffrey Mazo,
 Polar Record 50 (2014): 254, 1.
- 74 Gunhild Hoogensen Gjorv et al., 'Human Security in the Arctic – Yes it is Relevantl', Journal of Human Security 5 (2009): 1, 4.
- 75 Maria Gallucci, 'As the Arctic Melts, the Northern Sea Route Opens for Business', Science, 26 September 2018; 'Mega-ships set to take Arctic's North Sea Route', The National, 3 September 2018.
- 76 P.H. Liotta, 'Boomerang Effect: The Convergence of National and Human Security', Security Dialogue 33 (2002): 473, 480.
- 77 Arctic Domain Awareness Center, Assessing Concern, 4.
- 78 Hoogensen Gjorv, 'Yes it is Relevant!', 3.
- 79 Robert McLeman, Climate Change, Migration and Critical International Security Considerations (Geneva: International Organization for Migration, 2011), 11.
- 80 Lloyd's/Chatham House, Arctic Opening: Opportunity and Risk in the High North (London: Lloyd's, 2012), 6.
- 81 Ebinger and Zambetakis, 'The Geopolitics of Arctic Melt', 1217.
- 82 Lloyd's/Chatham House, *Arctic Opening*, 21
- 83 Lloyd's/Chatham House, Arctic Opening, 6.
- 84 Kenneth Bird et al., Circum-Arctic Resource Appraisal: Estimates of Undiscovered Oil and Gas North of the Arctic Circle, USGS Fact Sheet 2008–3049 (Washington, DC: US Geological Survey, 2008).
- 85 Lloyd's/Chatham House, *Arctic Opening*, 25.
- 86 Bettina Rudloff, The EU as a Fishing Actor in the Arctic: Stocktaking of Institutional Involvement and Existing Conflicts (Berlin: Stiftung Wissenschaft und Politik, 2010).
- 87 Lloyd's/Chatham House, Arctic Opening, 27.
- 88 Ebinger and Zambetakis, 'The Geopolitics of Arctic Melt', 1217.
- 89 Hoogensen Gjorv, 'Yes it is Relevanti', 3–4, citing Connie Deiter and Darlene Rude, Human Security and Aboriginal Women in Canada (Ottawa: Status of Women Canada, 2005).

- 90 Sweet, Raising Waters, 21.
- 91 Office to Monitor and Combat Trafficking in Persons, The Link Between Extractive Industries and Human Trafficking (Washington, DC: US Department of State, 2017); Global Affairs Canada, Formative Evaluation of Canada's Development Assistance on Extractives and Sustainable Development FY2010-11 to FY2016-17 (Ottawa: Government of Canada, 2017).
- 92 Sweet, Raising Waters, 170, citing Rick Ruddell, 'Boomtown Policing: Responding to the Dark Side of Resource Development', Policing 5 (2011): 330.
- 93 International Organization for Migration (IOM), *The Climate Change-Human Trafficking Nexus* (Geneva: United Nations, 2016).
- 94 Linda Smith and Samantha Healy
 Vardaman, 'The Problem of Demand in
 Combatting Sex Trafficking', Revue
 international de droit pénal 81 (2010):
 607. See also United Nations Interagency
 Framework Team for Preventive Action,
 Toolkit and Guidance for Preventing and
 Managing Land and Natural Resources
 Conflict: Extractive Industries and Conflict
 (New York: UN, 2012), 17.
- 95 Sweet, Raising Waters, 7.
- 96 Sweet, Raising Waters, 11-12.
- 97 Sweet, Raising Waters, 11, citing Georgianne Nienaber, 'Man Camp and Predator Economics Threaten Heartland Native Communities', The Huffington Post, 5 August 2013.
- 98 Arctic Domain Awareness Center, Assessing Concern, 4.
- 99 Cunje, 'Canada's Defence', citing E.J. Steward et al., 'Sea Ice in Canada's Arctic: Implications for Cruise Tourism', *Arctic* 60 (2007): 370.
- 100 'Arctic Cruises: Fun for Tourists, Bad For the Environment', The Globe and Mail, 16 May 2018.
- 101 Lloyd's/Chatham House, Arctic Opening, 5.
- 102 Lloyd's/Chatham House, Arctic Opening, 6.
- 103 Department of National Defence, *Arctic Planning Scenarios*, 19.
- 104 See Ann Brooks and Vanessa Heaslip, Sex Trafficking in a Globalised World (Poole, United Kingdom: Bournemouth University) [unpublished] citing Ian Yeoman and Michelle Mars, 'Robots, men and sex tourism', Futures 44 (2012): 365.
- 105 Indonesian Team Study 1, Tourism and Prostitution, https://www.ibiblio.org/ahkitj/wscfap/arms1974/Book%20
 Series/Women&MenInAsia/WMA-indonesia1.htm, 46. For more on the

- possible relationship between sex work and tourism, see Nelson Graburn, 'Tourism and Prostitution', Articles Review, Annals of Tourism Research 10 (1983): 437.
- 106 Carolin Lusby, 'Sex Trafficking in the Tourism Industry', *Journal of Tourism and Hospitality* [manuscript] 1 (2015): 1.
- 107 Smith, 'The Problem of Demand', 607.
- 108 Lusby, 'Tourism Industry', 6.
- 109 ECPAT Sweden, Code of Conduct for the Protection of Children from Sexual Exploitation in Travel and Tourism (United Nations World Tourism Organization: Madrid, 1998).
- 110 Robyn Bourgeois, 'Colonial Exploitation: The Canadian State and the Trafficking of Indigenous Women and Girls in Canada', *UCLA Law Review* 62 (2015): 1426, 1430.
- 111 Bourgeois, 'Colonial Exploitation', 142 –30, citing Royal Canadian Mounted Police, Missing and Murdered Aboriginal Women: A National Operational Overview 3 (Ottawa: RCMP, 2014).
- 112 McLeman, Climate Change, 15.
- 113 McLeman, Climate Change, 9.
- 114 Lloyd's/Chatham House, *Arctic Opening*, 8.
- 115 Arctic Domain Awareness Centre, Assessing Concern.
- 116 Ilulissat Declaration.
- 117 Lloyd's/Chatham House, *Arctic Opening*, 42–3.
- 118 Cunje, 'Canada's Defence', 25.
- 119 See Joshua Finn, 'Human Trafficking and Natural Disasters Exploiting Misery', International Affairs Review (2016) XXIV; Elzbieta Goździak and Alissa Walter, 'Misconceptions about Human Trafficking in a Time of Crisis', Forced Migration Review 45 (2014).
- 120 See IOM, Climate Change-Human Trafficking Nexus and Frank Biermann and Ingrid Boas, 'Protecting climate refugees: The case for a global protocol', Environment 50 (2008).
- 121 McLeman, Climate Change, 15.
- 122 IOM, Climate Change-Human Trafficking Nexus.
- 123 McLeman, Climate Change, 21.
- 124 Agnieszka Szpak, 'Human Security of the Indigenous Peoples in the Arctic. The Sami Case', International Studies 20 (2017): 75, 85, citing Juha Jokela, ed. Arctic security matters. ISS Report No. 24 (Cote-sur-Noireau, France: European Union Institute for Strategic Studies, 2015),18.

- 125 Hoogensen Gjorv, 'Yes it is Relevant!', 4.
- 126 McLeman, Climate Change, 23.
- 127 McLeman, Climate Change, 23.
- 128 Chie Sakakibrara, 'Our Home is Drowning: Iñupiat Storytelling and Climate Change in Point Hope, Alaska', Geographic Review 98 (2008): 470–71.
- 129 Robert Kates et al., 'Transforming Adaption', 2, citing US Army Corps of Engineers, Alaska Baseline Erosion Assessment: Study Findings and Technical Report, US Army Corps of Engineers Alaska District, Fort Richardson, AK, 2009. For more on 'climigration' in Alaska, see Robin Bronen, 'Forced Migration of Alaskan Indigenous Communities Due to Climate Change: Creating a Human Rights Response', in Linking Environment Change, Migration & Social Vulnerability, ed. Anthony Oliver-Smith and Xiaomeng Shen (Bonn: UNU Institute for Environment and Human Security, 12/2009), 68-73.
- 130 Julie Koppel Maldonado et al., 'The Impact of Climate Change on Tribal Communities in the US: Displacement, Relocation and Human Rights', Climate Change 120 (2013): 603.
- 131 McLeman, Climate Change, 23. See also Ebinger and Zambetakis, 'The Geopolitics of Arctic Melt', 1219.
- 132 Szpak, 'Human Security', 91.
- 133 Szpak, 'Human Security', 85.
- 134 'Climate Change and Slavery: The Perfect Storm?', *The Guardian*, 13 December 2013
- 135 Arctic Domain Awareness Center, Assessing Concern, 5.
- 136 Lloyd's/Chatham House, Arctic Opening,
- 137 McLeman, Climate Change, 11.
- 138 Joseph Erbentraut, 'Here's Who's Fighting Increased Sex Trafficking Due To Climate Change, Poverty', Huffington Post, 17 September 2016.
- 139 United Nations Educational, Scientific and Cultural Organization, Human Trafficking in Nigeria: Root Causes and Recommendations (Paris: UNESCO, 2006).
- 140 'The Trafficked: Sexual Exploitation is Costing Aboriginal People Their Lives', The Globe and Mail, 10 February 2016.
- 141 'We Have 12 Years to Limit Climate Change Catastrophe, Warns UN', *The Guardian*, 8 October 2018.
- 142 United Nations Intergovernmental Plan on Climate Change, Global Warming of 15 C. Special Report. Summary for

- Policy-Makers (Geneva: World Meteorological Organization, 2018), 11.
- 143 'Climate Change in Arctic Leading to Rise in Adventure Tourism', CBC, 18 October 2013
- 144 Szpak, 'Human Security', 87, citing Wilfrid Greaves, 'Arctic (In)security and Indigenous Peoples: Comparing Inuit in Canada and Sami Norway', Security Dialogue 47 (2016): 1, 16.
- 145 Michele Ann Clark, 'Trafficking in Persons: An Issue of Human Security', Journal of Human Development 4 (2003): 247, 251–3.
- 146 Jennifer Lynch and Katerina
 Hadjimatheou, 'Acting in Isolation:
 Safeguarding and Anti-trafficking
 Officers' Evidence and Intelligence
 Practices at the Border', Anti-Trafficking
 Review 8 (2017): 70.
- 147 'Why Everyone Wants a Piece of the Arctic', *Maclean's*, 13 May 2013.
- 148 'Why Everyone Wants a Piece'.
- 149 See Government Accountability Office, A Strategic Framework Could Help Enhance the Interagency Collaboration Needed to Effectively Combat Trafficking Crimes (Washington, DC: Government Accountability Office, 2000) as cited in Jennifer Lobasz, 'Beyond Border Security: Feminist Approaches to Human Trafficking', Security Studies 18 (2009): 319, 326.
- 150 US Customs and Border Protection, 'Human Trafficking', last modified 16 January 2015, https://www.cbp.gov/ border-security/human-trafficking.
- 151 Janice Beaver, *US International Borders: Brief Facts* (Washington, DC:
 Congressional Research Service, 2016).
- 152 Canadian Border Services Agency, 'What We Do', http://www.cbsa-asfc.gc.ca/agency-agence/what-quoi-eng.html.
- 153 See Melissa Lane, Myths about Migration: Historical and philosophical perspectives (London: History & Policy, 2006), cited in Rebecca Miller and Sebastian Baumeister, 'Managing Migration: Is Border Control Fundamental to Anti-trafficking and Anti-smuggling Interventions?', Anti-Trafficking Review 2 (2013): 15.
- 154 Miller, 'Managing Migration', 24.
- 155 See e.g., Arthur Rizer and Sheri Glaser, 'Breach: The National Security Implications of Human Trafficking', Widener Law Review 17 (2011): 69, 76. Human trafficking is especially susceptible to being regarded as a security threat given the criteria that define 'national

security' as articulated by Rizer and Glaser: national instability; economic; and diplomatic levels, Rizer, 'Breach', 76–82. 'The crime of trafficking in persons has recently been added to the list of crimes that are being studied for possible national security implications'. Rizer, 'Breach', 69-70. See also US National Security Presidential Directive 22: Trafficking in Persons (Washington, DC: White House, 2002) [linking human trafficking to, inter alia, terrorism]. The Royal Canadian Mounted Police's 2010 report on human trafficking in Canada was known internally within government as the trafficking 'threat assessment' at the time. However, Canada can be seen as taking a less national security approach to human trafficking than the United States. While Canada includes protecting communities and businesses within its conceptualisation of national security, its priorities focus on the traditional national security aspects of: counter terrorism and weapons proliferation; protection of critical infrastructure and cyber security; Public Safety Canada, 'National Security', last modified 8 August 2018, https:// www.publicsafety.gc.ca/cnt/ntnl-scrt/ index-en.aspx

- 156 See e.g., Lobasz, 'Beyond Border'.
- 157 See Anne Gallagher, 'Trafficking,
 Smuggling and Human Rights: Tricks
 and Treaties', Forced Migration Review
 12 (2002): 12, citing Lobasz, 'Beyond
 Border', 326; See generally Ana Avendano
 and Charlie Fanning, 'Immigration Policy
 Reform in the United States: Reframing
 the Enforcement Discourse to Fight
 Human Trafficking and Promote Shared
 Prosperity', Anti-Trafficking Review 2
 (2013): 97 [challenging the
 criminalisation of migration in favour of
 rights-based immigration policies].
- 158 For more see Matthew Coleman, 'US Immigration Law and its Geographies of Social Control: Lessons from Homosexual Exclusion During the Cold War', Environment and Planning D: Society and Space 26 (2008): 10; Eithne Luibheid, Entry Denied (Minneapolis: University of Minnesota Press, 2002) cited in S.A. FitzGerald, 'Vulnerable Geographies: Human Trafficking, Immigration and Border Control in the UK and Beyond', Gender, Place and Culture 23 (2016): 181–2.
- 159 Evan Smith and Marinella Marmo, 'Examining the Body through Technology:

- Age Disputes and the UK Border System', *Anti-Trafficking Review* 3 (2013): 67–8.
- 160 For more on the impact of gender and racial stereotypes on migration policy and their implications on mobility, see Julie Ham, Marie Segrave, and Sharon Pickering, 'In the Eyes of the Beholder: Border Enforcement, Suspect Travellers and Trafficking Victims', Anti-Trafficking Review 2 (2013): 51.
- 161 For example, gendered differences occur in women being trafficked seen as victims where as men are 'migrant workers'; See Government Accountability Office, A Strategic Framework, 15, cited in Lobasz, 'Bevond Border', 339.
- 162 Lobasz, 'Beyond Border', 344, citing J. Ann Tickner, Gendering World Politics (New York: Columbia University Press, 2001).
- 163 Polaris Project, '2016 Hotline Statistics'.
- 164 Szpak, 'Human Security', 85, citing Arctic Climate Impact Assessment, *Impact of a Warming Arctic* (Cambridge University Press: Cambridge, 2004), 8.
- 165 Sweet, Raising Waters, 18, citing Gabrielle Slowey, 'Aboriginal Self-Determination and Resource Development Activity: Improving Human Security in the Canadian Arctic?' in Environmental and Human Security in the Arctic, ed. Gunhild Hoogensen Gjorv et al. (London: Routledge, 2014).
- 166 Szpak, 'Human Security', 91.
- 167 Department of National Defence, *Scenarios*, 3.
- 168 Sweet, Raising Waters, 172.
- 169 Edward Newman, 'Human Security and Constructivism', *International Studies Perspectives* 2 (2001): 239–40.
- 170 Newman, 'Human Security', 240.
- 171 Newman, 'Human Security', 240.
- 172 'Far North at risk'.
- 173 'Far North at risk'; See also Newman, 'Human Security', 240.
- 174 Liotta, 'Boomerang Effect', 479.
- 175 Heather Exner-Pirot, Human Security in the Arctic: The Foundation of Regional Cooperation. Working Papers on Arctic Security No. 1 (Toronto: Monk School of Global Affairs, 2012), 3.
- 176 Szpak, 'Human Security', 84.
- 177 See Stefan Kirchner, Review of Hoogensen Gjorv et al, (eds.) 'Environmental and Human Security in the Arctic' in *Polar* Journal 4 (2014): 231.
- 178 Alex Kreidenweis and Natalie Hudson, 'More Than a Crime: Human Trafficking as Human (In) Security', International Studies Perspectives (2015): 67, 71.

- 179 United Nations Development Programme (UNDP), Human Development Report (New York: United Nations, 1994), 23.
- 180 UNDP, Human Development Report.
- 181 See Kreidenweis, 'More Than a Crime', 71.
- 182 See Sabina Alkire, A Conceptual Framework for Human Security. Working Paper 2 (Oxford: Centre for Research on Inequality, Human Security and Ethnicity, 2003), 9.
- 183 For more on the history of the concept of human security, see Alkire, A Conceptual Framework, 12–13.
- 184 UNDP, Human Development Report.
- 185 International Commission on Intervention and State Sovereignty, 'The Responsibility to Protect', Report (Ottawa: International Development Research Centre, 2001), 15.
- 186 Liotta, 'Boomerang Effect', 474.
- 187 Newman, 'Human Security', 245-46.
- 188 Hoogensen Gjorv, 'Yes it is Relevant!', 2.
- 189 Hoogensen Gjorv, 'Yes it is Relevant!', 6.
- 190 M. Austein, 'Human Trafficking a Human Rights Violation and Security Risk', Washington File, US Information Service (2007), cited in Michael Chibba, 'Understanding Human Trafficking: Perspectives from Social Science, Security Matters, Business and Human Rights', Contemporary Social Science 9 (2014): 311, 315.
- 191 Chibba, 'Understanding Human Trafficking', 314.
- 192 Bourgeois, 'Colonial Exploitation', 1441.
- 193 See e.g., Kreidenweis, 'More Than a Crime', 71; Newman, 'Human Security', 246–47.
- 194 See Newman, 'Human Security', 79.
- 195 See Bourgeois, 'Colonial Exploitation'.
- 196 Alkire, A Conceptual Framework, 3.
- 197 Kreidenweis, 'More Than a Crime', 72.
- 198 Liotta, 'Boomerang Effect', 474.
- 199 Liotta, 'Boomerang Effect', 474.
- 200 Kreidenweis, 'More Than a Crime', 82.
- 201 United Nations Interagency Framework
 Team for Preventive Action, Toolkit and
 Guidance for Preventing and Managing
 Land and Natural Resources Conflict:
 Extractive Industries and Conflict
 (New York: UN, 2012), 454–57.
- 202 Alison Brysk, 'Beyond Framing and Shaming. Human Trafficking, Human

- Security and Human Rights', *Journal of Human Security* 5 (2009): 8, 19.
- 203 Claudia Aradau, 'The Perverse Politics of Four-Letter Words: Risk and Pity in the Securitization of Human Trafficking', Millennium: Journal of International Studies 22 (2004): 251.
- 204 Aradau, 'Perverse Politics', 275.
- 205 Sweet, Raising Waters, 13.
- 206 Sweet, Raising Waters, 13.
- 207 Sweet, Raising Waters, 15-16.
- 208 Sweet, Raising Waters, 15-16.
- 209 See Sweet at 15–16, citing David Bilchitz, 'The Ruggie Framework: An Adequate Rubric for Corporate Human Rights Obligations?', SUR International Journal on Human Rights 63 (2012).
- 210 See Sweet, Raising Waters, citing Human Rights Council, Promotion and Protection of All Human Rights, Civil, Political, Economic, Social and Cultural Rights, Including the Right to Development (New York: United Nations, 2008), 3.
- 211 ECPAT Sweden, Code of Conduct.
- 212 Sweet, Raising Waters, 18-19.
- 213 Lloyd's/Chatham House, *Arctic Opening*, 7.
- 214 See Clark, 'Trafficking in Persons', 260.
- 215 See e.g., Miller, 'Managing Migration',
- 216 Miller, 'Managing Migration', 30.
- 217 Marika McAdam, 'Who's Who at the Border? A Rights-based Approach to Identifying Human Trafficking at International Borders', Anti-Trafficking Review 2 (2013): 33, 36.
- 218 McAdam, 'Who's Who', 43-4.
- 219 Finn, 'Human Trafficking and Natural Disasters'.
- 220 See IOM, Climate Change-Human Trafficking Nexus; Albert Ofuoku, 'Human trafficking in Nigeria and its implications for food security', International Journal of Rural Studies 17 (2010): 1; Environmental Justice Foundation, Pirates and Slaves: How Overfishing in Thailand Fuels Human Traficking and the Plundering of Our Oceans (London: Environmental Justice Foundation, 2015).
- 221 See generally Cunje, 'Canada's Defence'.

15

Informal Disaster Governance in the Arctic

Patrizia Isabelle Duda

15.1. Introduction

Imagery of climate change disproportionately affecting the Arctic has become a common theme in world media and scholarship. The world has realised that 'what happens in the Arctic doesn't stay in the Arctic', as the astonishing volume of publications with this precise title demonstrates. However, rarely do these accounts consider the Arctic beyond the tragic storyline of an empty, pristine and static landscape disappearing, all the while threatening to affect the entire world's climate. Put differently, Arctic communities and the disaster-related challenges they face do not take centre stage in these debates. Yet, disasters and disaster risks have always been abundant throughout the Arctic, and the region's communities face tremendous disaster risk reduction and response (DRR/R) challenges in their own backyards. These range from earthquakes, avalanches, landslides, floods and meteorites to climate change-related disasters including sea level rise, systemic environmental consequences or fears over melting permafrost unleashing past diseases hidden in the ice and leading to global pandemics. At the same time, climatic changes have resulted in a more accessible Arctic and increased realisation of economic opportunities across various realms including mining, fishing, tourism, research or maritime/air traffic. Subsequently, more people and infrastructure are potentially at risk of being affected by the region's disaster potential, adding to the already significant pressures on Arctic communities to mitigate risks and adapt to their changing environment.

To meet this new reality, Arctic populations actively invest in the region's DRR/R capabilities and resources including expanding search and rescue (SAR) capabilities, research activities and technological innovations. Notably, in recognising the Arctic's challenging environment and disasters' often transboundary and cross-border nature, Arctic nations have identified DRR/R as an issue that requires international cooperation and have created strong collaborative governance mechanisms to address the associated challenges. Examples include the Arctic Council and its climate change- and disaster-related working groups, diverse bi- and multilateral SAR agreements, coast guard collaboration and joint preparedness exercises. Thus, conforming with DRR/R experts' recommendations, Arctic populations emphasise the importance of cooperation for DRR/R and, arguably, have gone beyond what the field of DRR/R has achieved in many other corners of the globe.

Nonetheless, it is questionable whether such high-level formal disaster governance (FDG) can effectively address communities' DRR/R needs.¹ Contemporary FDG efforts are critiqued for their reliance on bureaucratic institutional frameworks conceived during and for the industrial era, as well as their often technocratic framing of disaster risks that ignores the underlying vulnerabilities that are key to disasters occuring in the first place.² Thus, FDG is increasingly perceived as too rigid, slow and narrow to properly reduce and respond to disasters.³ This is particularly true when collaborative cross-border DRR/R efforts are required which raise further questions of authority and responsibility. Instead, FDG is often insufficient, comes too late or may never be forthcoming, and when it does, it may ignore local realities to the extent that it may be irrelevant or even harmful.

With disasters and disaster risks rising across a drastically changing Arctic, its communities are faced with the need to act – or do nothing.⁴ With the lack of formal support, local stakeholders in disaster situations often resort to informal actions, including across borders. By default, the resulting 'informal disaster governance' (IDG) takes on special relevance in such cross-boundary settings, where they have the power to overcome many of the bureaucratic and legal challenges inherent in cross-border FDG. Conversely, by virtue of bypassing FDG, informal DRR/R across borders can take on paradiplomatic dimensions, creating the potential to be caught between the geopolitical dynamics of state-level cooperation and conflict.

The remainder of this chapter is structured as follows. The next section provides an overview of the specific Arctic disaster context. Section 15.3. discusses formal arrangements to deal with DRR/R, and why these face such significant challenges in doing so, both in the Arctic

and equally worldwide. This section also discusses the necessary switch from the still-popular disaster management framework to one that emphasises disaster governance (DG). In Section 15.4., this chapter focuses on the importance of informality in DRR/R, both in its own right and in its complementary role and relationship with formal DG. While informal disaster governance can be both positive and negative in nature and consequence, this chapter focuses predominantly on its positive aspects, while also outlining potentially negative repercussions. The last part of this chapter offers conclusions and suggests avenues for future research. The aim of this chapter and the concept of IDG is not to discredit formal disaster governance, but rather to bring observations about the existence and performance of IDG into systematic and comparative focus. To stay within the scope of this book, this chapter cannot offer a fully-fledged analysis of IDG. However, its reflections may serve as a starting point to encourage further discussion.

15.2. Characterising Disasters and DRR/R in the Arctic

15.2.1. Beyond the Arctic as the 'Canary in the Goldmine' for Climate Change

Arctic communities are significantly affected by ongoing socioeconomic, environmental and climatic changes. However, while the Arctic is widely acknowledged as being hit disproportionately hard by and at the forefront of climate change,⁵ the notion of disasters in the Arctic often evokes surprise. Disasters – when regarded as large-scale events, with high casualty rates and obliterated infrastructures – appear at odds with an Arctic perceived as pristine and sparsely populated. The resulting lack of media coverage on Arctic disasters reinforces this perception gap. Remaining at the core of Arctic disaster perceptions then is primarily climate change at large and its effects on places outside the Arctic, as well as often an environmental victimisation of Arctic communities.⁶ The actual DRR/R needs and efforts of affected Arctic communities remain under-reported and ignored, while the Arctic is increasingly 'at the mercy of decisions made elsewhere, often without the slightest consideration for the top of the world'.⁷

However, disaster risks and disasters in the Arctic, whether climate change-dependent or independent, are abundant and nothing new. Arctic communities have always faced a range of disasters including earthquakes, tsunamis, wildfires, landslides, avalanches, permafrost melt, floods, epidemics and extreme weather events. However, they are now occurring at an unanticipated pace. Additionally, disaster risks have risen over the past decades resulting from increased human activity on the one hand, and the lack of needed or sustainably developed infrastructure on the other. Subsequently, human error-induced disaster risks across, for instance, the extractive, shipping, aviation and tourism industries have become more commonplace.

Further, while mistakenly less often considered as disasters (see 15.3.2.), scarcity of or lack of access to subsistence resources, together with climatic and environmental change-related food security issues and unsustainable economic development, pose challenges that 'raise profound questions about the future of Arctic societies'. Moreover, these are inherently connected to adverse effects on public and animal health which can be equally catastrophic and need to be taken into account when considering disasters in the Arctic. 10 Referencing this situation, the World Health Organization states that the 'well-understood' impacts of climate change (that is, not including effects that are currently not 'well understood') are estimated to lead yearly to 250,000 excess deaths between 2030 and 2050. 11 Although this figure relates to excess deaths worldwide, the WHO further warns that 'some [populations] are more vulnerable than others [and] polar regions are particularly vulnerable'. 12 Notably, and given the high suicide rates across the Arctic, 13,14 the health-related focus on disasters in the Arctic must also include the 'often-unseen' mental health consequences of adaptation to climate change, modernisation and other everyday factors. 15

15.2.2. Cross-Border and Transboundary Disasters

While some disasters and disaster-related activities do not extend beyond the local dimension, many do. Similarly to the health-related disaster risks mentioned above, several well-known disasters have demonstrated the potential to cut across Arctic borders and affect large swathes of the region, e.g. the destructive consequences of the Second World War on Arctic infrastructure and communities, the radioactive fallout from the Chernobyl disaster, the effects of sulphur dioxide from Soviet nickel smelters, the Exxon Valdez oil spill or the sinking of the Soviet nuclear submarine *Komsomolets*. Such disasters not only highlight the well-known fragility of Arctic ecosystems, but equally the cross-border nature of disaster risks and disasters, and the need for cross-border DRR/R-related collaboration and coordination.

This is further amplified by the Arctic's growing international interdependencies. To exemplify, SAR efforts related to international tourists or workers active in the Arctic are by default matters of international coordination between organisations and governments. SAR, in general, has become a cross-border effort as currently no Arctic player possesses the capabilities to respond to emergencies alone. Further, environmental disasters such as oil spills or disturbances to interconnected sectors and systems of transportation, infrastructure, water or tourism easily span different jurisdictions and must be governed collectively. The same applies to large-scale or remote disasters, or the protection of the Arctic ecosystem in light of the growing human activity.

15.2.3 Arctic Disasters as Wicked Problems

Consequently, and drawing on the currently popular foci in disaster research emerging from the complexity and systems sciences, the challenges of governing Arctic disasters have led some scholars to refer to them as 'wicked problems'.²⁰ These are problems which usually lack clear solutions, as each problem or element thereof links to other problems, neither of which can be clearly defined and/or are subject to constant change.²¹ Scholars exploring wicked problems in the context of the Arctic refer most commonly to the challenges emerging from diverging and sometimes opposing interests of a wide range of Arctic (and non-Arctic) stakeholders. Implied in this approach to the Arctic is the belief that the effectiveness of disaster governance in the Arctic is ambiguous due to the involved uncertainties, complex embeddedness in socioecological systems and competing interests.

The issue of Arctic climate change demonstrates this aptly. Highlighted by many for its adverse effects on Arctic ecosystems and societies, for others climate change is synonymous with economic opportunities and the development of industry, infrastructure and, by extension, society. Environmental changes, together with technological and economic advances, allow for increased human activity and accessibility of the Arctic, and fuel optimism over the future viability of the Arctic for global trade and growth of its various industries. In summary, the notion of Arctic disasters as wicked problems increases the attention on, amongst others, stakeholders' interests being at loggerheads between protecting the Arctic and decreasing disaster vulnerability, and capitalising on what it has to offer for economic gains, allowing better lives for Arctic communities. This has important implications for Arctic DRR/R.

15.3. Challenges of (Cross-Border) FDG

The (growing) list of disaster risks and disasters in the Arctic is daunting. In response to these challenges and their transboundary nature, Arctic nations have invested tremendously in collaborative DRR/R-related efforts. Although not all Arctic nations are natural allies who would seek such collaboration, Arctic cooperation on environmental as well as disaster- and SAR-related issues has gradually increased.²³ In a way, it appears that the Nordic Arctic countries' affinity for governance characteristics such as 'a welfare state legacy, promotion of transparency and the inclination to follow bottom-up and polycentric governance approaches' has led to a similar construction of collaborative circumpolar DRR/R arrangements.²⁴

Amongst the most visible and important instances are the Arctic Council's Search-and-Rescue (SAR) agreements, the Norwegian-Russian Oil Spill Response regime, the 2015-initiated Arctic Coast Guard and the Barents Regional Cooperation. Despite differing mandates and foci, all of these deal with DRR/R, usually through the prism of SAR or progress on environmental protection. The success of these cooperative regimes is especially visible in the Arctic nations' achievement to establish norms of collaboration and joint SAR strategy in the region, 25 as demonstrated by the 2011 first-ever binding 'Arctic Search and Rescue Agreement' or the 2013 'Agreement on Cooperation on Marine Oil Pollution Preparedness and Response in the Arctic'. More recently, the agreement between Arctic nations and other fishing powers to safeguard the Central Arctic Ocean from commercial fishing for the next 16 years until more scientific research is conducted to understand its marine life and resources, has made headlines for being a 'model for international cooperation in the face of unprecedented environmental change'.26

However, even with such developments noted for their uniqueness and unprecedented success, it is important to remember that the Arctic remains a difficult, sometimes hostile, environment to human activity amidst the communities' growing vulnerabilities, many of which are not well-understood or overseen. Thus, growing concerns over climate change, environmental safety issues and disasters are not only juxtaposed with Arctic nations' collaborative successes on DRR/R – and particularly SAR – but also the severe challenges to respond to them. Depending on where in the Arctic, some of the most commonly stated challenges include the region's harsh weather conditions, lack of governance, poor infrastructure, neglected communities and issues, long distances and

inaccessibility, lack of resources and capabilities, inadequate technology, political unwillingness and competing interests.²⁷

Furthermore, complicating DRR/R action is the Arctic's nexus of rapid development versus rapid climatic changes, a backdrop against which even the best-equipped or prepared formal organisations are struggling to keep up. Looking at maritime activities, for example, the increase in human involvement across the Arctic means that whereas in the past these waters were only frequented by the stereotypical tough fisherman and the world's bravest explorers, recent years have seen a boom of unprepared adventure tourists or other industrial maritime traffic (e.g. maritime traders or oil tankers) not used to steering their ships this far north. Consequently, Arctic coast guards are now required to patrol much larger swathes of water. Coming back to the abovementioned lack of resources and capabilities, the increase in need has not been matched by an increase in resources, crippling organisational and national abilities to respond to disasters when they are most needed.²⁸

Importantly in the context of this chapter, the above examples powerfully display the difficulty to govern cross-border disasters in the Arctic, even with the aforementioned collaborative mechanisms. As Oran Young writes, while there is 'no shortage of governance arrangements applicable to human activities [in the Arctic]',²⁹ the jurisdictional and sectoral fragmentation has led to significant shortcomings in the existing DRR/R arrangements. In exploring the different factors that impact cross-border DRR/R in the Arctic, this last statement is perhaps the most revealing.

That is, while disasters are complex and the Arctic is undoubtedly a particularly challenging environment to navigate, as the above mentioned plethora of DRR/R challenges shows, these are likely not the most important hurdles to effective DRR/R, if even in a region hailed for its unprecedented successes on cross-border or international collaborative DRR/R, these efforts are still not enough to make for effective DRR/R. In other words, there are deeper-seated challenges that underlie FDG's failures than the ones mentioned above. To elaborate on this aspect, the following sub-sections focus on three factors that seem particularly important in this regard: the inherent misfit of many formal disaster governance (FDG) actors with contemporary disaster realities, failures to identify disasters based on misperceptions thereof, and the worthy but incomplete paradigm shift to disaster governance (DG). These factors are especially important in demonstrating the necessity to include informal disaster governance practices in the study and practice of DRR/R in the Arctic and beyond, as argued in section 15.4. of this chapter.

15.3.1. Institutional Misfit with Current Disaster Realities

Institutional difficulties in responding to disasters are increasingly attributed to their often inflexible and bureaucratic structures. Accordingly, practitioners and academics often characterise institutional cross-border DRR/R as uncoordinated, unreliable and too inflexible to be effective.³⁰ Built over a century ago to fit the needs of that time, institutions tasked with DRR/R were designed with classical threats in mind, not the complexity of today's (transboundary) disasters.³¹ Part of the problem is the still prevalent command-and-control approach criticised already 40 years ago by Dynes and Aguirre for their 'centralization of authority and the formulation of procedures' in a situation where such a strategy is 'inappropriate'. 32 While there is definite value in formal, traditional, top-down command-and-control-based mechanisms, such institutions struggle when there is the need to deal with crises that are not only complex but interconnected or ostensibly 'unexpected'. Transboundary/cross-border disasters, in particular, require the coordinated effort of an additional range of functional levels.³³ However, FDG actors often do not have the requisite knowledge to take charge of such coordination.³⁴ Moreover, as disasters cascade, especially across national borders, their quickly changing nature requires flexible, ad hoc responses that are difficult to coordinate in themselves and even more so in a top-down manner by institutional players.³⁵

15.3.2. Problems understanding Disasters as Inhibitors for Effective DRR/R

Secondly, and fundamentally, an often-overlooked aspect of ineffective FDG is the lack of clarity surrounding the definition of disasters itself. This is important as how we define disasters has undeniable consequences as to which disaster risks and disasters we choose to act on and, by extension, which communities and individuals receive support, and which do not. Yet, to date there is no universally accepted definition of what constitutes a disaster, with regards to both characteristics and consequences. Some events leave little doubt as to their status as disasters and are intuitively recognised as such. In the Arctic, prominent examples include the 1964 Anchorage earthquake and the sinking of the *Komsomolets* in 1989. These often demonstrate either nature's force or how human error leads to major consequences. They are often defined on the basis of more technical characteristics, such as event magnitude, spatial dimensions, causalities, speed of disaster onset

or physical/economic damage.³⁷ Widening the scope, however, results in more controversy. 'Fuzzy' or creeping developments, including failed states, financial crises, famines or even the 'environmental consequences of modernity',³⁸ could be classified as disasters too. Often, these result in the loss of as many or more lives as the above.³⁹

Ultimately, the result is that while some disasters receive considerable attention, others do not, due to their lower visible magnitude (in terms of death, destruction or financial impact) or the associated media and political biases. 40 Instead, much of what is declared – and acted on – as a disaster is often defined 'to fit bureaucratic organisational survival needs [in which] disasters parameters are to a large extent an artificial, bureaucratic "make-work" definition'. 41 Often, disasters are declared on political grounds with vast implications over resource allocation. According to Kirschenbaum, referring to the United States but equally applicable to other countries and the Arctic, 'a disaster has occurred when the president says it has'. 42 Arguably, such subjectivity as to what does and does not constitute a disaster contributes to the de facto marginalisation of some disasters across the Arctic (and elsewhere). Finally, the often singular focus of FDG on classic or intuitive disaster definitions and the resulting technocratic DRR/R best practices all too often 'show little acknowledgement of the social issues influencing risks at the local community level' and fail to include 'local knowledge or engagement of local people in transformative DRR strategies'.43

15.3.3. Disaster Governance and Associated Problems

Having touched on the problem of disaster definitions leading to FDG's failures to act on DRR/R, one additional and connected aspect deserves particular attention. In the above search for a 'holistic' disaster definition and the maturation of the disaster research field, an important development has emerged: the focus on the social embeddedness and social construction of disasters. At the core of these social approaches to disaster studies is the notion that (social) vulnerabilities act as the primary driving force of disasters. Similarly to the constructivist turn in the field of International Relations, this dimension constitutes a *social turn* in disaster research and, arguably, has induced a paradigm shift from reactive management to an emphasis on the importance of proactive governance of disasters and a focus on community-based approaches to DRR/R. This idea goes hand in hand with the now commonplace idea that DRR/R practices need to consider stakeholders at all hierarchical, functional and geographical levels. The idea goes has a state of the process of the importance of the process of the importance of proactive governance of disasters and a focus on community-based approaches to DRR/R. This idea goes hand in hand with the now commonplace idea that DRR/R practices need to consider stakeholders at all hierarchical, functional and geographical levels.

However, current social or vulnerability-based approaches as well as the resulting disaster governance paradigm have important drawbacks which limit effective DRR/R. With respect to the former, despite decades of scientific evidence showing that social vulnerabilities fundamentally cause disasters, this notion is still too often ignored, as the undying references to 'natural disasters' show. This profoundly limits FDG action on the root causes of disasters, where they are most needed, and thus many disaster risks go unaddressed by FDG. Secondly, albeit based on the noble intentions of all-stakeholder involvement, best practices of disaster governance are neither fully developed in theory nor necessarily followed in practice. For one, disaster governance approaches do not fully manage to escape established conceptual 'boxes' of disaster management. While advocating the involvement of a wide range of stakeholders, the conceptual angle for such involvement is still rooted in a perception of DRR/R as command-and-control or top-down driven. Thus, the often alluded to paradigm shift from central control-andcommand in DRR/R to decentralised multi-stakeholder governance is still very much 'centred'. This failure to go beyond established structures can be seen in the constant emphasis on the need to collaborate with 'non-state actors', 'non-traditional actors' or 'emerging actors'. It not only implies a top-down, directed and, thus, still a state-centred initiation or running of such collaborations, perhaps more importantly, it treats actors beyond state and/or established organisations as 'out of norm' actors. In other cases, not enough is done to ensure that participating local stakeholders are not simply the most vocal or most powerful ones at the expense of the least vocal and powerful, but perhaps the most vulnerable ones. That is, external FDG actors may act on idealised notions of governance and community, effectively including 'everyone' irrespective of stakeholders' power relations or desires to be involved.⁴⁸ In doing so, progress is stifled, funds and resources that might have been used more effectively elsewhere are misused and, finally, command-and-control, top-down formal DRR/R approaches – dressed in the sheep's clothing of 'community-based' and 'inclusive' approaches – are perpetuated.

Effectively then, disasters are still predominantly 'managed' in a reactive/corrective manner, rather than in a prospective way that would reflect a social construction view of disasters and, as a result, emphasise risk avoidance through vulnerability reduction and the strengthening of resilience.⁴⁹ In short, the terminological shift from management to governance has yet to be fully reflected in research to be more effective as well as substantiated in practice.⁵⁰ As a result, much of the burden in planning for and responding to disasters falls on the local and often

informal level of DRR/R. Decentralisation, information technologies and globalisation provide the structural opportunities for local actors to exert influence in this process, though without a formalised relationship to official institutions this possibility remains tenuous. ⁵¹ Consequently, DG actions often take on an informal form and, thus, constitute IDG, the focus of this chapter's next section.

15.4. Informal Disaster Governance in the Context of Cross-Border Disasters in the Arctic

When states and organisations fail to respond to the complexities of disasters, local actors may choose to step up. These are the very people involved on the ground, often offering alternative, innovative solutions and include 'public, private, and hybrid actors, acting in their own right and forming novel partnerships and networks.' Focusing on this level, scholars maintain that it is the local populations that often understand local risks more intimately; are the first responders when disasters hit and need to cope, recover and live with the consequences; and have access to both local knowledge and networks. Consequently, as discussed in the section above, the consultation and involvement of this level constitutes a cornerstone of disaster governance.

Yet, as the previous section pointed out, actual DRR/R in the field does not necessarily follow best practices of disaster governance. In other cases, it is not present to begin with, as the disasters themselves are not perceived as such or are neglected for a variety of reasons. In response to absent or inadequate institutional involvement, the DRR/R efforts of local communities often take on an informal character, with some individuals and communities preferring to come together and take responsibility for their own DRR/R needs.⁵⁴

The resulting phenomenon of informal disaster governance (IDG) has received only limited attention by scholars and practitioners alike.⁵⁵ This said, many references to instances of, or the need for, IDG do exist across grey literature as well as indirect, limited references in academic literature.⁵⁶ A problematic feature of the latter is that informal governance within DRR/R is often reduced to concepts of first responders, informal volunteerism and spontaneous and emergent citizen groups.⁵⁷ This often leads to a direct or indirect implication that these involved individuals or groups are 'secondary actors' that need to be managed by FDG institutions, thus not fully recognising local realities on the ground nor what local and, by necessity, informal DRR/R actors have to offer.

In truth, IDG goes far beyond such limited notions of volunteerism and includes organised, intentional acts of disaster governance. As such, IDG may include a broader base of actors. These can include individuals and groups – or, in other words, 'ordinary' people – who take action not as part of their professional role, but act as individuals, families, neighbours and so on: organisations without a DRR/R-related mandate – for instance. civil organisations such as churches, schools or cities; or organisations and individuals whose professional role may be disaster-related, but whose actions are not formally institutionalised or mandated.⁵⁸ Implicit in this perspective is that IDG can refer to the informal intention or nature of disaster governance itself irrespective of the stakeholder's role. Of particular importance in this regard are instances of stakeholders intentionally and actively bypassing governments or other formal institutions.⁵⁹ This could be due to lack of trust; formal organisations not allowing local citizens to act as in the case of the 'Deepwater Horizon Oil Spill';60 the private sector having access to better technology; or because institutions, whether national, regional local or supranational, simply do not act.

The above also demonstrates the need for FDG to attach more value to citizen 'scholarship' – that is, the notion that valuable education and, thus, knowledge may come from sources other than classrooms and academic scholarship. While much of the argument has gained attention with regards to including indigenous knowledge, this popular focus is by no means exhaustive. Such knowledge then includes a wider pool of stakeholders including youth, adults and elders who can be defined as 'experts' within their own knowledge systems. For instance, people across different spheres of food production, health services or infrastructure construction - e.g. hunters, fishers, those processing and storing food, health aides, urban planners, construction workers and so on - have access to potentially important knowledge, which, however, is rarely taken into account in FDG systems, thus, and if at all, often only finding its expression within the informal realms of thought and action. In the Arctic, and as acknowledged by a recent Red Cross study of the organisation's response capacity in the Arctic, such need for IDG and the proper understanding thereof, powerfully demonstrated by, for instance, the region's reliance on local volunteers for health- and emergency-related DRR/R in sparsely populated areas. 61 Put differently, where FDG has trouble acting or reacting in the face of complexity and uncertainty, IDG, by emphasising trust as well as perceptions of sharing information more effectively, can 'provide the urgently needed tools for knowledge and action'.62

An important and defining factor that makes IDG indeed useful for FDG institutions are, thanks to IDG's broad actor base, the informal

networks that are often formed through non-institutionalised channels. The numerous actors' types and entities, and the myriad of connections between them, create a 'complex web of informal networks' and interactions that, by its nature, responds in a non-linear fashion that is juxtaposed to the expected behaviour of classical hierarchies. This changing context has led to changes in behaviour and has resulted in communities engaging in their own informal and collaborative governance initiatives to respond to issues of concern to them. In the words of Rosenau, this represents 'governance without government'.

These trends also challenge concepts of territory, both in their own right and by means of the attitudes and possibilities they create. Around the Arctic, settlements, peoples and communities have been actively and cooperatively pursuing DRR/R initiatives across national borders. An important example of such Arctic cross-border IDG is the collaborative initiative between local non-governmental stakeholders from Edevtsv (Russia) and Galena (Alaska). While the regions near the Yukon River, AK and the Lena River, Russia are subject to regular ice breakup floods, the towns of Galena and Eteytsy were not prepared for the severity of the 2013 floods which led to the near-destruction of entire villages, relocation and severe socioeconomic impacts. In response, in 2015, a multidisciplinary team consisting of US and Russian scientists, emergency managers, local stakeholders and policy makers was established to conduct reciprocal visits to discuss and outline best practices related to spring-flood-related participatory, community-based DRR/R.65 Yet, funding for this initiative to share scientific and cultural knowledge between the two nations on ice jam floods was thrown into disarray following US-Russia tensions and the resulting sanctions.66

However, IDG is not without its own problem. The above example not only shows the financial fragility and need for support of some IDG initiatives, it also points to potential and unintended negative consequences and repercussions of IDG and for IDG actors, especially in cross-border instances of DRR/R. Arguably, in such cases, IDG morphs into de facto para-diplomatic actions and, if the respective states choose to do so, can be perceived as entering and contesting the realm of a state's foreign policy. That is, by participating in cross-border negotiations about collaboration and coordination of DRR/R, stakeholders engage in parallel everyday forms of diplomacy⁶⁷ and transgress into the traditional prerogatives of states and professional experts – politicians and diplomats, but also scientists, lawyers and so on.⁶⁸ Other known Arctic examples include para-diplomacy on environmental and related issues between cross-border Arctic settlements such as Nickel and Kirkenes⁶⁹

or the paradiplomatic relations between Greenland's community and non-Arctic actors. Oscillators Can directly challenge and move beyond a markets-and-states definition of the political realm. In this sense, IDG might challenge existing state- and organisation-centred authority and public policy-making processes and, in so doing, reshape power relations within domestic and international disaster governance. Hence, it may often be in the grey zones of legality or be interpreted as illegal. At a minimum, it would be possible for the state to make this case should it wish to do so.

Furthermore, similar to FDG, IDG is not immune to power issues emerging from community or stakeholder dynamics. 71 Kelman states that while governments can acknowledge their limitations and allow or actively support IDG,72 intra-community power relations can also hinder IDG by means of, for instance, powerful locals playing active roles in national governments. Thus, 'bypassing government for governance might never be feasible' in some cases.73 Similarly, where political power is lacking, informal networks can easily become subject to external manipulation or political capture. Tendler refers to these anti-development dynamics as 'the devil's deal' that perpetuates dependence rather than healthy, participatory governance and political empowerment.⁷⁴ The emerging imbalances can lead to distrust and weak commitment.⁷⁵ and. as a result, render IDG at best unhelpful and potentially even harmful. Finally, despite the enormous creativity and resourcefulness often inherent in informal networks, issues of resources as well as accountability can hamper effectiveness due to disorganisation, inadequate training and being under-resourced relative to the new gamut of responsibilities.⁷⁶

15.5. Conclusion

This chapter has introduced DRR/R in the Arctic, providing context and dispelling certain misconceptions. In the process, the limitations of FDG were highlighted, especially at the international or cross-border levels, arguing that vulnerable populations 'are not receiving the assistance and protection they need, despite the potential for it to be delivered'.⁷⁷ This 'gap between what is possible and what is actual defines the humanitarian failures of the twenty-first century'.⁷⁸

The final section of this chapter introduced IDG and highlighted both its wide-ranging role and its relative obscurity in literature. Given the tacit nature of informal governance in 'groups, organisations, elites and societies, it is perhaps not surprising that until now the literature on informal governance has been somewhat limited'. Therefore, research on IDG means embarking on a challenging quest to assemble an understanding of IDG expressed in informal disaster networks and the boundaries at which informal and formal modes of disaster governance converge and repel each other. More research honing IDG is necessary at this point. Whilst many examples emerge from grey literature or are known anecdotally, and while some academic literature exists that indirectly rather than directly refers to instances of IDG, there have been few published studies focused on this topic. With this concept being thus only at the preliminary stage, questions emerge, such as which stakeholders are likely to act on IDG and when as well as why; what their relations to formal DG institutions are; and who are its driving forces or gatekeepers.

Ultimately, incorporating IDG into a larger DG outlook means a more dynamic, present-oriented framework that favours more non-linear, holistic networked approaches perceived as necessary for more effective transboundary DRR/R.⁸⁰ In the face of the recognised complexity of disasters, not least due to their social construction, formal DRR/R mechanisms are at a breaking point. This chapter argued that if decision-makers hope to create responsive and sustainable DRR/R – in short, effective DRR/R, they will need to break from traditional, top-down, command-and-control, technology- and SAR-driven modes of DRR/R and embrace true disaster governance and potentially new organisational forms to address complex social problems such as DRR/R. Such new approaches cannot be viewed as complete without taking into account the informal dimension. Adopting such a new practice will be essential for our ability to mitigate and respond to the disaster-related challenges of the 21st century.

Notes

- 1 Dorothea Hilhorst, 'Responding to Disasters. Diversity of Bureaucrats, Technocrats and Local People', International Journal of Mass Emergencies and Disasters 21 (2003): 37–56; Susan Cutter and Kenneth Hewitt, 'Interpretations of Calamity from the Viewpoint of Human Ecology', Geographical Review 74, no. 2 (1984): 226–28; Allan Lavell and Andrew Maskrey, 'The Future of Disaster Risk
- Management', *Environmental Hazards* 13, no. 4 (2014): 267–80.
- 2 James Lewis and Ilan Kelman, 'The Good, The Bad and The Ugly: Disaster Risk Reduction (DRR) Versus Disaster Risk Creation (DRC)', PLOS Currents Influenza 4, (2012).
- 3 Russell R. Dynes and Benigno E. Aguirre, 'Organizational Adaptation To Crises: Mechanisms Of Coordination And Structural Change', Disasters 3, no. 1

- (1979): 71-74; Arjen Boin and Patrick Lagadec, 'Preparing for the Future: Critical Challenges in Crisis Management'. Journal of Contingencies and Crisis Management 8, no. 4 (2000): 185-91; Arjen Boin and Allan McConnell, 'Preparing for Critical Infrastructure Breakdowns: The Limits of Crisis Management and the Need for Resilience', Journal of Contingencies and Crisis Management 15, no. 1 (2007): 50-59; Chris Ansell, Arjen Boin, and Ann Keller, 'Managing Transboundary Crises: Identifying the Building Blocks of an Effective Response System', Journal of Contingencies and Crisis Management 18, no. 4 (2010): 195-207; Enrico L. Quarantelli, Patrick Lagadec, and Arjen Boin, Handbook of Disaster Research (New York: Springer, 2006), 16-41.
- 4 'Cultural Adaptation & Resilience to Arctic Climate Change', last modified 23 May 2018, https://www.arcus.org/ indigenous-scholars.
- 5 Pierre-Louis Têtu, Jackie Dawson, and Julia Olsen, Arctic Yearbook 2018: Arctic Development in Theory & In Practice (Northern Research Forum, 2018), 141; Lewis Archer et al., 'Longitudinal Assessment of Climate Vulnerability: A Case Study from the Canadian Arctic', Sustainability Science 12, no. 1 (2016): 15–29.
- 6 Bethany Haalboom and David C. Natcher, "The Power and Peril of "Vulnerability": Approaching Community Labels with Caution in Climate Change Research', Arctic 65, no. 3 (2012): 319–27; Subhankar Banarjee, Arctic Voices: Resistance at the Tipping Point (New York: Seven Stories Press, 2012).
- 7 Alun Anderson, After the Ice: Life, Death, and Geopolitics in the New Arctic (New York: Smithsonian Books, 2009), 9.
- 8 Oran R. Young, 'The Future of the Arctic: Cauldron of Conflict or Zone of Peace?', International Affairs 87, no. 1 (2011): 187.
- 9 Young, 'The Future of the Arctic: Cauldron of Conflict or Zone of Peace?', 187.
- 10 Maria Fossheim et al., 'Recent Warming Leads to a Rapid Borealization of Fish Communities in the Arctic', *Nature Climate Change* 5, no. 7 (2015): 673–77; Todd J. Brinkman et al., 'Arctic Communities Perceive Climate Impacts on Access as a Critical Challenge to Availability of Subsistence Resources', *Climatic Change* 139, no. 3–4 (2016): 413–27.

- 11 WHO, Quantitative Risk Assessment of the Effects of Climate Change on Selected Causes of Death, 2030s and 2050s (World Health Organisation, 2014); 'Climate change and health', last modified 1 February 2018, https://www.who.int/news-room/fact-sheets/detail/climate-change-and-health.
- 12 'Climate Change and Health', last modified 1 February 2018, https://www. who.int/news-room/fact-sheets/detail/climatechange-and-health.
- 13 Kue T. Young, Boris Revich, and Leena Soininen, 'Suicide in Circumpolar Regions: An Introduction and Overview', International Journal of Circumpolar Health 74, no. 1 (2015)
- 14 'Background Arctic Research
 Commission', last modified 2018,
 https://www.arctic.gov/amhwg/
 background.html; 'Solving the Suicide
 Crisis in the Arctic Circle Pacific
 Standard', last modified 23 May 2018,
 https://psmag.com/environment/
 solving-the-suicide-crisis-in-the-arctic-circle
- 15 Katie Hayes et al., 'Climate Change and Mental Health: Risks, Impacts and Priority Actions', International Journal of Mental Health Systems 12, no. 1 (2018); Nick Watts et al., 'The Lancet Countdown on Health and Climate Change: From 25 Years of Inaction to a Global Transformation For Public Health', Lancet 391, 10120 (2018): 581-630; Jessica G. Fritze et al., 'Hope, Despair and Transformation: Climate Change and the Promotion of Mental Health and Wellbeing', International Journal of Mental Health Systems 2, no. 1 (2008); François Bourque and Ashlee Cunsolo Willox, 'Climate Change: The Next Challenge for Public Mental Health?', International Review of Psychiatry 26, no. 4 (2014): 415-22.
- 16 Elana W. Rowe, Arctic Governance: Power in Cross-border Cooperation (Manchester University Press, 2018), 46.
- 17 Michael J. Dunbar, 'Stability and Fragility in Arctic Ecosystems', Arctic 26, no. 3 (1973): 178–85.
- 18 Emmi Ikonen, Arctic Search and Rescue Capabilities Survey. Enhancing International Cooperation (Finnish Border Guard, 2017).
- 19 Charles Perrow, Normal Accidents: Living with High Risk Technologies (Princeton University Press, 2011); Ansell, Boin, and Keller, 'Managing Transboundary Crises:

- Identifying the Building Blocks of an Effective Response System', 195–207; James D. Ford, Graham McDowell, and Julie Jones, 'The state of climate change adaptation in the Arctic', Environmental Research Letters 9, no. 10 (2014); Gianluca Pescaroli and David Alexander, 'A definition of cascading disasters and cascading effects: going beyond the "toppling dominos" metaphor', GRF Davos Planet@Risk 3, no. 1 (2015): 58-67; Gianluca Pescaroli and Ilan Kelman, 'How Critical Infrastructure Orients International Relief in Cascading Disasters', Journal of Contingencies and Crisis Management 25, no. 2 (2016): 56-67.
- Mandy Kämpf and Sharman Haley, 'Risk Management in the Alaska Arctic Offshore: Wicked Problems Require New Paradigms', The Polar Journal 4, no. 1 (2014): 150-69; Emilie A. Johannes, The Wicked Problem of Oil & Gas Development in the Beaufort and Chukchi Seas: Current Permitting and Evaluation Of Marine Spatial Planning as a Potential Management Tool (Texas A&M University, 2014); Rebecca Pincus, Large-Scale Disaster Response in the Arctic: Are We Ready? Lessons from the Literature on Wicked Policy Problems (Arctic Yearbook, 2015): Joan Mileski et al., 'Cooperation in Developing a Disaster Prevention and Response Plan for Arctic Shipping', Marine Policy 92 (2018): 131-37.
- 21 Horst W. J. Rittel and Melvin M. Webber, 'Dilemmas in a General Theory of Planning', *Policy Sciences* 4 (1973): 155–69.
- 22 Young, 'The Future of the Arctic: Cauldron of Conflict or Zone of Peace?', 185–93; Kathrin Keil, 'The Arctic: A New Region of Conflict? The Case of Oil and Gas', Cooperation and Conflict 49, no. 2 (2014): 162–90; Julia S.P. Loe and Ilan Kelman, 'Arctic Petroleum's Community Impacts: Local Perceptions from Hammerfest, Norway', Energy Research & Social Science 16 (2016): 25–34.
- 23 Shih-Ming Kao, Nathaniel S. Pearre, and Jeremy Firestone, 'Adoption of the Arctic Search and Rescue Agreement: A Shift of the Arctic Regime toward a Hard Law Basis?,' Marine Policy 36, no. 3 (2012): 832–38; Piotr Graczyk and Timo Koivurova, 'The Arctic Council,' Handbook of the Politics of the Arctic, eds. Leif Christian Jensen and Geir Hønneland (Edward Elgar Publishing,

- 2015), 298–337; Are Kristoffer Sydnes, Maria Sydnes, and Yngve Antonsen, 'International Cooperation on Search and Rescue in the Arctic', *Arctic Review on Law and Politics* 8 (2017): 109–36; Paula Kankaanpää and Oran R. Young, 'The Effectiveness of the Arctic Council', *Polar Research* 31, no. 1 (2012).
- 24 Lisa Van Well et al., 'Resilience to Natural Hazards: An Analysis of Territorial Governance in the Nordic Countries', International Journal of Disaster Risk Reduction 31 (2018): 1283.
- 25 Sydnes, Sydnes, and Antonsen, 'International Cooperation on Search and Rescue in the Arctic', 109–36.
- 26 Trevor Taylor, in Levon Sevunts: 'Nine Countries and EU Set to Sign "Historic" Agreement to Protect Central Arctic Ocean', The Barents Observer, 3 October 2018. https://thebarentsobserver.com/en/arctic/2018/10/nine-countries-and-euset-sign-historic-agreement-protect-central-arctic-ocean.
- 27 Sini Hangaslammi and Ilona Hatakka, Red Cross Arctic Disaster Management Study (Finnish Red Cross, 2017).
- 28 'Stretched Thin on Thin Ice Foreign Policy', last modified 12 September 2018, https://foreignpolicy.com/2018/09/12/stretched-thin-on-thin-ice-arctic-circle-climate-change-norway-coast-guard/.
- 29 Oran R. Young, 'Governing the Arctic Ocean', *Marine Policy* 72 (2016): 272.
- 30 Alan Kirschenbaum, Chaos Organization and Disaster Management (New York & Basel: Marcel Dekker. Inc., 2003); Boin and Lagadec, 'Preparing for the Future: Critical Challenges in Crisis Management', 185–91.
- 31 Arjen Boin and Mark Rhinard, 'Managing Transboundary Crises: What Role for the European Union?' *International Studies Review* 10, no. 1 (2008): 1–26.
- 32 Dynes and Aguirre, 'Organizational Adaptation To Crises: Mechanisms Of Coordination And Structural Change', 73.
- 33 Tricia Wachtendorf, A River Runs through it: Cross Border Interaction during the 1997 Red River Flood (University of Delaware. Disaster Research Center, 1999); Tricia Wachtendorf, 'When Disasters Defy Borders: What We Can Learn From the Red River Flood About Transnational Disasters', The Australian Journal of Emergency Management 15, no. 3 (2000): 36–41; Said Aini et al., 'M. Transnational Forest Fire Fighting: The Malaysian Experience', Disaster Prevention and

- Management 9 (2000): 282–87; Heidi Dahles and Ellen Van Hees, 'Firefighters Across Frontiers: Two Fire Brigades Cooperating in the Dutch–German Borderland', Culture and Organization 10 (2004): 315–28.
- 34 Laura Grube and Virgil Henry Storr, 'The Capacity for Self-governance and Post-disaster Resiliency', The Review of Austrian Economics 27 (2014): 301–24.
- 35 Wachtendorf, A River Runs Through It; Wachtendorf, 'When Disasters Defy Borders'; Arjen Boin, Mark Rhinard, and Magnus Ekengren, 'Managing Transboundary Crises: The Emergence of European Union Capacity', Journal of Contingencies and Crisis Management 22 (2014): 131–42; Pescaroli and Kelman, 'How Critical Infrastructure Orients International Relief in Cascading Disasters', 56–67.
- 36 Ibrahim M. Shaluf, Ahmadun Fakharu'lrazi, and Aini Mat Said, 'A Review of Disaster and Crisis', Disaster Prevention and Management: An International Journal 12 (2003): 24–32.
- 37 Harold D. Foster, 'Assessing Disaster Magnitude: A Social Science Approach', The Professional Geographer 28 (1976): 214-47; Harold D. Foster, 'Reducing Vulnerability to Natural Hazards', The Geneva Papers on Risk and Insurance 9 (1984): 27-56; Neil R. Britton, 'Developing an Understanding of Disaster', The Australian and New Zealand Journal of Sociology 22 (1986): 254-71; Anthony F.C. Wallace, Tornado in Worcester: An Exploratory Study of Individual and Community Behavior in an Extreme Situation. (NAS/NRC Committee on Disaster Studies, 1956); Michael K. Lindell, 'Disaster Studies', Current Sociology 61 (2013): 797-825; Allen H. Barton, Communities in Disaster: A Sociological Analysis of Collective Stress Situations (Garden City, New York: Doubleday, 1969), 721.
- 38 Richard York, Eugene A. Rosa, and Thomas Dietz, 'Footprints on the Earth: The Environmental Consequences of Modernity', American Sociological Review 68 (2003): 279–300.
- 39 Regina Below, Emily Grover-Kopec, and Maxx Dilley, 'Documenting Drought-Related Disasters', The Journal of Environment & Development 16 (2007): 328–44.
- 40 Ben Wisner and Jean-Christophe Gaillard, 'An Introduction to Neglected Disasters',

- Jàmbá: Journal of Disaster Risk Studies 2 (2009): 151–58.
- 41 Kirschenbaum, Chaos Organization and Disaster Management, 26.
- 42 Kirschenbaum, Chaos Organization and Disaster Management, 7–8.
- 43 Angelo Jonas Imperiale and Frank Vanclay, 'Reflections on the L'Aquila Trial and the Social Dimensions of Disaster Risk', Disaster Prevention and Management: An International Journal (2018).
- 44 Ben Wisner et al., At Risk: Natural Hazards, People's Vulnerability and Disasters 2nd ed. (London and New York: Routledge, 2004), doi:10.4324/9780203428764.
- 45 Cutter and Hewitt, 'Interpretations of Calamity from the Viewpoint of Human Ecology', 226–28; Greg Bankoff, Georg Frerks, and Dorothea Hilhorst, eds., Mapping Vulnerability: Disasters, Development and People (Abington and New York: Routledge, 2004).
- 46 Mark Pelling, 'Paradigms of Risk', in Natural Disaster and Development in a Globalizing World, ed. Mark Pelling (London and New York, Routledge, 2003), 3–16.
- 47 UNISDR, UNO, 'Sendai Framework for Disaster Risk Reduction 2015–2030', in Proceedings of the 3rd United Nations World Conference on DRR (Sendai, Japan, 2015): 9–13.
- 48 Bill Cooke and Uma Kothari, eds., Participation: The New Tyranny? (London and New York: Zed Books, 2001); Samuel Hickey and Giles Mohan, eds., Participation – From Tyranny to Transformation. Exploring New Approaches to Participation in Development (London and New York: Zed Books, 2004); Alexandra Titz, Terry Cannon, and Fred Krüger, 'Uncovering 'Community': Challenging an Elusive Concept in Development and Disaster Related Work', Societies 8 (2018): 71.
- 49 Lavell and Maskrey, 'The Future of Disaster Risk Management', 267–80.
- 50 Joachim Ahrens and Patrick M. Rudolph, "The Importance of Governance in Risk Reduction and Disaster Management', Journal of Contingencies and Crisis Management 14 (2006): 207–20; Kathleen Tierney, 'Disaster Governance: Social, Political, and Economic Dimensions', Annual Review of Environment and Resources 37 (2012): 341–63.

- 51 Michael C. Dorf and Charles F. Sabel, 'A Constitution of Democratic Experimentalism', Columbia Law Review 98 (1998): 267–473; Christopher K. Ansell, Pragmatist democracy: evolutionary learning as public philosophy (New York: Oxford University Press, 2011).
- 52 Peter Newell, Philipp Pattberg, and Heike Schroeder, 'Multiactor Governance and the Environment', *Annual Review of* Environment and Resources 37 (2012): 380.
- Ben Wisner, Phil O'Keefe, and Ken Westgate, 'Global Systems And Local Disasters: The Untapped Power Of Peoples' Science', Disasters 1 (1977): 47-57; Robert A. Stallings and Enrico L. Quarantelli, 'Emergent Citizen Groups and Emergency Management', Public Administration Review 45 (1985): 92-100; Katrina M. Allen, 'Communitybased Disaster Preparedness and Climate Adaptation: Local Capacity-building in the Philippines', Disasters 30, (2006): 81-101; Jake Rom D. Cadag and J.C. Gaillard, 'Integrating Knowledge and Actions in Disaster Risk Reduction: The Contribution of Participatory Mapping', Area 44 (2012): 100-09; Michelle Ann Miller and Mike Douglass, 'Introduction: Decentralising Disaster Governance in Urbanising Asia', Habitat International 52 (2016): 1-4; Elizabeth Carabine and Emily Wilkinson, 'How Can Local Governance Systems Strengthen Community Resilience? A Social-Ecological Systems Approach', Politics and Governance 4 (2016): 62-73; Eva Irene Falleth and Sissel Hovik, 'Local Government and Nature Conservation in Norway: Decentralisation as a Strategy in Environmental Policy', Local Environment 14 (2009): 221-31.
- 54 Dustin Roasa, "The D.I.Y. Disaster Plan
 How Informal Networks Battled
 Bangkok's Worst Flood', The Rockefeller
 Foundation's Informal City Dialogues 1
 (2013); Roanne Van Voorst, 'Formal and
 Informal Flood Governance in Jakarta,
 Indonesia', Habitat International 52
 (2016): 5–10; Serene Ng, 'Governance
 beyond the Government: Responding
 to a Reactionary Flood Governance
 Regime in Ayutthaya, Thailand', Habitat
 International 52 (2016): 11–19.
- 55 D. Parthasarathy, 'Informality, Resilience, and the Political Implications of Disaster Governance', *Pacific Affairs* 88 (2015): 551–75.

- 56 Roasa, 'The D.I.Y. Disaster Plan'; Hangaslammi and Hatakka, Red Cross Arctic Disaster Management Study; Wachtendorf, A River Runs through it.
 - Joshua Whittaker, Blythe Mclennan, and John Handmer, 'A Review of Informal Volunteerism in Emergencies and Disasters: Definition, Opportunities and Challenges,' International Journal of Disaster Risk Reduction 13 (2015): 358-68; Enrico L. Quarantelli, Emergent Behavior at the Emergency Time Periods of Disasters. (Delaware: University of Delaware, Disaster Research Center, 1983); Stallings and Quarantelli, Emergent Citizen Groups and Emergency Management'; Claudia Paciarotti, Angela Cesaroni, and Maurizio Bevilacqua. 'The Management of Spontaneous Volunteers: A Successful Model from a Flood Emergency in Italy', International Journal of Disaster Risk Reduction 31 (2018): 260-74; John Twigg and Irina Mosel, 'Emergent Groups and Spontaneous Volunteers in Urban Disaster Response', Environment and Urbanization 29, no. 2 (2017): 443-58.
- 58 Roasa, 'The D.I.Y. Disaster Plan'
- 59 Ilan Kelman, 'Disaster Risk Governance for Pacific Island Communities', The Asia-Pacific Journal | Japan Focus 13 (2015).
- 60 Hannah E. Clarke and Brian Mayer, 'Community Recovery Following The Deepwater Horizon Oil Spill: Toward a Theory of Cultural Resilience', Society & Natural Resources 30 (2017): 129–44.
- 61 Dylan G. Clark, James D. Ford, and Taha Tabish, 'What Role Can Unmanned Aerial Vehicles Play in Emergency Response in the Arctic: A Case Study from Canada', Plos One 13 (2018), 4; Hangaslammi and Hatakka, Red Cross Arctic Disaster Management Study.
- 62 Mona Fawaz, 'Planning and the Refugee Crisis: Informality as a Framework of Analysis and Reflection', *Planning Theory* 16, no. 1 (2017): 99–115.
- 63 Robert Egnell and Peter Haldén, 'Laudable, Ahistorical and Overambitious: Security Sector Reform Meets State Formation Theory', Conflict, Security & Development 9 (2009): 27–54.
- 64 James N. Rosenau, 'Governance, Order, and Change in World Politics', Governance Without Government: Order and Change in World Politics, ed. James N., Rosenau, Ernst-Otto Czempiel, and

- Steve Smith (Cambridge: Cambridge University Press, 1992), 1–29.
- 65 'Reducing Spring Flood Impacts: An International Project Implemented By "Natural Hazards" Thematic Network', last modified 12 May 2016, http://www.uarctic.org/news/2016/5/reducing-spring-flood-impacts-an-international-project-implemented-by-natural-hazards-thematic-network/.
- 66 'U.S.-Russia Tensions Put a Chill on Ice Disaster Research Effort', last modified 8 October 2015, https://www.sciencemag. org/news/2015/10/us-russia-tensionsput-chill-ice-disaster-research-effort.
- 67 Costas M. Constantinou, 'Everyday Diplomacy: Mission, Spectacle and the Remaking of Diplomatic Culture', in Diplomatic Cultures and International Politics: Translations, Spaces and Alternatives, ed. Jason Dittmer and Fiona McConnell (London: Routledge, 2016), 23–40.
- 68 Ronnie Lipschutz and James K. Rowe, Globalization, Governmentality and Global Politics: Regulation for the Rest of Us? (London and New York: Routledge, 2006).
- Pertti Joenniemi, 'City-twinning as Local Foreign Policy: The Case of Kirkenes-Nickel', CEURUS EU-Russia paper 15 (2014); Pertti Joenniemi and Alexander Sergunin, 'Kirkenes-Nikel: Catching a Second Wind of Twinning?' in Arctic Yearbook 2013, ed. Lassi Heininen, (Northern Research Forum, 2013); Kristoffer Eliasson, Arctic Strategies of Sub-national Regions: Why and How Sub-national Regions in Northern Finland and Sweden Mobilize as Arctic Stakeholders (Master Thesis: Umeå University, 2015); 'Russia and Norway Make Progress on Cross-border Environmental Problems', last modified 9 October 2017, http:// bellona.org/news/industrial-pollution/ 2017-10-russia-and-norway-makeprogress-on-cross-border-environmentalproblems.
- 70 Maria Ackrén, 'Greenlandic Paradiplomatic Relations', in Security and Sovereignty in the North Atlantic, ed.

- Lassi Heininen (Basingstoke, Hampshire: Palgrave Macmillan, 2014), 42–61.
- 71 Fikret Berkes and Helen Ross,
 'Community Resilience: Toward an
 Integrated Approach', Society & Natural
 Resources 26 (2013): 5–20.
- 72 Kelman, 'Disaster Risk Governance for Pacific Island Communities', 13.
- 73 Kelman, 'Disaster Risk Governance for Pacific Island Communities', 17.
- 74 Judith Tendler, 'Small Firms, the Informal Sector, and the Devil's Deal', *IDS Bulletin* 33, no. 3 (2002): 1–15.
- 75 Barbara Gray, Collaborating: Finding Common Ground for Multiparty Problems (San Francisco and London: Jossey, 1989).
- 76 Nick Devas, 'The Connections Between Urban Governance and Poverty', Journal of International Development 13, no. 7 (2001): 989–96; Nick Devas, 'Does City Governance Matter for the Urban Poor?', International Planning Studies 6, no. 4 (2001): 393–408, doi:10.1080/13563470120092395.
- 77 Kyle McNally and James Orbinsky, 'Humanitarianism: Stagnation, Fragmentation and Possibilities', Beyond Gridlock, ed. Thomas Hale and David Held (Cambridge, UK: Polity Press, 2017), 123.
- 78 McNally and Orbinsky, 'Humanitarianism: Stagnation, Fragmentation and Possibilities', 123.
- 79 Claudia Baez-Camargo and Alena Ledeneva, 'Where Does Informality Stop and Corruption Begin? Informal Governance and the Public/Private Crossover in Mexico, Russia and Tanzania', 'The Slavonic and East European Review 95 (2017): 49–50.

16

Historical Ecology for Risk Management

Anuszka Mosurska and Anne Garland

16.1. Introduction

Historical Ecology for Risk Management is an evolving interdisciplinary research programme that is increasingly adopted in risk and disaster management. As in other historical ecology projects, the studies include an integrative team that have backgrounds in the historical, social and natural sciences to better understand complex systems over the long term and across regions. As well as being interdisciplinary (i.e. working across and between disciplines), the projects are typically also transdisciplinary, in that they actively seek to include stakeholders, such as government, the private sector and the general public, amongst others. Ideally, these stakeholders actively participate in research design, data collection and analysis. It is this transdisciplinary aspect of historical ecology that ensures that interpretations, decisions and outcomes of the projects are grounded in local concerns and relevant to them. In doing so, history ecology both provides practical impacts and can further theoretical understandings of issues.

Facilitation of research to practice is a common concern within disaster risk reduction (DRR), and there have been shifts towards research approaches that lend themselves to this, such as community-based and participatory research, which places a heavy emphasis on co-production of knowledge and knowledge mobilisation. Through drawing on forms of knowledge other than Western academic thought (e.g. local knowledge and traditional ecological knowledge) and incorporating these into the interpretation of results, research is more locally relevant. With its interdisciplinary and transdisciplinary approach,

historical ecology falls under the umbrella of these research practices. In adopting this approach, inclusion of emergency management offices, community groups and individuals with research and action is encouraged, which ultimately results in increased mitigation of disasters and preparedness for them. Thus, the process is iterative, and all team members are engaged in a process of continual learning that allows the project to be fine-tuned to meet local needs.

To demonstrate both the practical and academic outputs of such approaches, we describe three community-based projects (Arctic Risk Management; Coastal Observers of Barrow Community Based Monitors; Perceptions of Risk, Communication, Interpretations, and Actions in Social-Ecological Systems) which are part of the HERMYS programme for the North Slope Borough, Alaska. Aside from the Arctic Risk Management Network, which is a regional initiative, all of the projects were conducted in Utqiagvik, Alaska, in partnership with the North Slope Borough's emergency management department, and with Applied Research in Environmental Sciences Nonprofit, Inc. (ARIES) as the facilitator. These are first and foremost applied projects that aim for local-scale impact, although data from one project (Perceptions of Risk, Communication, Interpretations, and Actions in Social-Ecological Systems) was used in an academic study to highlight insider/outside relations in DRR, as will be detailed later.

16.2. Arctic Risk Management Network (ARMNet)

Arctic Risk Management Network (ARMNet) aims to link risk management practitioners and researchers across the Arctic regions of Canada and Alaska to improve risk, emergency and disaster preparedness and mitigation through comparative analysis and applied research.²

In 2014, ARMNet was conceived as a trans-disciplinary hub to encourage and facilitate greater cooperation, communication and exchange among American and Canadian academics and practitioners actively engaged in the research, management and mitigation of risks, emergencies and disasters in the Arctic regions. Its aim is to assist regional decision makers through the sharing of:

- Applied research
- Best practices
- Greater interoperability

ARIES has worked with the North Slope Borough Risk Management and other North Slope Borough village community organisations to improve risk reduction capability in this northernmost region of Alaska. Under ARIES, ARMNet is one of a number of initiatives in partnership with the North Slope Borough.

16.2.1. Potential Partners

The ARMNet constituency includes all northern academics and researchers, Arctic-based corporations, first responders, emergency management offices and risk management offices, military, Coast Guard, northern police forces, search and rescue associations, boroughs, territories and communities of the North American Arctic.

16.2.2. Interoperable Communications

Bilateral collaboration among emergency management officers and search and rescue are facilitated through improved networking, joint exercises, conference workshops, teleconferences, radio programmes and virtual communications to increase interoperability and communication redundancy across far north regions and local communities.

16.2.3. Clearinghouse: DRR Information

Most importantly, ARMNet will be a clearinghouse for all information related to the management of the frequent hazards of Arctic climate and geography in North America, including new and emerging challenges arising from:

- Climate change
- Increased maritime polar traffic
- Expanding economic development in the region

To assist the clearinghouse of DRR information, an ecosystem map across the US and Canadian Arctic is being developed through an Inter-Agency Standing Committee (IASC) partnership.³ The goal is to make a knowledge map to access comparative research and practice among Arctic DRR researchers, practitioners, policymakers and stakeholders that is hazard-relevant. Hazard sciences are shifting in the Arctic due to rapid environmental changes so sharing mitigation research and strategies in a convenient manner is invaluable. Much Arctic science,

whether academic or local knowledge (e.g. traditional ecological knowledge), can be applied to hazard mitigation.

16.2.4. Sponsors and Funding

ARMNet is an outcome of the Arctic Observing Network for long-term observations, governance and management discussions.⁴ The Arctic Observing Network's goals continue with cumulative regional integrated operability scores studies⁵ and coastal erosion research⁶ led by the North Slope Borough Risk and Emergency Management Office, with collaboration from ARIES and support from the Canadian Risk and Hazards Network.

Presentations and a feasibility survey in support of the development of ARMNet at three Canadian conferences (SARScene, Canadian Risk and Hazards Network and ArcticNet) in the fall of 2015 were made possible through funding from the US Embassy in Ottawa. ARIES sponsored the conference presentations to conduct the ARMNet feasibility study among Arctic researchers at the Arctic Observing Summit and Science Week and the Arctic Open Science Meeting.

16.3. Coastal Observers of Barrow Community Based Monitors (COBCBM)

As of 2018–2020, ARMNet has funding through Alaska Sea Grant to continue research about coastal erosion and surge modelling to assist the North Slope Borough Emergency Management Office and to share this with Arctic DRR researchers and practitioners in the US and Canadian Arctic. Sharing and training of these methods and mitigation outcomes have been requested by regional Canadian Arctic emergency management offices. The following is the summary of this HERMYS project, titled the 'Arctic Risk Management Network: Linking Regional Practitioners and Researchers to Improve Mitigation Through Participatory Action Research by Community Monitors about Erosion, Surges, and Nearshore Sea Ice Loss as Mutual Priorities'.⁷

This HERMYS project will continue the development of the Utqiagvik (formally known as Barrow), Alaska, community-based coastal observation network and will develop a coastal hazard forecasting system focused on the forecasting of coastal surge, flooding and coastal erosion, which has increased with the lengthier ice-free season. The existing coastal monitoring system consists of the monitoring of six cross-shore

transects and was initiated in 2014 by project team member Anne Garland (ARIES) with the North Slope Borough Office of Emergency Management. With these funds, community volunteers are trained with auto levels and stadia in order to record transect profiles and how these change following surges. The coastal monitoring system was expanded in two respects. First, a team of community observers are now documenting storm surge heights with stadia marks on shoreline stanchions and surge protocol photos at several cross-shore transects from the water's edge. Second, an Argus video camera will be deployed on a public building to document the near-shore wave conditions and water level.

Data collected by the observers and the camera observation system will be used to calibrate and validate the storm surge, coastal flooding and coastal erosion forecasting system. In the event of large storms, erosion forecasts generated by the project will be provided to the North Slope Borough Risk and Emergency Management Office, so local and state managers can improve measures to control erosion and flooding. The project will be shared through ARMNet among US and Canadian Arctic Emergency Management Officers and DRR researchers through conference workshops, webinars and teleconferences.

16.4. Perceptions of Risk, Communication, Interpretations, and Actions in Social-Ecological Systems (PERCIAS)

This participatory action research utilises two innovative approaches to evaluate the knowledge, attitudes and behaviours about emerging hazards (environmental and anthropogenic) and rapid risks among community groups of the North Slope Borough. This region in Alaska has been experiencing accelerating erosion and warmer temperatures, permafrost thawing, more frequent and intense storm surges, and increased maritime traffic and industries, all of which can have direct or cascading effects that undermine liveability among the mixed ethnic and indigenous communities. Using a combination of qualitative contexts (participatory applied theatre, interactive discussions and risk ranking) and quantitative measures (interactive participatory geospatial survey) on an annual basis, the study will evaluate outcomes, outputs and impacts towards risk reduction, adaptation choices and relocation decisions for the long term in this remote, yet strategic, location. Applied theatre can assist learning about difficult topics, can use local traditional

and/or ecological knowledge, and storytelling pedagogy to: 1. assess risk perceptions about increasing hazards; 2. communicate preparedness activities; 3. assist interpretations of emerging and rapid risks; and 4. improve mitigation, such as protect or prepare in place, or retreat and relocate to lower-risk areas. In addition, the researchers will administer an interactive, geospatial participatory survey, designed to align with the context and pedagogy to quantify inputs about risk perceptions, different adaptations and relocation decisions.

For the North Slope Borough, the preferred contextual approach is applied theatre as pedagogy to improve interpretive learning and risk reduction actions. This approach contributes to Integrated Risk and Disaster Research and the Sendai Framework Priority 1.24 about understanding risk in which contextual learning encourages risk interpretations and actions to improve risk reduction choices.8 This new approach aims to empower remote, mixed ethnic and indigenous communities to pursue risk reduction choices with risk communication that includes 1. socioecological and cultural contexts and 2. familiar pedagogy. Among Tribally Inclusive Geographic Areas (TIGA), indigenous and diverse ethnic groups, generational storytelling relays social ecological contexts (i.e. traditional ecological knowledge) to teach and achieve risk mitigation. By using traditional contextual pedagogy (i.e. participatory applied theatre and interactive storytelling) and participatory data collection (e.g. digital risk mapping, scenario selection, and decision-making hierarchy navigation), it will provide bottom-up data on risk perceptions and encourage solutions from the North Slope communities at individual, family, organisation and agency scales. This integrated research will facilitate the development of effective risk communication, interpretive activities and decisions by communities and emergency management that will increase coping and adaptive capacities. It will refine a method for participatory data collection and risk reduction choices in remote locations that can be applied in other areas of Alaska and the Canadian Arctic Territories which have indigenous and mixed ethnic cultures.

The applied nature of these projects mean that these are of high importance for practitioners. However, there is also academic value in much of the work. For instance, COBCBM is working closely with the University of Alaska Anchorage to monitor the coastline and sea ice. The next part of this chapter looks at how the aforementioned PERCIAS project was incorporated into a Master's thesis about insider/outside relations in DRR at University College London.

16.5. Insider/Outsider Relations for Disaster Risk Reduction in Utqiagʻvik, Alaska

Policy from southern regions of Arctic states govern issues in the Arctic, which is problematic as policy is often not congruent to the very different polar and circumpolar contexts. With regards to DRR for instance, factors such as remoteness (e.g. many communities are not on the road network, meaning that they can only be reached by air), isolation (e.g. airports/air travel can become compromised due to poor weather, making shortages of supplies frequent) and historically poor relations between indigenous groups and southern populations (i.e. due to colonialism) make DRR here especially problematic. Ice jam floods in 2013 that affected interior Alaska (notably, the native village of Galena) highlighted some of the inadequacies of federal action, which did not incorporate local knowledge or values.9 A large part of this can be attributed to indigenous contexts not being adequately considered. One region where this is the case is Utqiagvik, the regional hub of the North Slope Borough, Alaska. This section combines the 2016 results from the aforementioned PERCIAS project with interviews with outsiders who have some role in either Arctic DRR or the Utgiagvik community. As such, this section attempts to shed light on the relationship between insiders and outsiders in managing disasters at the community scale. In particular, this section aims to highlight where there are currently insider/outsider tensions in DRR, as well as how insider/outsider tensions may manifest in two issues related to DRR: risk perception and relocation.

Insider/outsider relations have been integral to the study of community development, particularly in indigenous communities, where previous studies have found differences in development goals between insiders and outsiders, 10 as well as the hiring of outsiders to achieve development goals, creating tension. 11 It is important to note at this point that definitions of insiders and outsiders are constantly evolving and are highly dependent on whose views are considered. Furthermore, it should be considered that insider/outsider relations are closely associated with studies of 'communities', as both insiders and outsiders are present in communities. Communities are not homogenous, but host to their own complex power structures, interests and divisions. 12 This is oftentimes overlooked in DRR, climate change adaptation and development work, where outside organisations and researchers use the term 'community' without considering these internal dynamics, sub-groups within communities and who has been excluded from their work.¹³ However, what this also means in terms of insiders and outsiders is that definitions of these are constantly evolving and dependent on whose views within the community are considered. The internal power structures present in communities can act to marginalise some groups, exacerbating their vulnerability to disasters. That means that marginalised groups may be ill-prepared for disasters, feel the immediate impacts disproportionately and face greater challenges in recovery. In terms of insider/outsider relations, it is important to consider exactly what the role of insiders and outsiders is in this, and where tensions may evolve. With this information, steps can be taken towards alleviating tension and addressing issues prior to disaster, so that all those involved in DRR can work more collaboratively and efficiently.

Disasters are the combination of hazard (a physical event, such as an earthquake or blizzard) and vulnerability. Disaster risk reduction is the 'systematic development and application of policies, strategies and practices to minimise vulnerabilities, and the unfolding of disaster impacts throughout a society, in the broad context of sustainable development'. It adopts an 'all-hazards' approach, recognising the importance of vulnerability and integration with development. As such, DRR can be extremely diverse, and can include construction of sea defences, education, land use zoning, amongst a range of other activities. Disasters shed light on often-invisible social processes, and one such process could be insider-outsider relations. This is logical, as disasters, by definition, surpass a community's capacity to cope, respond and recover from risks, necessitating outside intervention. It

16.5.1. Utqiagvik, Alaska

Utqiaʻgvik (71.3°N, 156.5°W) is the regional hub of the North Slope Borough, Alaska. Compared with other North Slope Borough settlements, it is relatively multi-ethnic and diverse, with a mixed economy (i.e. cash and subsistence). Additionally, there has been migration into Utqiaʻgvik from surrounding villages, due to the employment opportunities here. Utqiaʻgvik is host to sophisticated infrastructure, which includes a utilidor. This is a buried utilities corridor, containing fibre optics, hot water, sewerage, electrics and telecommunications. Whilst the utilidor has undoubtedly improved quality of life (and reduced vulnerability to some hazards, such as disease), pump stations that the utilidor relies upon to work are now situated much closer to the coastline than they were previously. This is the result of a lengthier ice-free season, which means that sea ice (which protects the coastline from destructive waves and storm surges) is present for less time. As such, there is increased coastal

erosion, increased impact of storm surges and increased permafrost thaw. As the coastline erodes, infrastructure and building that were once situated at a reasonably safe distance from the sea are now closer and more exposed to hazards, such as storm surge, as is the case with a number of the pump stations in Utqiagvik. Whilst Utqiagvik has been termed a 'microcosm for climate change', there are also social processes that have increased disaster vulnerability, such as the aforementioned population rise, erosion of local and traditional knowledge (e.g. TEK), colonialism, high costs and logistical complexities. In particular, high costs and logistical complexities make outsider involvement in DRR more important (e.g. in accessing funding and opportunities from federal sources); yet, colonial histories heighten the potential for tension if programmes are either too interventionist or unsuccessful.

16.5.2. Insider/Outsider Tensions in DRR in Utqiagvik

A number of issues in Utqiagvik, Alaska, have been found to result in insider/outsider tensions. These include the role of the extractive industry, land use planning (in particular, delimitation and implementation of the flood zone) and subsistence livelihoods (in particular, in relation to the potential future for offshore oil development and how this would affect whale migration). However, in terms of DRR, it is important to acknowledge that outsiders themselves were found to be a source of tension in the community. For instance, interviews conducted with insiders showed that outside engineers in Utqiagvik have not always considered local contexts sufficiently, resulting in failure of sea defences, such as the berm system that currently protects the shoreline, which is frequently compromised by human activity. One insider commented that this berm system does not consider the need for access to the sea for subsistence hunting of whales and seals, which the participant then highlighted as the reason for nine holes being created in the system, which ultimately reduced the protection to the shoreline. Therefore, there is a need for local contexts to be better understood by outsiders, especially where subsistence livelihoods are concerned, if insider/ outsider tensions in DRR are to be ameliorated. That outsiders were perceived as bringing tension presents a challenge for DRR, as DRR necessarily involves outsiders.²¹ Yet, the negative preconception of outsiders could hinder efforts to do this effectively, as actions could be viewed as political, particularly given the colonial histories here and consequential intergenerational trauma.

Risk Perception

Risk perception combines not only hazard and vulnerability, but also appropriate action in response to risk.²² Insiders and outsiders may have different risk perception, and where DRR is not a bottom-up process, tensions between insiders and outsiders may occur where insiders perceive actions by outsiders to be inadequate or political. As stated previously, where outsiders are already associated with tension, this could further exacerbate situations where insiders and outsiders hold different risk perceptions. Therefore, it is important to identify where such discrepancies lie, to be aware of them, and to alleviate any tension that could result through DRR.

In Utqiaʻgvik, both insiders and outsiders generally appear to agree on present and emerging hazards. These were highlighted to be storm surge, permafrost thaw, decreased sea ice (and the resultant effects on subsistence activities such as whaling), erosion and blizzards. Apart from blizzard risk, all of those mentioned are associated with the feedbacks of retreating sea ice, that leave the soft alluvial sediment of the coastline exposed to more frequent storm surges which erode the coast and lead to permafrost thaw. The changing sea ice means that TEK is sometimes outdated, and hunters are no longer able to safely navigate the ice, causing increased risk when hunting. That both insiders and outsiders acknowledge these as being of highest risk bodes well, as it follows that both will agree that these are the issues that necessitate most consideration.

The above details perception of hazards. When risk was concerned, there were differences between insiders and outsiders, suggesting differences in how these two groups conceptualise vulnerability of Utqiagvik and its peoples. This was especially evident where participants mentioned blizzards: both insiders and outsiders agreed that blizzards were a present hazard in Utqiagvik. Yet, insiders spoke of how they had coped and adapted to blizzards, whilst outsiders highlighted concern over the impact of blizzard on aviation and other critical infrastructure. Thus, this shows how insiders and outsiders perceive vulnerability of Utqiagvik differently: insiders note their ability to deal with blizzards, whilst outsiders note the vulnerability of critical infrastructure, and how this could exacerbate blizzard hazard by isolating an already remote community. This suggests that, where outsiders are involved, they will look to reduce vulnerability of critical infrastructure, whilst insiders may turn towards education regarding risk (which may involve aspects of traditional knowledge). The challenge then, in terms of insider/outsider relations, is to ensure that there is dialogue between insiders and outsiders

regarding DRR, as well as recognition of the inherent capacities the community of Utqiagʻvik has to deal with blizzards.

16.5.3. Relocation

Small, rural communities on the Western coast of Alaska have been experiencing coastal erosion and have garnered significant media attention. Some settlements, such as Kivalina²³ and Shishmaref²⁴, have voted to relocate, yet slow progress has highlighted some of the challenges, particularly in terms of decision making and financing. Interestingly, Shishmaref (an island community on Alaska's west coast) reversed its decision to relocate when the Federal government decided to withhold investment if the town relocated. Since, Shishmaref has attempted to progress with relocation efforts, which has resulted in infrastructure degradation due to withdrawal of this investment.²⁵ This situation has been recently exacerbated by steps taken by the Trump Administration to withdraw funding available for relocation of these communities.²⁶

Whilst studies of places such as Shishmaref are important, they are not representative of settlements in Alaska. As an island, the options available to Shishmaref are limited where storm surges and erosion are concerned. Additionally, subsistence plays a large role in the Shishmaref economy which is not the case in all Alaskan settlements, such as Utqiagʻvik, which have a mixed economy (a combination of cash and subsistence).²⁷

In Utqiagvik, focus groups conducted under PERCIAS revealed that insiders stood divided regarding relocation as a result of increased hazardousness. Interestingly here, Elders expressed support for relocation. Nevertheless, this is not the same across all groups, and overall there was a balance of views, with negative views being attributed to issues concerning the sense of place and the concept of home. The act of having to recreate relations and integrate into a new community due to relocation was identified and demonstrates how relocation is yet another disruption to which the community has to adapt (as discussed in previous disaster literature).²⁸ These focus groups further revealed that insiders would relocate to 'higher ground' and 'inland', suggesting that the risks that could lead to relocation are coastal, whether that be storm surges, tsunami or erosion. Importantly, these hazards all have the potential to breach the utilidor. The importance of the utilidor in relation to relocation was solidified when focus groups discussed what hazards would have to happen for relocation to occur. Here, rather than identifying a specific hazard, participants overwhelmingly mentioned the loss of the utilidor. The loss of the utilidor is not a hazard in itself, but rather an impact that results from a hazard interacting with vulnerability. A number of hazards affect the utilidor (e.g. storm surge, erosion, permafrost thaw), but the proximity of the utilidor's pump station to the coast, combined with the dependency of the community on the utilidor, is a source of vulnerability.

Specifically, when asked what hazard would have to happen for the relocation to occur, participants most frequently mentioned anything that would breach the utilidor. That loss of critical infrastructure was highlighted as a reason to relocate reinforces that the community is dependent on the utilidor, as well as suggesting that engineering solutions may be required in order to safeguard it (e.g. floodgates). Already, some federally-funded retrofitting has been completed; yet, the utilidor does remain exposed to flooding. Further retrofitting would require high costs, likely placing decision-making power beyond the local community. Similarly, it cannot be a permanent solution, as the coast will continue to erode. Therefore, it appears that in Utqiagvik, vulnerability is to a large degree determined by dependency on the utilidor.

In contrast to insiders, outsiders generally did not believe that Utgiagvik needed to relocate, despite being deemed at imminent risk of flooding and erosion.²⁹ Where outsiders did identify the need for Utqiagvik to relocate, references were made to doing so gradually by moving inland with the aid of land use zoning. However, land use zoning has proven to be a contentious issue in Utqiagvik, particularly with regards to delimitation of the flood zone, where interviews with outsiders, who had designed flood zone plans, revealed the lack of implementation of these. Insiders alluded to issues of well-connected organisations being situated in what would be the flood zone, resulting in its lack of implementation. Based on the focus groups and interviews conducted here, it appears that there are internal power dynamics that have exacerbated vulnerability of some groups (i.e. those living in the flood zone) that have rendered them more vulnerable. Whilst disaster literature does posit that the role of the outsider in this case is to challenge these internal power dynamics, 30 this should be exercised with great caution and sensitivity, particularly where there is already a preconceived idea that outsiders are associated with tension. As such, vulnerability reduction in Utqiagvik, which addresses local power structures, could result in insider/outsider tension. Nevertheless, not addressing the issue at hand could mean that those who live in the flood zone remain vulnerable and do not have any party to voice their concerns.

Where outsiders did mention migration due to increased risk, this was made specifically in relation to post-disaster contexts, drawing on how the duration of reconstruction (as a result of the short building season and logistical difficulties in transporting materials) means that temporary resettlement would likely be for a longer period of time than elsewhere. Resultantly, there is a greater amount of time to establish a sense of community through building relationships, meaning that those who have been displaced may not wish to return. Again, this demonstrates how post-disaster resettlement is another disruption for the community, but also how relocating back to Utqiagvik following temporary resettlement equally could be a disruption that individuals and the wider community would have to deal with. Post-disaster resettlement is not an unrealistic scenario in Utqiagvik, particularly given social and environmental changes since the 1963 storm surge event which, if it recurred today, would lead to breach of the utilidor that insiders have already mentioned as a reason for relocation.31

Given the overall positive discussion surrounding relocation with insiders and the contrasting lack of need to relocate as perceived by outsiders, there appears to be a misalignment in the views of insiders and outsiders. Given that settlements such as Shishmaref, which have voted to relocate, are facing significant difficulties in doing so due to lack of outside assistance, 32 it is unlikely that Utqiagvik, as a regional hub, host to sophisticated infrastructure³³ and not an island, will be granted outside assistance for relocation if it were requested. This is supported by results from interviewing outsiders, who, overall, did not view the need for community-scale relocation of the city. Not all insiders want to relocate, and this means that if relocation were to occur, it would be likely done at the individual or household scale. This means that only those who have the means to relocate do so, leading to entrapment. This is a situation in which those who are most vulnerable remain in an at-risk place.34 This was supported by discussion in the PERCIAS sessions, where financial difficulties in selling property in Utqiagvik were mentioned. In part, this could be attributed to the lack of flood zoning and subsequent lack of insurance previously mentioned. Therefore, establishing a flood zone could be a means of preventing entrapment, as well as reducing exposure and vulnerability. However, given the power dynamics previously mentioned, this would likely require outside assistance, which may not be available, or may create tension.

16.6. Conclusion

Through working with community groups, PERCIAS has helped to gain a more thorough understanding of issues pertaining to risk perception. behaviours and actions at the local level. It is also noteworthy that PERCIAS works with community groups who provide some benefit to the community at no profit (e.g. health workers) and often interact with those most vulnerable. As such, PERCIAS is relatively successful in identifying concerns of those who work with those who would be more vulnerable to disaster. The perspectives gathered through PERCIAS, combined with interviews with outsiders (as part of the author's Master's thesis), has highlighted where either current tensions exist or where they may manifest in the future. A recurring theme and problem appear to be the role of outsiders in challenging sources of vulnerability that result from local power structures. It is difficult for insiders to challenge these, as they are members of the community and potentially put themselves in a compromising role if they do so. However, where outsiders are associated with tension, as has been found in Utqiagvik, this is problematic and has to be addressed with great sensitivity.

This work also bears relevance to other projects under HERMYS – for instance, part of this work was presented to ARMNet, with feedback and discussion with emergency managers from across the US and Canada. Therefore, although the majority of projects detailed here are specific to the North Slope Borough, discussion with others (e.g. through ARMNet) can ensure that lessons can be learnt across the Arctic. Equally, other HERMYS projects are also directly relevant to the thesis, in that no aspect of DRR can be tackled alone. Rather, many factors influence hazard and vulnerability (and, therefore, risk). DRR should be addressed as an integrated and whole community. The historical ecology model seeks to address risk throughout the whole community, through linking historical, social-ecological systems, and adopting a transdisciplinary approach across research and practice. The HERMYS programme is to assist regional emergency management with the rapid and emergent risks to which they and residents must adapt in the Arctic.

Notes

- Robert Costanza et al., 'Developing an Integrated History and Future of People on Earth (IHOPE)'. Current Opinion in Environmental Sustainability 4, no. 1 (2012): 106–14.
- 2 'Arctic Risk Management Network', last modified 2018, http://www. ariesnonprofit.com/P9.php.
- 3 'Data Ecosystem Map', last modified 2018, https://arcticdc.org/products/dataecosystem-map.
- 4 'Study of Environmental Arctic Change', last modified 2018, https://www.searcharcticscience.org/.
- 5 'Cumulative Regional Integrated Operability Scores (CRIOS)', last modified 2018 http://www.ariesnonprofit.com/ ARIESprojects.php.
- 6 'Webinars: Coastal Erosion on the North Slope of Alaska', last modified 2014 www.ariesnonprofit.com/webinar CoastalErosion.php.
- 7 'Arctic Risk Management Network: Linking Regional Practitioners and Researchers to Improve Mitigation Through Participatory Action Research by Community Monitors about Erosion, Surges, and Nearshore Sea Ice Loss as Mutual Priorities', last modified 28 January 2016, https://seagrant.uaf.edu/ research/projects/summary.php?id= 1083.
- 8 'Sendai Framework for Disaster Risk Reduction', last modified 2015, https:// www.preventionweb.net/files/43291_ sendaiframeworkfordrren.pdf.
- 9 Yekaterina Y. Kontar et al., 'Interdisciplinary Approach to Hydrological Hazard Mitigation and Disaster Response and Effects of Climate Change on the Occurrence of Flood Severity in Central Alaska', Proceedings of the International Association of Hydrological Sciences 369 (2015): 13–17.
- 10 Alexander Lockhart, 'The Insider-Outsider Dialectic in Native Socio-Economic Development: A Case Study in Process Understanding', Canadian Journal of Native Studies 2 (1982): 159–68.
- 11 Ken J. Caine, Michael J. Salomons, and Deborah Simmons, 'Partnerships for Social Change in the Canadian North: Revisiting the Insider-Outsider Dialectic', *Development* and Change 38 (2007): 447–71.
- 12 Steven Brint, 'Gemeinschaft Revisited: A Critique and Reconstruction of the

- Community Concept', *Sociological Theory* (2001): 1–23.
- 13 Alexandra Titz, Terry Cannon, and Fred Krüger, 'Uncovering 'Community': Challenging an Elusive Concept in Development and Disaster Related Work', Societies 8, no. 3 (2018): 71.
- 14 'UNISDR Terminology On Disaster Risk Reduction', last modified May 2009, https://www.unisdr.org/files/7817_ UNISDRTerminologyEnglish.pdf.
- James Lewis, Development in Disaster-Prone Places: Studies of Vulnerability (London: Intermediate Technology Publications, 1999).
- 16 Anthony Oliver-Smith and Susanna M. Hoffman, The Angry Earth: Disaster in Anthropological Perspective (New York: Routledge, 1999).
- 17 Matthew S. Carroll et al., 'Community Wildfire Events as a Source of Social Conflict', Rural Sociology 71 (2006): 261–80.
- 18 Amanda H. Lynch and Ronald D. Brunner, 'Context and Climate Change: An Integrated Assessment for Barrow, Alaska', Climatic Change 82 (2007): 93–111.
- 19 Katherine R. Barnhart, Irina Overeem, and Robert S. Anderson, 'The Effect of Changing Sea Ice on the Physical Vulnerability of Arctic Coasts', Cryosphere 8 (2014): 4.
- 20 Ronald D. Brunner and Amanda H. Lynch, Adaptive Governance and Climate Change, (Massachusetts: American Meteorological Society, 2010).
- 21 Jean-Christophe Gaillard and Jessica Mercer, 'From Knowledge to Action: Bridging Gaps in Disaster Risk Reduction', Progress in Human Geography 37 (2013): 93–114.
- 22 Heather Lazrus, 'Risk Perception and Climate Adaptation in Tuvalu: A Combined Cultural Theory and Traditional Knowledge Approach', Human Organization 74 (2015): 52–61.
- 23 Christine Shearer, Kivalina: A Climate Change Story (Chicago: Haymarket Books, 2011).
- 24 Elizabeth Marino, 'The Long History of Environmental Migration: Assessing Vulnerability Construction and Obstacles to Successful Relocation in Shishmaref, Alaska', Global Environmental Change 22 (2012): 374–81.

- 25 Elizabeth Marino and Heather Lazrus, 'Migration or Forced Displacement?: The Complex Choices of Climate Change and Disaster Migrants in Shishmaref, Alaska and Nanumea, Tuvalu', Human Organization 74 (2015): 341–50.
- 26 'Alaskan Towns At Risk From Rising Seas Sound Alarm As Trump Pulls Federal Help', last modified 10 August 2017, https://www.theguardian.com/ us-news/2017/aug/10/alaska-coastaltowns-sea-level-rise-climate-change.
- 27 Lee Huskey, 'Community Migration in Alaska's North: The Places People Stay and The Places They Leave', *Polar* Geography 32 (2009): 17–30.
- 28 Thayer Scudder and Elizabeth Colson, 'From Welfare to Development: A Conceptual Framework for the Analysis of Dislocated People', Involuntary Migration and Resettlement; The Problems and Responses of Dislocated People, ed. Art Hansen and Anthony Oliver-Smith (Boulder: Westview Press, 1982), 267–87.

- 29 US General Accounting Office (GAO), Report to Congressional Committees, Alaska Native Villages: Most Are Affected by Flooding and Erosion, but Few Qualify for Federal Assistance (Washington, DC: GAO, 2003).
- 30 Gaillard and Mercer 'From Knowledge to Action'.
- 31 Lynch and Brunner 'Context and Climate Change'.
- 32 Henry P. Huntington, Eban Goodstein, and Eugénie Euskirchen, 'Towards a Tipping Point in Responding to Change: Rising Costs, Fewer Options for Arctic and Global Societies', Ambio 41 (2012), 66–74.
- 33 Lynch and Brunner 'Context and Climate Change'.
- 34 Andrew E. Collins, 'Applications of the Disaster Risk Reduction Approach to Migration Influenced by Environmental Change', Environmental Science & Policy 27 (2013): S112–S125.
- 35 'Whole Community', last modified 5 February 2018, https://www.fema.gov/ whole-community.

Bibliography

- Abele, Frances. 'The North in New Times: Revising Federal Priorities'. *North Of 60: Toward A Renewed Canadian Arctic Agenda*, 1st ed., edited by John Higginbotham and Jennifer Spence, 5–11. Waterloo, Ontario: Centre for International Governance Innovation, 2016.
- Aboriginal Affairs and Northern Development Canada (AANDC). 'Canada's Statement of Support on the United Nations Declaration on the Rights of Indigenous Peoples'. 12 November 2010, last modified 30 July 2012. http://www.aadnc-aandc.gc.ca/eng/1309374239861.
- Ackrén, Maria. 'Greenlandic Paradiplomatic Relations'. In *Security and Sovereignty in the North Atlantic*, edited by Lassi Heininen, 42–61. Basingstoke, Hampshire: Palgrave Macmillan, 2014.
- Act of 02 April 1928. 308, 45 Stat. 401, 8 U.S.C. § 226a (2006).
- Act on Greenland Self-Government. Act no. 473 of 12 June 2009.
- Act of 26 March 1790, ch. III, § 1, Stat.103.
- Adger, W. Neil, Terry P. Hughes, Carl Folke, Stephen R. Carpenter, and Johan Rockström. 'Social-ecological Resilience to Coastal Disasters'. *Science* 309 (2005): 1036–39.
- Agreement between the Government of the Kingdom of Denmark and the Government of Canada relating to the Delimitation of the Continental Shelf between Greenland and Canada, Den.-Can., 17 December 1973, 950 UNTS 148.
- Ahrens, Joachim, and Patrick Rudolph. "The Importance of Governance in Risk Reduction and Disaster Management". Journal of Contingencies and Crisis Management 14 (2006): 207–20.
- Ajagun, Samuel. 'Implication of Human Trafficking for Human Rights: The Case of Nigeria'. *Global Journal of Human Social Science Arts & Humanities* 12 (2012): 29.
- Akins v. Saxbe, no. 380 F. Supp. 1210 (United States District Court, D. Maine, ND 20 June 1974).
- 'Alaskans Walk Barefoot Through Anchorage to Raise Awareness About Human Trafficking'. *Alaska Dispatch News.* 20 May 2017.
- Alaska Sea Grant. 'Arctic Risk Management Network: Linking Regional Practitioners and Researchers to Improve Mitigation Through Participatory Action Research by Community Monitors about Erosion, Surges, and Nearshore Sea Ice Loss as Mutual Priorities'. Last modified 28 January 2016. https://seagrant.uaf.edu/research/projects/summary.php?id=1083.
- Alaska Communications System Photograph Collection, 1904–1963, PCA-64. Alaska State Library Historical Collections. Juneau, Alaska.
- Allen, Katrina M. 'Community-Based Disaster Preparedness and Climate Adaptation: Local Capacity-Building in the Philippines'. *Disasters* 30 (2006): 81–101.
- AMHWG. 'Arctic Mental Health Working Group'. Last modified 2018. https://www.arctic.gov/amhwg/background.html.
- Anderson, Alun. After the Ice: Life, Death, and Geopolitics in the New Arctic. New York: Smithsonian Books. 2009.
- Anderson, Robert Brent. Economic Development among the Aboriginal Peoples in Canada The Hope for the Future. Concord: Captus University Press, 1999.
- Ansell, Christopher K. Pragmatist Democracy: Evolutionary Learning as Public Philosophy. Oxford: Oxford University Press, 2011.
- Ansell, Chris, Arjen Boin, and Ann Keller. 'Managing Transboundary Crises: Identifying the Building Blocks of an Effective Response System'. Journal of Contingencies and Crisis Management 18 (2010): 195–207.

- Aradau, Claudia. 'The Perverse Politics of Four-Letter Words: Risk and Pity in the Securitization of Human Trafficking'. *Millennium: Journal of International Studies* 22 (2004): 251.
- Archer, Lewis, James D. Ford, Tristan Pearce, Slawomir Kowal, William A. Gough, and Mishak Allurut. 'Longitudinal Assessment of Climate Vulnerability: A Case Study from the Canadian Arctic'. Sustainability Science 12 (2016): 15–29.
- Arctic Centre. 'Arctic Indigenous Peoples'. Accessed 7 August 2018. https://www.arcticcentre.org/EN/communications/arcticregion/Arctic-Indigenous-Peoples.
- Arctic Centre. 'Definition of Indigenous Peoples'. Accessed 7 August 2018. https://www.arcticcentre.org/EN/communications/arcticregion/Arctic-Indigenous-Peoples/Definitions.
- Arctic Council. Agreement on Co-operation on Aeronautical and Maritime Search and Rescue in the Arctic. Nuuk, Greenland: Arctic Council, 2011.
- Arctic Council. Agreement on Co-operation on Marine Oil Pollution Preparedness and Response in the Arctic. Kiruna, Sweden: Arctic Council, 2003.
- Arctic Council. Declaration of the Establishment of the Arctic Council. Joint Communique of the Governments of the Arctic Countries on the Establishment of an Arctic Council. Ottawa, 19 September 1996.
- Arctic Council. 'History of the Arctic Council Permanent Participants'. Accessed 7 August 2018. https://www.arctic-council.org/index.php/en/our-work2/8-news-and-events/313-history-of-the-arctic-council-permanent-participants.
- Arctic Council. 'Inuit Circumpolar Council (ICC)'. Last modified 30 September 2015. Accessed 7 August 2018. https://www.arctic-council.org/index.php/en/about-us/permanent-participants/icc.
- Arctic Council. Joint Statement, 11th Session. Document 55. Harstad, Norway, 9/10 November 2005.
- Arctic Council. 'Permanent Participants' (27 April 2011). Accessed 7 August 2018. https://www.arctic-council.org/index.php/en/about-us/permanent-participants.
- Arctic Domain Awareness Centre. Assessing Concern ... Advancing Collaboration. Lit. Rev., Anchorage, 2018.
- ARIES. 'Arctic Risk Management Network'. Last modified 2018. http://www.ariesnonprofit.com/P9.php.
- ARIES. 'Cumulative Regional Integrated Operability Scores (CRIOS)'. Last modified 2018. http://www.ariesnonprofit.com/ARIESprojects.php.
- ARIES. 'Webinars: Coastal Erosion on the North Slope of Alaska'. Last modified 2014. www.ariesnonprofit.com/webinarCoastalErosion.php.
- Arunotai, Narumon. 'Saved By an Old Legend and a Keen Observation: The Case of Moken Sea Nomads in Thailand'. *Indigenous Knowledge for Disaster Risk Reduction* 73 (2008).
- Assembly of First Nations. 'Dismantling the Doctrine of Discovery: Assembly of First Nations'.

 Last modified January 2018. http://www.afn.ca/wp-content/uploads/2018/02/18-01-22-Dismantling-the-Doctrine-of-Discovery-EN.pdf.
- Auestein, M. Human Trafficking as a Human Rights Violation and Security Risk. Washington, DC: US Information Service, 2017.
- Avendano, Ana, and Charlie Fanning. 'Immigration Policy Reform in the United States: Reframing the Enforcement Discourse to Fight Human Trafficking and Promote Shared Prosperity'. *Anti-Trafficking Review 2* (2013): 97.
- Baez-Camargo, Claudia, and Alena Ledeneva. 'Where Does Informality Stop and Corruption Begin? Informal Governance and the Public/Private Crossover in Mexico, Russia and Tanzania'. *The Slavonic and East European Review* 95 (2017): 49–75.
- Bak, Osman Askin. The High North: Emerging Challenges and Opportunities (Special Draft Report).

 Brussels; NATO Parliamentary Assembly, Scientific and Technology Committee, 2015. https://www.nato-pa.int/document/2015-177-stcees-15-e-bis-high-north-bak-report
- Bakx, Kyle. 'Kinder Morgan Braces for Standing Rock-type Protests'. CBC News. Last modified 5 November 2016. http://www.cbc.ca/news/business/tmx-kindermorgan-bc-oilpatch-pipeline-standing-rock-1.3836489.
- Banerjee, Subhankar. Arctic Voices: Resistance at the Tipping Point. New York: Seven Stories Press, 2013.
- Bankoff, Greg, Georg Frerks, and Dorothea Hilhorst. *Mapping Vulnerability: Disasters, Development and People*. Abingdon and New York: Routledge, 2004.
- Barnhart, Katherine R., Irina Overeem, and Robert S. Anderson. 'The Effect of Changing Sea Ice on the Physical Vulnerability of Arctic Coasts.' *Cryosphere* 8 (2014): 1777–779.

- Barton, Allen H. Communities in Disaster: A Sociological Analysis of Collective Stress Situations, vol. 721. Garden City, New York: Doubleday, 1969.
- Baxter, Jamie, and Michael Trebilcock. 'Development Unreserved: Aboriginal Economic Development for the 21st Century'. *Legal Aspects of Aboriginal Business Development*, edited by Joseph Magnet and Dwight Dorey, 9–10. Markham Canada: LexisNexis, 2005.
- Beaufort Sea Partnership. 'Integrated Ocean Management Plan for the Beaufort Sea: 2009 and Beyond'. Retrieved on 25 April 2017. http://waves-vagues.dfo-mpo.gc.ca/Library/350719.pdf. 2009.
- Beaver, Janice. U.S. International Borders: Brief Facts. Washington, DC: Congressional Research Service, 2016.
- Bell, Jim. 'ICC-Greenland Worries About Potential Oil-Gas Activity in Baffin Bay'. *Nunatsiaq News.* 13 January 2017. http://nunatsiaq.com/stories/article/65674icc-greenland_worries_about_oil-gas_development_in_baffin_bay/.
- Bellfy, Phil. 'The Anishnaabeg of Bawating: Indigenous People Look at the Canada-US Border'. In Beyond the Border: Tensions Across the Forty-Ninth Parallel in the Great Plains and Prairies 7, edited by Kyle Conway and Timothy Pasch. McGill-Queens Univ. Press, 2013.
- Bellrichard, Chantelle. 'U.S.-born Tsimshian Woman Fighting to Stay in her First Nation's Traditional Territory in Canada'. CBC News. Accessed 31 August 2018. https://www.cbc.ca/news/indigenous/u-s-born-tsimshian-woman-fighting-to-stay-in-her-first-nation-s-traditional-territory-in-canada-1.4704477.
- Below, Regina, Emily Grover-Kopec, and Maxx Dilley. 'Documenting Drought-Related Disasters'. *The Journal of Environment & Development* 16 (2007): 328–44.
- Bennett, Andrew, and Colin Elman. 'Qualitative Research: Recent Developments in Case Study Methods'. *Annual Review of Political Science* 9 (2006): 455–76.
- Berger, Thomas R. Northern Frontier, Northern Homeland: The Report of the Mackenzie Valley Pipeline Inquiry: Volume 1. Ottawa: Supply and Services Canada, 1977.
- Berkes, Fikret. 'Cross-Scale Institutional Linkages: Perspectives from the Bottom Up'. In *The Drama* of the Commons, edited by E. Ostrom, T. Dietz, N. Dolšak, P. Stern, S. Stonich, and E. Weber. Washington, DC.: The National Academies Press, 2002.
- Berkes, Fikret. 'Understanding Uncertainty and Reducing Vulnerability: Lessons from Resilience Thinking'. *Natural Hazards* 41, no. 2 (2007): 283–95.
- Berkes, Fikret, and Helen Ross. 'Community Resilience: Toward an Integrated Approach'. Society & Natural Resources 26 (2013): 5–20.
- Berkes, Fikret, Nigel Bankes, Melissa Marschke, Derek Armitage, and Douglas Clark. 'Chapter 11: Cross-Scale Institutions and Building Resilience in the Canadian North'. *Breaking Ice: Renewable Resource and Ocean Management in the Canadian North, Volume 1*, edited by Fikret Berkes, Rob Huebert, Helen Fast, Micheline Manseau, and Alan Diduck, 225–48. Calgary, Alberta: University of Calgary Press, 2005.
- Biermann, Frank, and Ingrid Boas. 'Protecting Climate Refugees: The Case for a Global Protocol'. Environment 50 (2008).
- Bigo, Didier. 'Security and Immigration: Towards a Critique of the Governmentality of Unease'. *Alternatives* 27, no. 1 (2002): 63–92.
- Bilchitz, David. 'The Ruggie Framework: An Adequate Rubric for Corporate Human Rights Obligations?'. SUR International Journal on Human Rights 63 (2012).
- Bird, Kenneth, Ronald Charpentier, Donald Gautier, David Houseknecht, Timothy Klett, Thomas Moore, Janet Pitman, Christopher Schenk, Marilyn Tennyson, and Craig Wandrey. Circum-Arctic Resource Appraisal: Estimates of Undiscovered Oil and Gas North of the Arctic Circle, USGS Fact Sheet 2008–3049. U.S. Geological Survey: Washington, 2008.
- Blitzer, C. R., P. E. Cavoulacos, D. R. Lessard, and J. L. Paddock. 'Oil Exploration in the Developing Countries: Poor Geology or Poor Contracts?'. *Natural Resources Forum* 9, no. 4 (November 1985): 293–302.
- Boin, Arjen, and Patrick Lagadec. 'Preparing for the Future: Critical Challenges in Crisis Management'. *Journal of Contingencies and Crisis Management* 8 (2000): 185–91.
- Boin, Arjen, and Allan McConnell. 'Preparing for Critical Infrastructure Breakdowns: The Limits of Crisis Management and the Need for Resilience'. *Journal of Contingencies and Crisis Management* 15 (2007): 50–59.
- Boin, Arjen, and Mark Rhinard. 'Managing Transboundary Crises: What Role for the European Union?' *International Studies Review* 10 (2008): 1–26.

BIBLIOGRAPHY 327

- Boin, Arjen, Mark Rhinard, and Magnus Ekengren. 'Managing Transboundary Crises: The Emergence of European Union Capacity'. *Journal of Contingencies and Crisis Management* 22 (2014): 131–42.
- Bone, Robert M. *The Canadian North: Issues and Challenges*. 5th ed. Don Mills: Oxford University Press, 2016.
- Boos, Greg, and Greg McLawsen. 'American Indians Born in Canada and the Right of Free Access to the United States'. *Border Policy Research Institute* (2013).
- Boos, Greg, Greg McLawsen, and Heather Fathali. 'Canadian Indians, Inuit, Métis, and métis: An Exploration of the Unparalleled Rights Enjoyed by American Indians Born in Canada to Freely Access the United States'. Seattle Journal of Environmental Law 4, no. 1(2014): 342–407.
- Borders in Globalization. 'Borders in Globalization: 2nd International Conference, Lord Elgin Hotel Ottawa, ON December 6–8, 2017. Detailed Programme'. Last modified 6 December 2017. https://biglobalization.org/sites/default/files/uploads/files/dec4big_international_conference_2017_final.pdf.
- Borgerson, Scott G. 'Arctic Meltdown: The Economic and Security Implications of Global Warming'. Foreign Affairs 87, no. 2 (2008): 63–77.
- Bourgeois, Robyn. 'Colonial Exploitation: The Canadian State and the Trafficking of Indigenous Women and Girls in Canada'. UCLA Law Review 62 (2015): 426.
- Bourque, François, and Ashlee Cunsolo Willox. 'Climate Change: The Next Challenge for Public Mental Health?' *International Review of Psychiatry* 26 (2014): 415–22.
- Brennan, Mark A., Courtney G. Flint, and A. E. Luloff. 'Bringing Together Local Culture and Rural Development: Findings from Ireland, Pennsylvania and Alaska'. *Sociologia ruralis* 49 (2009): 97–112.
- Brewster, Karen. 'Native Contributions to Arctic Science at Barrow, Alaska'. *Arctic* 50, no. 3 (1997): 277–88.
- Brewster, Murray. 'How Far Behind Schedule is Canada's Shipbuilding Program? Ottawa Won't Say'. *CBC News.* 16 May 2018. https://www.cbc.ca/news/politics/shipbuilding-seaspan-schedule-1.4664480.
- Brinkman, Todd J., Winslow D. Hansen, F. Stuart Chapin, Gary Kofinas, Shauna BurnSilver, and T. Scott Rupp. 'Arctic Communities Perceive Climate Impacts on Access as a Critical Challenge to Availability of Subsistence Resources'. *Climatic Change* 139 (2016): 413–27.
- Brint, Steven. 'Gemeinschaft Revisited: A Critique and Reconstruction of the Community Concept'. Sociological Theory 19 (2001): 1–23.
- $Britton, N.\ R.\ `Developing \ an \ Understanding \ of \ Disaster'. \ \textit{Journal of Sociology} \ 22 \ (1986): 254-71.$
- Brohman, Erin. 'Warm Reception in Churchill for New Owners of Port and Railway'. CBC News. 5 September 2018. https://www.cbc.ca/news/canada/manitoba/churchill-port-rail-owners-hudson-bay-line-1.4810683.
- Bromfield, Nicole. Human Trafficking as a Human Rights Issue and Policy Responses of Arctic. Anchorage, Alaska: Fifth National Research Forum Open Assembly, 2008: 1.
- Bronen, Robin. 'Climate-induced Community Relocations: Creating an Adaptive Governance Framework Based in Human Rights Doctrine'. New York University Review of Law & Social Change 35 (2011): 357.
- Bronskill, Jim. 'Canada-U.S. Cross-Border Police Project "Postponed" Over Differences'. CBC News.
 4 March 2016. http://www.cbc.ca/news/politics/canada-u-s-cross-border-police-project-postponed-over-differences-1.3475784.
- Brooks, Ann, and Vanessa Heaslip. Sex Trafficking in a Globalized World. Poole, United Kingdom: Bournemouth University [unpublished].
- Brunet-Jailly, Emmanuel. Borderlands: Comparing Border Security in North America and Europe. Ottawa: University of Ottawa Press, 2007.
- Brunet-Jailly, Emmanuel. 'Conclusion: Borders, Borderlands, and Security: European and North American Lessons and Public Policy Suggestions'. In Borderlands: Comparing Border Security in North America and Europe, edited by Emmanuel Brunet-Jailly, 351–7. Ottawa: University of Ottawa Press, 2007.
- Brunet-Jailly, Emmanuel, and Bruno Dupeyron. 'Introduction: Borders, Borderlands, and Porosity'. In *Borderlands: Comparing Border Security in North America and Europe*, edited by Emmanuel Brunet-Jailly. Ottawa: University of Ottawa Press, 2007.
- Brunner, Ronald D., and Amanda H. Lynch. *Adaptive Governance and Climate Change*. Massachusetts: American Meteorological Society, 2010.

- Brysk, Alison. 'Beyond Framing and Shaming. Human Trafficking, Human Security and Human Rights'. *Journal of Human Security* 5 (2009): 8.
- Bulman, May. 'Flight Attendant Saves Teenage Girl From Human Trafficking After Seeing Secret Note'. *The Independent*. 6 February 2017.
- Burchill, Scott, Andrew Linklater, Richard Devetak, Jack Donnelly, Terry Nardin, Matthew Paterson, Christian Reus-Smit, and Jacqui True (eds.). *Theories of International Relations*. 5th ed. Hampshire, UK: Palgrave Macmillan, 2015.
- Buyck, Cathy. 'EU, Russia in Stalemate on Siberian Overflight Fees'. Aviation Week and Space Technology. 1 April 2013.
- Buzan, Barry, Ole Waever, and Jaap de Wilde. Security: A New Framework for Analysis. Boulder, CO: Lynne Rienner Publishers Inc., 1998.
- Byers, Michael. 'Arctic Cruises: Fun for Tourists, Bad for the Environment'. *The Globe and Mail*. 16 May 2018.
- Byers, Michael. Who Owns the Arctic?: Understanding Sovereignty Disputes in the North. Vancouver, British Columbia: Douglas and McIntyre, 2009.
- Cadag, Jake Rom D., and J. C. Gaillard. 'Integrating Knowledge and Actions in Disaster Risk Reduction: The Contribution of Participatory Mapping'. Area 44 (2012): 100–09.
- Caine, Ken J., Michael J. Salomons, and Deborah Simmons. 'Partnerships for Social Change in the Canadian North: Revisiting the Insider-Outsider Dialectic'. *Development and Change* 38 (2007): 447–71.
- Cama, Timothy. 'Trump Administration Approves Arctic Offshore Oil Drilling Project Off Alaska's Coast'. *The Hill*. 24 October 2017. https://thehill.com/policy/energy-environment/412996-trump-admin-approves-arctic-offshore-oil-drilling-project-off.
- Cameron, Emilie S. 'Securing Indigenous Politics: A Critique of the Vulnerability and Adaptation Approach to the Human Dimensions of Climate Change in the Canadian Arctic'. *Global Environmental Change* 22 (2012): 103–14.
- Cameron, Emilie, and Tyler Levitan. 'Impact and Benefit Agreements and the Neoliberalisation of Resource Governance and Indigenous-State Relations in Northern Canada'. *Studies in Political Economy* 93, no. 1 (2014): 25–52.
- Canada. 2015 Canada-United States Beyond the Border Action Plan Implementation Report. Ottawa: Canada, 2016. Last modified 29 September 2016. https://www.publicsafety.gc.ca/cnt/rsrcs/pblctns/2015-bynd-brdr-mplmntn/index-en.aspx.
- Canada. 2014 Canada-United States Beyond the Border Action Plan Implementation Report. Ottawa: Canada, 2015. https://www.publicsafety.gc.ca/cnt/rsrcs/pblctns/archive-2014-bynd-brdr-mplmntn/archive-2014-bynd-brdr-mplmntn-en.pdf.
- Canada. 2013 Canada-United States Beyond the Border Action Plan Implementation Report. Ottawa: Canada, 2013. https://www.publicsafety.gc.ca/cnt/rsrcs/pblctns/archive-2013-bynd-brdr-mplmntn/archive-2013-bynd-brdr-mplmntn-en.pdf.
- Canada. 2012 Canada-United States Beyond the Border Action Plan Implementation Report. Ottawa: Canada, 2012. https://www.publicsafety.gc.ca/cnt/rsrcs/pblctns/archive-2012-bynd-brdr-mplmntn/archive-2012-bynd-brdr-mplmntn-en.pdf.
- Canada. Perimeter Security and Economic Competitiveness. Action Plan. Beyond the Border: A Shared Vision for Perimeter Security and Economic Competitiveness. Ottawa: Foreign Affairs and International Trade Canada, 2011.
- Canada. Perimeter Security and Economic Competitiveness. What Canadians Told Us. A Report on Consultations on Perimeter Security and Economic Competitiveness Between Canada and the United States. Ottawa: Foreign Affairs and International Trade Canada, 2011.
- Canada. 'Speech from the Throne to Open the Second Session of the 39th Parliament of Canada'. Speech from the Throne. 16 October 2007.
- Canada Border Services Agency. 'Airports of Entry (AOE)'. Last modified 15 February 2019. https://cbsa-asfc.gc.ca/do-rb/services/aoe-eng.html.
- Canada Border Services Agency. 'Airport of Entry/15 (AOE/15)'. Last modified 15 February 2019. https://www.cbsa-asfc.gc.ca/do-rb/services/aoe15-eng.html.
- Canada Border Services Agency. 'Airport of Entry/15/Seaplane (AOE/15/SEAPL)'. Last modified 15 February 2019. https://cbsa-asfc.gc.ca/do-rb/services/aoe15seapl-aoe15hydra-eng.html.
- Canadian Border Services Agency. 'What We Do'. Last modified 29 November 2016. http://www.cbsa-asfc.gc.ca/agency-agence/what-quoi-eng.html.

Canada Immigration and Refugee Protection Act, S.C. 2001, c.27.

- Canada. Indigenous and Northern Affairs Canada. Report on First Nations Border Crossing Issues. Indigenous and Northern Affairs Canada, 2017. https://www.aadnc-aandc.gc.ca/eng/15066 22719017/1506622893512.
- Canada. House of Commons. Standing Committee on Foreign Affairs and International Development. Canada and the Arctic Council: An Agenda for Regional Leadership. 41st Parl., 1st Sess., 2013. http://publications.gc.ca/collections/collection_2013/parl/xc11-1/XC11-1-411-7-eng.pdf.
- Canada. Parliament. Standing Committee on Foreign Affairs and International Development. Canada and the Arctic Council: An Agenda for Regional Leadership. 41st Parl., 2nd Sess., 2013.
- Canada. Parliament. Standing Committee on Foreign Affairs and International Development. Government Response to the Ninth Report of the Standing Committee on Foreign Affairs and International Development: 'Canada and the Arctic Council: An Agenda for Regional Leadership'. 41st Parl., 2nd Sess., 2013.
- Canada, Parliament. Standing Committee on National Defence. *Canada's Arctic Sovereignty*. 40th Parl., 3rd Sess., 2010.
- Canada. Senate. Standing Senate Committee on Fisheries and Oceans. *Controlling Canada's Arctic Waters: Role of the Canadian Coast Guard*. 40th Parl., 2nd Sess., 2009.
- Canada. Senate. Standing Senate Committee on Fisheries and Oceans. Rising to the Arctic Challenge: Report on the Canadian Coast Guard. 40th Parl., 2nd Sess., 2009.
- Canada. Senate. Standing Senate Committee on Fisheries and Oceans. The Coast Guard in Canada's Arctic: Interim Report. 39th Parl., 2nd Sess., 2008.
- Canada. Senate. Standing Senate Committee on National Security and Defence. Sovereignty & Security in Canada's Arctic: Interim Report. 40th Parl., 3rd Sess., 2011.
- Canadian Institute for Health Information. 'Health Spending'. Accessed 16 February 2019. https://www.cihi.ca/en/health-spending.
- Carabine, Elizabeth, and Emily Wilkinson. 'How Can Local Governance Systems Strengthen Community Resilience? A Social-Ecological Systems Approach'. *Politics and Governance* 4 (2016): 62–73.
- Caron, Fred. 'Report on First Nation Border Crossing Issues'. Accessed 29 August 2018. http://www.aadnc-aandc.gc.ca/eng/1506622719017/1506622893512.
- Carroll, Matthew S., Lorie L. Higgins, Patricia J. Cohn, and James Burchfield. 'Community Wildfire Events as a Source of Social Conflict'. *Rural Sociology* 71 (2006): 261–80.
- Case of the Yakye Axa Indigenous Community v. Paraguay. Merits, Reparations and Costs, Judgment of 17 June 2005. Inter-American Court of Human Rights. Series C No.125.
- C.A.S.E. Collective. 'Critical Approaches to Security in Europe: A Networked Manifesto'. Security Dialogue 37, no. 4 (2006): 444–87.
- Cash, David W., W. Neil Adger, Fikret Berkes, Po Garden, Louis Lebel, Per Olsson, Lowell Pritchard, and Oran Young. 'Scale and Cross-scale Dynamics: Governance and Information in a Multilevel World'. *Ecology and Society* 11, no. 2 (2006): 8.
- Cavallo, Antonella, and Vernon Ireland. 'Preparing for Complex Interdependent Risks: A System of Systems Approach to Building Disaster Resilience'. *International Journal of Disaster Risk Reduction* 9 (2014): 181–93.
- Chambers, Robert. 'Editorial Introduction: Vulnerability Coping, and Policy'. IDS Bulletin 21 (1989): 1–7.
- Charron, Andrea. 'Canada and the Arctic Council'. International Journal 67 (2012): 765.
- Chater, Andrew. 'Beyond the "Golly Gee" Stage: The Inspiration of Academics Who Study Arctic Sovereignty'. *International Journal* 67, no. 3 (2012): 799–816.
- Chibba, Michael. 'Understanding Human Trafficking: Perspectives From Social Science, Security Matters, Business and Human Rights'. *Contemporary Social Science* 9 (2014): 311.
- Clark, Dylan G., James D. Ford, and Taha Tabish. 'What Role Can Unmanned Aerial Vehicles Play in Emergency Response in the Arctic: A Case Study from Canada'. *Plos One* 13 (2018): e0205299.
- Clark, Michele Ann. 'Trafficking in Persons: An Issue of Human Security'. *Journal of Human Development* 4 (2003): 247.
- Clarke, Hannah E., and Brian Mayer. 'Community Recovery Following the Deepwater Horizon Oil Spill: Toward a Theory of Cultural Resilience'. Society & Natural Resources 30 (2017): 129–44.
- Coates, Ken S., P. Whitney Lackenbauer, William R. Morrison, and Greg Poelzer. *Arctic Front: Defending Canada in the Far North.* Toronto: Thomas Allen Publishers, 2008.
- Coleman, Matthew. 'US Immigration Law and its Geographies of Social Control: Lessons from Homosexual Exclusion During the Cold War'. *Environment and Planning D: Society and Space* 26 (2008): 10.

- Collins, Andrew E. 'Applications of the Disaster Risk Reduction Approach to Migration Influenced by Environmental Change'. *Environmental Science & Policy* 27 (2013): S112–S125.
- Conaway, Cameron. 'Climate Change and Slavery: The Perfect Storm?' *The Guardian*. 13 December 2013.
- Congressional Research Service. 'Coast Guard Polar Security Cutter (Polar Icebreaker) Program: Background and Issues for Congress'. *Policy Brief* (2018): 1–17.
- Constantinou, Costas M. Everyday Diplomacy: Mission, Spectacle and the Remaking of Diplomatic Culture'. *Diplomatic Cultures and International Politics: Translations, Spaces and Alternatives*, edited by Jason Dittmer and Fiona McConnell, 23–40. London: Routledge, 2016.
- Cooke, Bill, and Uma Kothari. Participation: The New Tyranny? London & New York: Zed Books, 2001.
- Costanza, Robert, Sander Van Der Leeuw, Kathy Hibbard, Steve Aulenbach, Simon Brewer, Michael Burek, Sarah Cornell, et al. 'Developing an Integrated History and Future of People on Earth (IHOPE)'. Current Opinion in Environmental Sustainability 4, no. 1 (2012): 106–14.
- Côté-Boucher, Karine. 'Risky Business? Border Preclearance and the Securing of Economic Life in North America'. Neoliberalism in Everyday Life, edited by by Susan Braedley and Meg Luxton, 37–67. Montreal: McGill-Oueen's University Press, 2010.
- Council for Yukon Indians. *Together Today for our Children Tomorrow* (Brampton: Charters Publishing Company, 1977). https://cyfn.ca/wp-content/uploads/2013/10/together_today_for_our_children_tomorrow.pdf.
- Criminal Code, Revised Statutes of Canada, 1985, chapter C-46.
- 'Crown-Indigenous Relations and Northern Affairs Canada'. Accessed 29 August 2018. https://www.canada.ca/en/crown-indigenous-relations-northern-affairs.html.
- Crown-Indigenous Relations and Northern Affairs Canada. 'Canada Implements Measures to Address Canada-United States Border-Crossing Issues for First Nations'. *Newswire*. 12 December 2018. https://www.newswire.ca/news-releases/canada-implements-measures-to-address-canada-united-states-border-crossing-issues-for-first-nations-702608391.html.
- Cunje, Ashton. 'Canada's Defence and Security in the Maritime Arctic'. MA diss., University of Ottawa, 2014.
- Dacks, Gurston. 'Implementing First Nations Self-Government in Yukon: Lessons for Canada'.

 Canadian Journal of Political Science/Revue canadienne de science politique 37, no. 3 (2004):
- Dahles, Heidi, and Ellen Van Hees. 'Firefighters Across Frontiers: Two Fire Brigades Cooperating in the Dutch–German Borderland'. *Culture and Organization* 10 (2004): 315–28.
- Daly, Tom. 'Greenland Will Offer Oil, Gas Concessions Next Year Minister'. Reuters. 31 October 2017.https://www.reuters.com/article/greenland-china-oil-gas/update-2-greenland-will-offer-oil-gas-concessions-next-year-minister-idUSL4N1N63TY.
- Dangeli, Mique'l. 'Demand That the Canadian Government Reciprocate the Jay Treaty!'. Care2 Petitions. Accessed 31 August 2018. https://www.thepetitionsite.com/takeaction/340/032/ 152/.
- Daniels v. Canada (Indian Affairs), 2014 FCA 101.
- Daniels v. Canada (Indian Affairs and Northern Development), [2013] 2 FCR 268, 2013 FC 6.
- Daniels v. Canada (Indian Affairs and Northern Development), 2016 SCC 12, [2016] 1 S.C.R. 99.
- Danish Centre Against Human Trafficking, http://www.cmm.dk/in-english.
- 'The Definitive Treaty Between Great Britain and the United States of America (Treaty of Paris), Great Britain-United States, 3 September 1783'. Accessed 7 August 2018. https://www.loc.gov/resource/rbpe.14601800.
- Deiter, Connie, and Darlene Rude. *Human Security and Aboriginal Women in Canada*. Ottawa: Status of Women Canada, 2005.
- Denmark Consolidation Act, no. 945 (2006).
- Department of Justice Canada. 'Principles Respecting the Government of Canada's Relationship with Indigenous Peoples'. Last modified 14 February 2018. http://www.justice.gc.ca/eng/csj-sjc/principles-principes.html.
- Department of Justice Canada. 'Strengthening Canada's Criminal Law Response to Human Trafficking'. 2017.
- Department of National Defence. *Department of National Defence and the Canadian Armed Forces*. 2015–16 Report on Plans and Priorities. Ottawa: Government of Canada, 2015.
- Department of National Defence. Arctic Planning Scenarios. Scenario #2 Safety and Security Scenario. Ottawa: Defence R&D Canada. Centre for Operational Research & Analysis. Strategic Analysis Section, 2011.

- Department of National Defence Science Advisory Board. DSAB Report 1001: Defining a Comprehensive Approach to the Canadian Arctic Theatre of Operations. 9ii. Ottawa: 2012.
- Department of Public Safety. National Action Plan to Combat Human Trafficking. Ottawa: Government of Canada, 2012.
- Deutsch, Karl W. Political Community and the North Atlantic Area: International Organization in the light of Historical Experience. Princeton: Princeton University Press, 1957.
- Devas, Nick. 'Does City Governance Matter for the Urban Poor?' International Planning Studies 6, no. 4 (2001): 393–408. doi:10.1080/13563470120092395.
- Devas, Nick. 'The Connections between Urban Governance and Poverty'. *Journal of International Development* 13, no. 7 (2001): 989–96. doi:10.1002/jid.823.
- Diener, Alexander C., and Joshua Hagen. Borders: A Very Short Introduction. Oxford: Oxford University Press, 2012.
- Directive 2011/36/EU of the European Parliament and of the Council of 5 April 2011 on preventing and combating trafficking in human beings and protecting its victims, and replacing Council Framework Decision 2002/629/JHA.
- Dodds, Klaus. 'A Polar Mediterranean? Accessibility, Resources and Sovereignty in the Arctic Ocean'. *Global Policy* 1, no. 3 (2010): 303–11.
- Dorais, Louis-Jacques. Language of the Inuit: Syntax, Semantics, and Society in the Arctic. McGill-Queen's University Press, 2010: 235–36.
- Dorf, Michael C., and Charles F. Sabel. 'A Constitution of Democratic Experimentalism'. Columbia Law Review 98 (1998): 267–473.
- Dufresne, Robert. 'Canada's Legal Claims Over Arctic Territory and Waters'. *Parliament of Canada: Law and Government Division*, 6 December 2007.
- Dunbar, M. J. 'Stability and Fragility in Arctic Ecosystems'. Arctic 26 (1973): 178-85.
- Dynes, R. R., and B. E. Aguirre. 'Organizational Adaptation to Crises: Mechanisms of Coordination and Structural Change'. *Disasters* 3, no. 1 (1979): 71–74.
- Easton, Norman, A. 'King George Got Diarrhea: The Yukon Alaska Boundary Survey, Bill Rupe, and the Scottie Creek Dineh'. *Alaska Journal of Anthropology* 5, no. 1 (2007): 95–118.
- Ebinger, Charles, K., and Evie Zambetakis. 'The Geopolitics of Arctic Melt'. *International Affairs* 85 (2009): 1215.
- ECPAT Sweden. Code of Conduct for the Protection of Children from Sexual Exploitation in Travel and Tourism, United Nations World Tourism Organization: Madrid, 1998.
- Egnell, Robert, and Peter Haldén. 'Laudable, Ahistorical and Overambitious: Security Sector Reform Meets State Formation Theory'. Conflict, Security & Development 9 (2009): 27–54.
- Eichelberger, John. 'Telephone Interview on Arctic Disasters and Climate Change'. 5 January 2017. Einarsson, Niels, Joan Nymand Larsen, Annika Nilsson, and Oran R. Young. *Arctic Human Development Report*. Akureyri: Stefansson Arctic Institute, 2004.
- Ekéus, Rolf. 'Military Security in the Arctic'. Arctic Security in the 21st Century: Conference Report, edited by Jayantha Dhanapala, John Harriss, and Jennifer Simons, 38–40. Vancouver: Simon Fraser University School for International Studies, 2008.
- EKOS Research Associates. 'Rethinking the Top of the World: Arctic Public Opinion Survey Vol. 2'. The Gordon Foundation, 2015.
- Eliasson, Kristoffer. 'Arctic Strategies of Sub-National Regions. Why and How Sub-National Regions in Northern Finland and Sweden Mobilize as Arctic Stakeholders'. MA thesis, Umeå University, 2015.
- Elk v. Wilkins, no. 112 U.S. 94 (November 3, 1884).
- Environmental Justice Foundation. *Pirates and Slaves: How Overfishing in Thailand Fuels Human Trafficking and the Plundering of Our Oceans.* London: Environmental Justice Foundation, 2015.
- Erbentraut, Joseph. 'Here's Who's Fighting Increased Sex Trafficking Due To Climate Change, Poverty'. Huffington Post. 17 September 2016.
- Eriksson, Johan. 'Observers or Advocates? On The Potential Role of Security Analysts'. *Co-operation and Conflict* 34, no. 3 (1999): 311–30.
- Evans, Denise. 'The Jay Treaty and Aboriginal Rights'. *Dalhousie Journal of Legal Studies* 4 (1995): 215–30.
- Everett, Karen G. 'National Border Management Polices and Their Effect on Regional Trade: A Study of the Yukon Exporting Industry'. The Networked North: Borders and Borderlands in the Canadian Arctic Region, edited by Heather Nicol and P. Whitney Lackenbauer, 132–45. Waterloo: Centre on Foreign Policy and Federalism; Victoria: Borders in Globalization, 2017. https://biglobalization.org/sites/default/files/content-attachments/networked-north-2017.pdf.

- Exner-Pirot, Heather. Human Security in the Arctic: The Foundation of Regional Cooperation. Working Papers on Arctic Security No. 1. Monk School of Global Affairs: Toronto, 2012.
- Falleth, Eva Irene, and Sissel Hovik. 'Local Government and Nature Conservation in Norway:

 Decentralisation as a Strategy in Environmental Policy'. *Local Environment* 14 (2009): 221–31
- Far East Development Fund. 'Northern Sea Route: Key Economic Characteristics'. Presentation, Arctic Economic Development Council, Helsinki, Finland. February 2017.
- Fawaz, Mona. 'Planning and the Refugee Crisis: Informality as a Framework of Analysis and Reflection'. *Planning Theory* 16, no.1 (2017): 99–115.
- FEMA. 'Whole Community'. Last updated 5 February 2018. https://www.fema.gov/whole-community.
- Fierke, Karin. Critical Approaches to International Security. Cambridge, MA: Polity Press, 2007.
- Finn, Joshua. 'Human Trafficking and Natural Disasters Exploiting Misery'. *International Affairs Review* (2016): XXIV.
- FitzGerald, S.A., 'Vulnerable Geographies: Human Trafficking, Immigration and Border Control in the UK and Beyond'. *Gender, Place & Culture* 23, no. 2 (2016): 181.
- Fjerstad, Jessica L. 'The First Amendment and Eagle Feathers: An Analysis of RFRA, BGEPA, and the Regulation of Indian Religious Practices'. South Dakota Law Review 55 (2010): 528, 529.
- Flaherty, Chris, and Walter Leal Filho. 'Energy Security as a Subset of National Security'. *Global Energy Policy and Security* (2013): 11–25.
- Fondahl, Gail, and Joan Larsen. 'Chapter 1: Introduction'. In Arctic Human Development Report: Regional Processes and Global Linkages, edited by Joan Larsen and Gail Fondahl. Denmark: Nordic Council of Ministers, 2014.
- Forbes, Bruce, and Gary Kofinas. 'Resource Governance'. In *Arctic Human Development Report: Regional Processes and Global Linkages*, edited by Joan Larsen and Gail Fondahl. Denmark:
 Nordic Council of Ministers, 2014.
- Ford, James D., Graham McDowell, and Julie Jones. 'The State of Climate Change Adaptation in the Arctic'. *Environmental Research Letters* 9 (2014): 104005.
- Ford, James D., Tristan Pearce, Frank Duerden, Chris Furgal, and Barry Smit. 'Climate change policy responses for Canada's Inuit population: The importance of and opportunities for adaptation'. *Global Environmental Change* 20, no. 1 (2010): 177–91.
- Fossheim, Maria, Raul Primicerio, Edda Johannesen, Randi B. Ingvaldsen, Michaela M. Aschan, and Andrey V. Dolgov. 'Recent Warming Leads to a Rapid Borealization of Fish Communities in the Arctic'. *Nature Climate Change* 5 (2015): 673–77.
- Foster, Harold D. 'Reducing Vulnerability to Natural Hazards'. *The Geneva Papers on Risk and Insurance* 9, no. 30 (1984): 27–56.
- Foster, Harold D. 'Assessing Disaster Magnitude: A Social Science Approach'. *The Professional Geographer* 28 (1976): 241–47.
- Foucault, Michel. Power/Knowledge: Selected Interviews & Other Writings 1972–1977. 4th ed. New York: Vintage Books, 1980.
- Francis v. The Queen, [1956] SCR. 618.
- 'Fraser Border Hours Reduced for Travellers Entering Yukon'. CBC News. 31 March 2015. http://www.cbc.ca/news/canada/north/fraser-border-hoursreduced-for-travellers-entering-yukon-1.3015860.
- Fritze, Jessica G., Grant A. Blashki, Susie Burke, and John Wiseman. 'Hope, Despair and Transformation: Climate Change and the Promotion of Mental Health and Wellbeing'. International Journal of Mental Health Systems 2, no. 1 (2008): 13.
- Frizzell, Sara. 'Truce? Canada, Greenland and Denmark Inch Closer to Settling Decades-old Spat Over Hans Island'. CBC News. 28 May 2018. https://www.cbc.ca/news/canada/north/canada-denmark-battle-ownership-hans-island-1.4679142.
- Fukuyama, Francis. 'The End of History?' The National Interest 16 (1989): 3-18.
- Gage, Lyman J., F. Tuttle, David H. Jarvis, Ellsworth P. Bertholf, Samuel J. Call, and E.H. Woodruff. Report of the Cruise of the US Revenue Cutter Bear and the Overland Expedition for the Relief of the Whalers in the Arctic Ocean from Nov. 27, 1897 to Sept. 13, 1898. Washington: Government Printing Office, 1899.
- Gaillard, Jean-Christophe. 'Vulnerability, capacity and resilience: perspectives for climate and development policy'. *Journal of International Development: The Journal of the Development Studies Association* 22 (2010): 218–32.
- Gaillard, Jean-Christophe, and Jessica Mercer. 'From Knowledge to Action: Bridging Gaps in Disaster Risk Reduction'. *Progress in Human Geography* 37 (2013): 93–114.

- Gallagher, Anne. 'Trafficking, Smuggling and Human Rights: Tricks and Treaties'. Forced Migration Review 12 (2002): 12.
- Gallucci, Maria. 'As the Arctic Melts, the Northern Sea Route Opens for Business'. *Science*. 26 September 2018.
- Gastle, Charles. 'Marine Mammal Protection Act'. Sustainable Aboriginal Cultures 16 U.S.C. §§ 1361–1421h, 1972.
- George, Tom. 'ADS-B Coverage in Alaska: Where You Have It And Where You Don't'. Aircraft Owners and Pilots Association. 17 April 2017.
- Global Affairs Canada. 'Canada and the Kingdom of Denmark (with Greenland) announce the establishment of a Joint Task Force on Boundary Issues'. Last modified 23 May 2018. https://www.canada.ca/en/global-affairs/news/2018/05/canada-and-the-kingdom-of-denmark-with-greenland-announce-the-establishment-of-a-joint-task-force-on-boundary-issues.html.
- Global Affairs Canada. Formative Evaluation of Canada's Development Assistance on Extractives and Sustainable Development FY2010-11 to FY2016-17. Ottawa: Government of Canada, 2017.
- Global Affairs Canada. Statement on Canada's Arctic Foreign Policy: Exercising Sovereignty and Promoting Canada's Northern Strategy Abroad. Ottawa, Canada, 12 May 2017.
- Gorbachev, Mikhail. 'The Speech in Murmansk at the ceremonial meeting on the occasion of the presentation of the Order of Lenin and the Gold Star Medal to the city of Murmansk, October 1, 1987'. Moscow: Novosti Press Agency, 1987.
- Government Accountability Office. A Strategic Framework Could Help Enhance the Interagency Collaboration Needed to Effectively Combat Trafficking Crimes. Washington, DC: Government Accountability Office, 2000.
- Government Accountability Office. 'Alaska Native Villages: Most Are Affected by Flooding and Erosion, but Few Qualify for Federal Assistance'. Washington, DC. (2003). https://www.gao.gov/new.items/d04142.pdf.
- Government of Canada. 'Agreement Between the Government of Canada and the Government of the United States of America for the Sharing of Visa and Immigration Information'. Last modified 3 September 2013. http://www.cic.gc.ca/english/department/laws-policy/agreements/canusa-agreement.asp.
- 'Government of Canada appoints new Chief Federal Negotiator for Nunavut Devolution', Newswire, 9 July 2016. Accessed 29 August 2018. https://www.newswire.ca/news-releases/government-of-canada-appoints-new-chief-federal-negotiator-for-nunavut-devolution-586146271.html.
- Government of Canada. 'Beyond the Border Action Plan Statement of Privacy Principles by the United States and Canada'. Ottawa: Government of Canada, 2012. https://www.dhs.gov/sites/default/files/publications/beyond-the-border-action-plan-statement-of-privacy-principles_0.pdf.
- Government of Canada. 'Canada's Arctic Foreign Policy'. Last modified 12 May 2017. https://international.gc.ca/world-monde/international_relations-relations_internationales/arctic-arctique/arctic_policy-canada-politique_arctique.aspx?lang=eng.
- Government of Canada. 'Canada's International Policy Statement: A Role of Pride and Influence in the World Defence'. Ottawa: Foreign Affairs Canada, 2005. http://publications.gc.ca/collections/Collection/D2-168-2005E.pdf.
- Government of Canada. 'Canada's Northern Strategy: Our North, Our Heritage, Our Future'.

 Ottawa, Ontario: Minister of Indian Affairs and Northern Development and Federal Interlocutor for Métis and Non-Status Indians, 2009. Accessed 12 September 2019. http://library.arcticportal.org/1885/
- Government of Canada, Canadian Coast Guard. 'North Pacific Coast Guard Forum'. Last modified 5 September 2017. www.ccg-gcc.gc.ca/Home/NPCGF.
- Government of Canada; Crown-Indigenous Relations and Northern Affairs Canada (CIRNAC), 'Self-Government: What is Indigenous Self-government?' Last modified 27 August 2019. https://www.rcaanc-cirnac.gc.ca/eng/1100100032275/1529354547314#chp2.
- Government of Canada; CIRNAC, 'Self-government: Other paths to greater self-determination.' Last modified 27 August 2019. https://www.rcaanc-cirnac.gc.ca/eng/1100100032275/1529 354547314#chp2
- Government of Canada. 'Law of the Sea: United Nations Convention'. Last modified 10 August 2017. https://www.canada.ca/en/environment-climate-change/corporate/international-affairs/partnerships-organizations/law-sea-united-nations-convention.html.
- Government of Canada, National Energy Board. 'Who we are'. Last modified 1 December 2016. https://www.neb-one.gc.ca/bts/whwr/index-eng.html.

- Government of Canada. 'Origin of the Name "Canada". Last modified 11 August 2017. https://www.canada.ca/en/canadian-heritage/services/origin-name-canada.html.
- Government of Canada. Statement on Canada's Arctic Foreign Policy: Exercising and Promoting Canada's NORTHERN STRATEGY Abroad. Ottawa: Government of Canada, 2010.
- Government of Canada Aboriginal Affairs and Northern Development. 'Frequently Asked Questions About Inuit Relations'. Accessed 7 August 2018. https://www.aadnc-aandc.gc.ca/eng/13031 47522487/1303147669999.
- Government of Canada, as per the Public Accounts of Canada. 'Detailed information on Transfer Payments'. Last modified March 2017. http://open.canada.ca/data/en/dataset/69bdc3ebe919-4854-bc52-a435a3e19092.
- Government of Canada: Justice Laws. 'The Third Schedule: Provincial Public Works and Property to be the Property of Canada'. Accessed 7 August 2018. http://lois.justice.gc.ca/eng/const/page-11.html#docCont.
- Government of the United States of America and Government of Canada. Agreement Between the Government of the United States of America and the Government of Canada on the North American Aerospace Defense Command. Ottawa, 2006. https://www.state.gov/wp-content/uploads/2019/02/06-512-Canada-Defense.pdf
- Goździak, Elżbieta, and Alissa Walter. 'Misconceptions about Human Trafficking in a Time of Crisis'. Forced Migration Review 45 (2014).
- Graburn, Nelson. 'Tourism and Prostitution'. Articles Review. Annals of Tourism Research 10 (1983): 437.
- Graczyk, Piotr, and Timo Koivurova. 'The Arctic Council'. Handbook of the Politics of the Arctic, edited by Leif Christian Jensen and Geir Hønneland, 298–327. Cheltenham: Edward Elgar Publishing, 2015.
- Gramer, Robbie. 'Stretched Thin on Thin Ice'. Foreign Policy (Fall 2018).
- Grant, Shelagh. Polar Imperative: A History of Arctic Sovereignty in North America. 1st ed. Vancouver: Douglas & McIntyre, 2010.
- Grant, Tavia. 'The Trafficked: Sexual exploitation is costing aboriginal people their lives'. *The Globe and Mail*. 10 February 2016.
- Greaves, Wilfrid. 'Artic (in)security and Indigenous peoples: Comparing Inuit in Canada and Sami Norway'. Security Dialogue 47 (2016): 1.
- 'Greenland Offshore Drilling is Safe: Cairn Energy'. CBC News. 25 May 2011. https://www.cbc.ca/news/canada/north/greenland-offshore-drilling-is-safe-cairn-energy-1.977542.
- Griffiths, Franklyn. 'Not That Good a Fit? "Human Security" and the Arctic'. Arctic Security in the 21st Century: Conference Report, edited by Jayantha Dhanapala, John Harriss, and Jennifer Simons, 55–60. Vancouver: Simon Fraser University School for International Studies, 2008.
- Group of Experts on Action Against Human Trafficking in Human Beings. Report concerning the implementation of the Council of Europe Convention on Action against Trafficking in Human Beings by Denmark. Second Evaluation Round. Strasbourg: Secretariat of the Council of Europe Convention on Action against Trafficking in Human Beings, Council of Europe, 2016.
- Grube, Laura, and Virgil Henry Storr. 'The Capacity for Self-Governance and Post-Disaster Resiliency'. The Review of Austrian Economics 27, no. 3 (2014): 301–24.
- Gwich'in Council International. 'Board of Directors'. Accessed 7 August 2018. https://gwichincouncil.com/board-directors.
- Haalboom, Bethany, and David C. Natcher. 'The Power and Peril of "Vulnerability": Approaching Community Labels with Caution in Climate Change Research'. *Arctic* 65 (2012): 319–27.
- Hale, G. So Near Yet So Far: The Public and Hidden Worlds of Canada-US Relations. Vancouver: UBC Press, 2012.
- Hallowell, Gerald (ed.). The Oxford Companion to Canadian History. Don Mills, Ont.: Oxford Univ. Press, 2004.
- Ham, Julie, Marie Segrave, and Sharon Pickering. 'In the Eyes of the Beholder: Border enforcement, suspect travellers and trafficking victims'. Anti-Trafficking Review 2 (2013): 51.
- Hangaslammi, Sini, and Ilona Hatakka. Red Cross Arctic Disaster Management Study. Finnish Red Cross, 2018.
- Hanson, Anne. 'Offshore Oil Exploration and Impact Assessment in Greenland'. Northern Public Affairs, May 2016.
- Haycox, Stephen W. Alaska: An American Colony. Seattle: University of Washington Press, 2006.
- Hayes, Katie, G. Blashki, J. Wiseman, S. Burke, and L. Reifels. 'Climate Change and Mental Health: Risks, Impacts and Priority Actions'. *International Journal of Mental Health Systems* 12 (2018): 28.

- Heininen, Lassi, Heather Exner-Pirot, and Joel Plouffe. 'The Arctic Council: 20 Years of Regional Cooperation and Policy-Shaping'. *Arctic Yearbook* (2016): 336.
- Heininen, Lassi, and Chris Southcott. 'Globalisation and the Circumpolar North: An Introduction'. In *Globalisation and the Circumpolar North*, edited by Lassi Heininen and Chris Southcott. University of Alaska Press, 2010.
- Heininen, Lassi. 'Circumpolar International Relations and Geopolitics'. *The Arctic Human Development Report*, edited by Niels Einarsson, Joan Larsen, Annika Nilsson, and Oran R. Young. Akureyri: Stefansson Arctic Institute, 2004.
- Hellawell, David. 'Inside-out: analysis of the insider-outsider concept as a heuristic device to develop reflexivity in students doing qualitative research'. *Teaching in Higher Education* 11 (2006): 483–94.
- Hendriks, C. M. 'Inclusive governance for sustainability'. Tackling wicked problems through the transdisciplinary imagination, edited by Valerie A. Brown, John A. Harris, and Jacqueline Y. Russell, 148–61. London: Earthscan, 2010.
- Hepburn, Stephanie, and Rita Simon. *Human Trafficking Around the World: Hidden in Plain Sight*. New York: Columbia University Press, 2013.
- Hewitt, Kenneth. Interpretations of Calamity from the Viewpoint of Human Ecology. Boston: Allen & Unwin, 1983.
- Hickey, Samuel, and Giles Mohan. Participation from Tyranny to Transformation. Exploring New Approaches to Participation in Development. New York: Zed Books, 2004.
- Higginbotham, J., and M. Grosu. 'The Northwest Territories and Arctic Maritime Development in the Beaufort Area'. CIGI Policy Brief 40 (2014): 1–13.
- Hilhorst, Dorothea. 'Responding to Disasters. Diversity of Bureaucrats, Technocrats and Local People'. International Journal of Mass Emergencies And Disasters 21 (2003): 37–56.
- Hill, Fiona. 'Pipelines in the Caspian: Catalyst or Cure-all?'. Georgetown Journal of International Affairs 5, no. 2 (2004).
- Hoogensen Gjorv, Gunhild, Dawn Bazely, Marina Goloviznina, and Andrew Tanentzap (eds.). Environmental and Human Security in the Arctic. London: Routledge, 2014.
- Hoogensen Gjorv, Gunhild, Dawn Bazely, Julia Christensen, Andrew Tanentzap, and Evgeny Bojko. 'Human Security in the Arctic – Yes it is Relevant!' *Journal of Human Security* 5 (2009): 1.
- Hooghe, L., and G. Marks. 'Unraveling the Central State, but How? Types of Multi-Level Governance'. The American Political Science Review 97, no. 2 (2003): 223–43.
- Hopson, Eben. 'Inuit Circumpolar Conference (June 1977)'. Accessed 7 August 2018. http://ebenhopson.com/inuitcircumpolarconference2/.
- Hopson, Eben. 'Request for Lilly Endowment Grant Support (Sept. 9, 1975)'. Accessed 7 August 2018. http://ebenhopson.com/request-for-lilly-endowment-grant-support-first-international-inuit-conference/.
- Hopson, Eben. 'Welcoming Address, Inuit Circumpolar Conference, Utkiagvikmi, June 13, 1977'. Eben Hopson Memorial Archives. http://ebenhopson.com/mayor-eben-hopsons-welcoming-address-first-inuit-circumpolar-conference-utkeagvikmi-barrow-ak/.
- Hudson, Heather. Connecting Alaskans: Telecommunications in Alaska from Telegraph to Broadband. Fairbanks: University of Alaska Press, 2015.
- Huebert, Rob. 'Canadian Arctic Sovereignty and Security in a Transforming Circumpolar World'. Canada and the Changing Arctic edited by Franklyn Griffiths, Rob Huebert, and P. Whitney Lackenbauer. Waterloo, Ontario: Wilfred Laurier University Press, 2011.
- Huebert, Rob. 'Return of the Vikings'. *The Globe and Mail*. 28 December 2009. https://www.theglobeandmail.com/opinion/return-of-the-vikings/article758850/.
- Huebert, Rob. 'Welcome to a New Era of Arctic Security'. The Globe and Mail. 24 August 2010. Last modified 7 April 2018. https://www.theglobeandmail.com/opinion/welcome-to-a-new-eraof-arctic-security/article1377997/.
- Human Rights Council. Promotion and Protection of All Human Rights, Civil, Political, Economic, Social and Cultural Rights, Including the Right to Development. New York: United Nations, 2008.
- $Human\ Trafficking\ National\ Hotline.\ `Alaska'.\ https://humantraffickinghotline.org/state/alaska.$
- 'Human trafficking still happening in Nunavut, researcher says'. *CBC News*. 4 January 2016. Huntington, Henry P., Eban Goodstein, and Eugénie Euskirchen. 'Towards a Tipping Point in Responding to Change: Rising Costs, Fewer Options for Arctic and Global Societies'. *Ambio* 41 (2012): 66–74.
- Huskey, Lee. 'Community Migration in Alaska's North: The Places People Stay and the Places they Leave'. *Polar Geography* 32 (2009): 17–30.

- Hutchins, Peter, W., Monique Caron, Bianca Suciu, and Robin Campbell. Setting out Canada's Obligations to Inuit in Respect of the Extended Continental Shelf in the Arctic Ocean. Hutchins Legal Inc, 2015. http://liberalsenateforum.ca/wp-content/uploads/2016/05/Hutchins_ Arctic.pdf.
- IASC. 'Arctic Data Ecosystem Map'. Last modified 2018. https://arcticdc.org/products/data-ecosystem-map.
- ICC. Utqiagvik Declaration 2018 (2018). https://www.arctictoday.com/wp-content/uploads/ 2018/07/2018-Utigavik-Declaration.pdf.
- ICC. A Circumpolar Inuit Declaration on Sovereignty in the Arctic. (2009). https://iccalaska.org/wp-icc/wp-content/uploads/2016/01/Signed-Inuit-Sovereignty-Declaration-11x17.pdf.
- ICC Alaska. Final Outcome Document: Circumpolar Inuit Economic Summit. (ICC, 2017). https://iccalaska.org/wp-icc/wp-content/uploads/2017/04/FINAL-OUTCOME-DOCUMENT-3-30-17.pdf.
- ICC Pikialasorsuaq Commission. 'About the Commission'. http://pikialasorsuaq.org/en/About/the-commission.
- ICC Pikialasorsuaq Commission. People of the Ice Bridge: The Future of the Pikialasorsuaq, Executive Summary: Report of the Pikialasorsuaq Commission. November 2017 (ICC, 2017).
- Ikonen, Emmi. Arctic Search and Rescue Capabilities Survey. Enhancing International Cooperation 2017. Finland: Finnish Border Guard, 2017.
- ILO. Indigenous & Tribal Peoples' Rights in Practice A Guide to ILO Convention No. 169 (2009).
- Ilulissat Declaration. Arctic Ocean Conference. Ilulissat, Greenland. 28 May 2008.
- Immigration Act of 1924 (Johnson-Reed Act). Public Law 68–139, 43. U.S. Statutes at Large 153.39, 874 (1924): Ch 190, § 13(c).
- Immigration and Nationality Act of 1952, ch. 477, § 289, 66 Stat. 234, 8 U.S.C. § 1359 (2006).
- Immigration and Refugee Protection Act, 2001 S.C. ch. 27, (Division 3, Entering and Remaining, § 19(1).
- Imperiale, Angelo Jonas, and Frank Vanclay. 'Reflections on the L'Aquila Trial and the Social Dimensions of Disaster Risk'. Disaster Prevention and Management: An International Journal (2018).
- The Indian Citizenship Act, 43 Stat. 253, ch. 233.
- Indigenous and Northern Affairs Canada. 'The Government of Canada's Approach to Implementation of the Inherent right and the Negotiation of Aboriginal Self-Government – Financial Arrangements'. 1995, last modified 15 September 2010. https://www.rcaanccirnac.gc.ca/eng/1100100031843/1539869205136
- Indigenous and Northern Affairs Canada (INAC). Building the Future: Yukon First Nation Self-Government. Ottawa: Indigenous and Northern Affairs Canada, 2008.
- Indigenous and Northern Affairs Canada. 'Vuntut Gwitchin First Nation Final Agreement'. 29 May 1993. Yukon Final Agreements and Related Implementation Matters.
- Indonesian Team Study 1. *Tourism and Prostitution*. https://www.ibiblio.org/ahkitj/wscfap/arms1974/Book%20Series/Women&MenInAsia/WMA-indonesia1.htm.
- Intelligence Reform and Terrorism Prevention Act of 2004. Public Law 108–488. U.S. Statutes at Large 118 (2004): 3638–872.
- International Covenant on Civil and Political Rights, GA res. 2200A (XXI), 21 UN GAOR Supp. (No. 16) UN Doc. A/6316 (1966).
- International Labour Organization (ILO). *Indigenous and Tribal Peoples Convention*, C169. 27 June 1989. https://www.refworld.org/docid/3ddb6d514.html.
- International Labour Organization. 'Statistics on forced labour, modern slavery and human trafficking'. http://www.ilo.org/global/topics/forced-labour/policy-areas/statistics/lang-en/index.htm.
- International Organization for Migration. *The Climate Change-Human Trafficking Nexus*. Geneva: United Nations, 2016.
- $In ternational\ Organization\ for\ Migration.\ `Counter-Trafficking'.\ https://denmark.iom.int/counter-trafficking.$
- International Panel on Climate Change (IPCC). Climate Change 2007: Impacts, Adaptation, and Vulnerability. Contribution of Working Group II to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change, edited by M. L. Parry, O. F. Canziani, J. P. Palutikof, P. J. van der Linden, and C. E. Hanson, 1–976. Cambridge: Cambridge University Press, 2007.
- International Panel on Climate Change (IPCC). 'Summary for policymakers'. Climate Change 2014: Impacts, Adaptation, and Vulnerability. Part A: Global and Sectoral Aspects. Contribution of

- Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change, edited by C. B. Field, V. R. Barros, D. J. Dokken, K. J. Mach, M. D. Mastrandrea, T. E. Bilir, M. Chatterjee, K. L. Ebi, Y. O. Estrada, R. C. Genova, B. Girma, E. S. Kissel, A. N. Levy, S. MacCracken, P. R. Mastrandrea, and L. L. White, 1–32. Cambridge: Cambridge University Press, 2014.
- Inuit Circumpolar Conference, Barrow, Alaska, June 13–18, 1977. http://publications.gc.ca/collections/collection_2018/aanc-inac/R74-42-1977-eng.pdf.
- Inuit Circumpolar Council (Canada). 'About ICC'. Accessed 7 August 2018. http://www.inuitcircumpolar.com/.
- Inuit Circumpolar Council (Canada). 'Activities and Initiatives'. Accessed 7 August 2018. https://www.inuitcircumpolar.com/icc-activities/.
- 'Inuit Defend Canada's Seal Hunt'. CBC Docs POV. 7 January 2018. https://www.cbc.ca/cbcdocspov/features/inuit-defend-canadas-seal-hunt.
- Inuulitsivik. 'Who Are the Inuit?'. Accessed 7 August 2018. http://www.inuulitsivik.ca/northern-life-and-inuit-culture/who-are-the-inuits.
- Inuvialuit Regional Corporation. 'The Western Arctic Claim: Inuvialuit Final Agreement (as amended)'. Accessed 12 September 2019. http://publications.gc.ca/collections/collection_2017/aanc-inac/R74-34-1985-eng.pdf
- Jensen, Leif C. International Relations in the Arctic: Norway and the Struggle for Power in the New North. London: I.B. Tauris, 2016.
- Jockel, Joseph. No Boundaries Upstairs: Canada, the United States and the Origin of North American Air Defense; 1945–1958. Vancouver: UBC Press, 1987.
- Joenniemi, Pertti. 'City-twinning as local foreign policy: The case of Kirkenes-Nickel'. CEURUS EU-Russia paper 15 (2014).
- Joenniemi, Pertti, and Alexander Sergunin. 'Kirkenes-Nikel: Catching a Second Wind of Twinning?' Arctic Yearbook 2013, edited by Lassi Heininen, 1–20. Northern Research Forum, 2013.
- Johannes, Emilie. 'The wicked problem of oil & gas development in the Beaufort and Chukchi seas: current permitting and evaluation of marine spatial planning as a potential management'. Master thesis, Texas A&M University, 2014.
- John, Theresa Arevgaq. 'Cultural Adaptation & Resilience to Arctic Climate Change'. ARCUS Arctic Research Seminar Series presented at the Arctic Indigenous Scholars Seminar, Washington D.C., 23 May 2018. https://www.arcus.org/indigenous-scholars.
- Johnson, Ralph W. 'Fragile Gains: Two Centuries of Canadian and United States Policy Toward Indians'. Washington Law Review 66 (1991): 643, 662.
- Joint Statement of the United States-Nordic Leaders Summit. Washington, D.C., 13 May 2016.
- Jokela, Juha (ed.). *Arctic security matters. ISS Report No. 24*. Cote-sur-Noireau, France: European Union, Institute for Strategic Studies, 2015.
- Kämpf, Mandy, and Sharman Haley. 'Risk Management in the Arctic Offshore: Wicked Problems Require New Paradigms'. *ISER Working Paper Series* (2011).
- Kanatami, Tapiriit. 'A Note on Terminology: Inuit, Métis, First Nations, and Aboriginal'. Accessed 7 August 2018. https://www.bowmanvillerotaryclub.org/sitepage/a-note-on-terminology-for-indigenous-peoples.
- Kankaanpää, Paula, and Oran R. Young. 'The Effectiveness of the Arctic Council'. *Polar Research* 31, no. 1 (2012): 17176.
- Kao, Shih-Ming, Nathaniel S. Pearre, and Jeremy Firestone. 'Adoption of the Arctic Search and Rescue Agreement: A Shift of the Arctic Regime toward a Hard Law Basis?'. Marine Policy 36 no. 3 (2012): 832–38.
- Keil, Kathrin. 'The Arctic: A New Region of Conflict? The Case of Oil and Gas'. *Cooperation and Conflict* 49, no. 2 (2014): 162–90.
- Keil, K., T. Wiertz, and I. Chabay. 'Engaging Stakeholders in Interdependent Arctic and Global Change: Developing the SMART Research Project'. Presented at the Arctic Horizon 2030, Institute for Advanced Sustainability Studies, 2014.
- Kelman, Ilan. 'Disaster Risk Governance for Pacific Island Communities'. The Asia-Pacific Journal: Japan Focus 13, no. 48 (2015).
- Kelman, Ilan, Jessica Mercer, and J. C. Gaillard. 'Indigenous knowledge and disaster risk reduction'. Geography 97 (2012): 12.
- Kelman, Ilan. 'Hearing local voices from small island developing states for climate change'. Local Environment 15 (2010): 605–19.

- Kennedy, Mark. 'Prime Minister defends annual Arctic visit'. Montreal Gazette. 28 August 2010. www.pressreader.com/canada/montreal-gazette/20100828/290558833591448.
- Keohane, R., and J. Nye. Power and Interdependence. 3rd ed. Toronto: Pearson, 2001.
- Keskitalo, E. Climate Change and Globalisation in the Arctic: An Integrated Approach to Vulnerability Assessment. 1st ed. London: Earthscan, 2008.
- Killen, Anna. 'Border Closure Plan Panned by Stewart and Hyder Residents'. *BC Local News*. 26 February 2015. https://www.bclocalnews.com/news/border-closure-plan-panned-by-stewart-and-hyder-residents/.
- Kintisch, Eli. 'U.S.-Russia Tensions Put a Chill on Ice Disaster Research Effort'. Science. Last modified 8 October 2015. https://www.sciencemag.org/news/2015/10/us-russia-tensions-put-chill-ice-disaster-research-effort.
- Kirchner, Stefan. Review of Hoogensen Gjorv et al. (eds.). Environmental and human security in the Arctic in Polar Journal 4 (2014): 231, 231.
- Kireeva, Anna. 'Russia and Norway Make Progress on Cross-Border Environmental Problems'. Last modified 9 October 2017. http://bellona.org/news/industrial-pollution/2017-10-russia-and-norway-make-progress-on-cross-border-environmental-problems.
- Kirschenbaum, Alan. Chaos Organization and Disaster Management. New York & Basel: Marcel Dekker, Inc., 2003.
- Konrad, Victor, and Heather N. Nicol. *Beyond Walls: Reimaging the Canada-US Borderlands*. 2nd ed. New York: Routledge, 2016.
- Konrad, Victor, and Heather N. Nicol. *Beyond Walls: Re-Inventing the Canada-United States Borderlands*. Burlington, VT: Ashgate Publishing Company, 2008.
- Kontar, Yekaterina Y., Uma S. Bhatt, Scott D. Lindsey, Edward W. Plumb, and Richard L. Thoman. 'Interdisciplinary Approach to Hydrological Hazard Mitigation and Disaster Response and Effects of Climate Change on the Occurrence of Flood Severity in Central Alaska'. Proceedings of the International Association of Hydrological Sciences 369 (2015): 13–17.
- Kreidenweis, Alex, and Natalie Hudson. 'More Than a Crime: Human Trafficking as Human (In) Security'. *International Studies Perspectives* (2015): 67.
- Kyle, Kate. 'Arctic Hamlets Prepare For Giant Cruise Ship Crystal Serenity'. CBC News. 17 August 2016. https://www.cbc.ca/news/canada/north/crystal-serenity-arctic-hamlets-prepare-1.3723425.
- Lackenbauer, P. Whitney. The Canadian Rangers: A Living History. Vancouver: UBC Press, 2013.
- Lackenbauer, P.Whitney, and Adam Lajeunesse. 'The Canadian Armed Forces in the Arctic: Building Appropriate Capabilities'. *Journal of Military and Strategic Studies* 16, no. 4 (2016): 8–66.
- Laghi, Brian. 'Danes Call Graham's Visit to Hans Island "Occupation". The Globe and Mail. 27 July 2005. https://www.theglobeandmail.com/news/national/danes-call-grahams-visit-to-hans-island-occupation/article20424592/.
- Lane, Melissa. Myths about Migration: Historical and philosophical perspectives. London: History & Policy, 2006.
- Lavell, Allan, and Andrew Maskrey. 'The Future of Disaster Risk Management'. Environmental Hazards 13 (2014): 267–80.
- Lazrus, Heather. 'Risk Perception and Climate Adaptation in Tuvalu: A Combined Cultural Theory and Traditional Knowledge Approach'. Human Organization 74 (2015): 52–61.
- League of Nations. Convention to Suppress the Slave Trade and Slavery. 25 September 1926. 60 LNTS 253, Registered No. 1414. Accessed 4 March 2019. https://www.refworld.org/docid/3ae6b36fb.html.
- Lemmen, Donald. S., and Fiona J. Warren. 'Synthesis'. Canada's Marine Coasts in a Changing Climate, edited by Donald S. Lemmen, Fiona J. Warren, Thomas S. James, and Colleen S. L. Mercer Clarke, 1–17. Ottawa: Government of Canada, 2016. http://www.nrcan.gc.ca/sites/www.nrcan.gc.ca/files/earthsciences/files/pdf/NRCAN_fullBook%20%20accessible.pdf.
- Lewis, James. Development in Disaster-prone Places: Studies of Vulnerability. London: Intermediate Technology Publications, 1999.
- Lewis, J., and Ilan Kelman. 'The Good, the Bad and the Ugly: Disaster Risk Reduction (DRR) versus Disaster Risk Creation (DRC)'. *PLoS Currents Disasters*. 21 June 2012. http://currents.plos.org/disasters/article/the-good-the-bad-and-the-ugly-disaster-risk-reduction-drr-versus-disaster-risk-creation-drc/.
- Library and Archives Canada. 'Métis Genealogy'. Accessed 7 August 2018. https://www.bac-lac.gc.ca/eng/discover/aboriginal-heritage/metis/Pages/metis-genealogy.aspx.
- Library of Congress. 'Fourteenth Amendment and Citizenship'. Accessed 7 August 2018. http://www.loc.gov/law/help/citizenship/fourteenth_amendment_citizenship.php.

- Library of Congress. 'George Washington Papers, 1741–1799: Series 4, General Correspondence: 1697–1799, Treaty of Amity and Commerce with Great Britain, October 1795, Analysis of Articles'. Accessed 7 August 2018. https://www.loc.gov/item/mgw439735/.
- Lindell, M. K. 'Disaster Studies'. Current Sociology 61 (2013): 797-825.
- Liotta, P. H. 'Boomerang Effect: The Convergence of National and Human Security', Security Dialogue 33 (2002): 473.
- Lipschutz, Ronnie D., and James K. Rowe. *Globalization, Governmentality and Global Politics:* Regulation for the Rest of Us? RIPE Series in Global Political Economy. London and New York: Routledge, 2006.
- Lloyd's/Chatham House. Arctic Opening: Opportunity and Risk in the High North. London: Lloyd's, 2012.
- Lobasz, Jennifer. 'Beyond Border Security: Feminist Approaches to Human Trafficking'. Security Studies 18 (2009): 319.
- Locke, John. Two Treatises of Government. London: Whitmore and Fenn, 1821; originally published in 1690
- Lockhart, Alexander. 'The Insider-Outsider Dialectic in Native Socio-Economic Development: A Case Study in Process Understanding'. Canadian Journal of Native Studies 2 (1982): 159–68.
- Loe, Julia S.P., and Ilan Kelman. 'Arctic Petroleum's Community Impacts: Local Perceptions from Hammerfest, Norway'. *Energy Research & Social Science* 16 (2016): 25–34.
- Luibheid, Eithne. Entry Denied. Minneapolis: University of Minnesota Press, 2002.
- Lusby, Carolin. 'Sex Trafficking in the Tourism Industry'. *Journal of Tourism and Hospitality* [manuscript] 1 (2015).
- Lynch, Amanda H., and Ronald D. Brunner. 'Context and Climate Change: An Integrated Assessment for Barrow, Alaska'. *Climatic Change* 82 (2007): 93–111.
- Lynch, Jennifer, and Katerina Hadjimatheou. 'Acting in Isolation: Safeguarding and anti-trafficking officers' evidence and intelligence practices at the border'. Anti-Trafficking Review 8 (2017): 70.
- Lytvynenko, Anneta. Arctic Sovereignty Policy Review: Prepared for the Ad Hoc Committee of Deputy Ministers on the Arctic. Ottawa: Carleton University, 2011.
- Maldonado, Julie Koppel, Christine Shearer, Robin Bronen, Kristina Peterson, and Heather Lazrus. 'The Impact of Climate Change on Tribal Communities in the US: Displacement, Relocation, and Human Rights'. Climate Change and Indigenous Peoples in the United States, edited by J. K. Maldonado, B. Colombi, and R. Pandya, 93–106. Cham: Springer, 2013.
- Marino, Elizabeth, and Heather Lazrus. 'Migration or Forced Displacement?: The Complex Choices of Climate Change and Disaster Migrants in Shishmaref, Alaska and Nanumea, Tuvalu'. *Human Organization* 74 (2015): 341–50.
- Marino, Elizabeth. 'The Long History of Environmental Migration: Assessing Vulnerability Construction and Obstacles to Successful Relocation in Shishmaref, Alaska'. Global Environmental Change 22 (2012): 374–81.
- Mattar, Mohamed. 'Human Security or State Security? The Overriding Threat in Trafficking in Persons'. *Intercultural Human Rights Law Review* 1 (2006): 249.
- McAdam, Marika. 'Who's Who at the Border? A rights-based approach to identifying human trafficking at international borders'. *Anti-Trafficking Review 2* (2013): 33.
- McCarthy, Shawn. "Anti-petroleum" Movement a Growing Security Threat to Canada, RCMP say.

 The Globe and Mail. Last modified 17 February 2015. http://www.theglobeandmail.com/news/politics/anti-petroleum-movement-a-growing-security-threat-to-canada-rcmp-say/article23019252/.
- McDonald, Bruce. 'Climate Change in Arctic Leading to Rise in Adventure Tourism'. CBC News. October 18, 2013.
- McLeman, Robert. Climate Change, Migration and Critical International Security Considerations. Geneva: International Organization for Migration, 2011.
- McNally, Kyle, and James Orbinski. 'Humanitarianism: Stagnation, Fragmentation and Possibilities'. Beyond Gridlock, edited by Thomas Hale and David Held, 123–41. Cambridge, UK: Polity Press, 2017.
- McPherson, Hugo, W. Duncan Wood, and Derek M. Robinson (eds.). Emerging Threats to Energy Security and Stability: Proceedings of the NATO Advanced Research Workshop on Emerging Threats to Energy Security and Stability, London, United Kingdom, from 23 to 25 January 2004.

 North Atlantic Treaty Organization (NATO) Security through Science Series. Dordrecht: Springer, 2005.

- 'Mega-ships Set to Take to Arctic's Northern Sea Route'. The National. 3 September 2018.
- Menezes, Dwayne R., and Heather Nicol (eds.). The North American Arctic: New Trends in Arctic Security. London: UCL Press, 2019.
- Mercer, Jessica, Ilan Kelman, Kate Lloyd, and Sandie Suchet-Pearson. 'Reflections on Use of Participatory Research for Disaster Risk Reduction'. *Area* 40 (2008): 172–83.
- Middleberg, Maurice I., 'Trump Administration's Talk on Human Trafficking Must be Matched by Deeds'. CNN. 1 July 2017.
- Mileski, Joan, Amir Gharehgozli, Lawrence Ghoram, and Ryan Swaney. 'Cooperation in Developing a Disaster Prevention and Response Plan for Arctic Shipping'. Marine Policy 92 (2018): 131–37.
- Miller, Michelle Ann, and Mike Douglass. 'Introduction: Decentralising Disaster Governance in Urbanising Asia'. *Habitat International* 52 (2016): 1–4.
- Miller, Rebecca, and Sebastian Baumeister. 'Managing Migration: Is Border Control Fundamental to Anti-trafficking and Anti-smuggling Interventions?'. *Anti-Trafficking Review* 2 (2013): 15.
- Milman, Oliver. 'Alaskan Towns at Risk From Rising Seas Sound Alarm as Trump Pulls Federal Help'. *The Guardian*. Last modified 10 August 2017. https://www.theguardian.com/us-news/2017/aug/10/alaska-coastal-towns-sea-level-rise-climate-change.
- Miner, Joshua D. 'Navigating the "Erotic Conversion": Transgression and Sovereignty in Native Literatures of the Northern Plains'. Beyond the Border: Tensions across the Forty-ninth Parallel in the Great Plains and Prairies, edited by Kyle Conway and Timothy Pasch, 170. Canada: McGill-Oueen's University Press, 2013.
- Mineral Resources Branch: Energy, Mines, and Resources (Yukon). *Interpretative Bulletin 2009–03 Administration of Mineral Claims in the Traditional Territory of First Nations with Final Agreements (Umbrella Final Agreement)*. Whitehorse, YT: Yukon Government, 2009. http://www.emr.gov.yk.ca/mining/pdf/ib_2009_03_settlement_lands.pdf.
- Ministry for Children, Gender Equality, Integration and Social Affairs. *Action Plan to Combat Trafficking in Human Beings* 2015–2018. Copenhagen: Skabertrang, 2015.
- Ministry of Foreign Affairs of Finland. 2014. 'Group of Experts on Action against Trafficking in Human Beings Visited Finland's Presidency of the Arctic Council'.
- Mitchell v. Minister of National Revenue, 2001 SCC 33, [2001] 1 S.C.R. 911.
- Montpetit, Isabelle. 'Background: The Indian Act'. CBC News. 30 May 2011. Last modified 14 July 2011. https://www.cbc.ca/news/canada/background-the-indian-act-1.1056988.
- Morin, Philippe. 'White River First Nation United Despite Being Split by Yukon-Alaska Border'. *CBC News.* 20 June 2015. https://www.cbc.ca/news/canada/north/white-river-first-nation-united-despite-being-split-by-yukon-alaska-border-1.3120897.
- Morton, Desmond. 'Providing and Consuming Security in Canada's Century'. *Canadian Historical Review* 81, no. 1 (2000).
- Morton, Desmond, and Weinfeld, Morton (eds.). Who Speaks for Canada? Words That Shape a Country. Toronto: McClelland and Stewart, 1998.
- Muller, Benjamin. J. 'Risking it all at the Biometric Border: Mobility, Limits, and the Persistence of Securitization'. *Geopolitics* 16, no. 1 (2011): 91–106.
- Murphy, David. 'Nunavut Inuit exposed to human trafficking, child exploitation report'. *Nunatsiaq News.* 4 February 2014.
- Murphy, Laura. Labor and Sex Trafficking Among Homeless Youth. Report no. A 10 City Study Full Report. New Orleans: Loyola University, 2017.
- Myers, Candice A., Tim Slack, and Joachim Singelmann. 'Social vulnerability and migration in the wake of disaster: the case of Hurricanes Katrina and Rita'. *Population and Environment* 29 (2008): 271–91.
- National Defence and the Canadian Armed Forces. 'Types of Operations'. Last modified 21 March 2018. http://www.forces.gc.ca/en/operations/types-operations.page.
- National Defence and the Canadian Armed Forces. Strong, Secure, Engaged: Canada's Defence Policy. Ottawa: National Defence and Canadian Armed Forces, 2017. http://dgpaapp.forces.gc.ca/en/canada-defence-policy/docs/canada-defence-policy-report.pdf.
- National Defence and the Canadian Armed Forces. *Canada First Defence Strategy*. Ottawa: National Defence, 2008. http://www.forces.gc.ca/assets/FORCES_Internet/docs/en/about/CFDS-SDCD-eng.pdf.
- Newell, Peter, Philipp Pattberg, and Heike Schroeder. 'Multiactor Governance and the Environment'. Annual Review of Environment and Resources 37 (2012): 365–87.

- Newman, Edward. 'Human Security and Constructivism'. International Studies Perspectives 2 (2001): 239.
- Ng, Serene. 'Governance beyond the Government: Responding to a Reactionary Flood Governance Regime in Ayutthaya, Thailand'. *Habitat International* 52 (2016): 11–19.
- Nicol, Heather N. 'Conclusion'. *The Networked North: Borders and Borderlands in the Canadian Arctic Region*, edited by Heather Nicol and P. Whitney Lackenbauer, 177–79. Waterloo: Centre on Foreign Policy and Federalism; Victoria: Borders in Globalization, 2017.
- Nicol, Heather N. The Fence and the Bridge: Geopolitics and Identity along the Canada-US Border. Waterloo: Wilfrid Laurier University Press, 2015.
- Nicol, Heather N., Adam Lajeunesse, and Karen Everett. 'Managing Flows: A Profile of Regional Border Security Management in the Territorial North'. *The Networked North: Borders and Borderlands in the Canadian Arctic Region*, edited by Heather Nicol and P. Whitney Lackenbauer, 114–30. Waterloo: Centre on Foreign Policy and Federalism; Victoria: Borders in Globalization, 2017. https://biglobalization.org/sites/default/files/content-attachments/networked-north-2017.pdf.
- Nicol, Heather N., and Ian Townsend-Gault (eds.). Holding the Line: Borders in a Global World. Vancouver: University of British Colombia, 2005.
- Nicol, Heather, and Lassi Heininen. 'Human Security, the Arctic Council and Climate Change: Competition or Co-existence?'. *Polar Record* 50, no. 1 (January 2014): 80–85.
- Nicol, Heather N., and P. Whitney Lackenbauer (eds.). The Networked North: Borders and Borderlands in the Canadian Arctic Region. Waterloo: Borders in Globalization/Centre on Foreign Policy and Federalism, 2018.
- Nienaber, Georgianne. 'Man Camp and Predator Economics Threaten Heartland Native Communities'. The Huffington Post. 5 August 2013.
- Nordic Council of Ministers. Arctic Human Development Report. Regional Processes and Global Linkages. Copenhagen: Nordic Council, 2016.
- Northwest Territories. 'Northwest Territories Provincial Nominee Program'. Last accessed 11 January 2019. http://www.theimmigrationteam.com/immigrate/provincial-nominee-program/northwest-territories-provincial-nominee-program/.
- O'Brien, Sharon. 'The Medicine Line: A Border Dividing Tribal Sovereignty, Economies and Families'. Fordham Law Review 53 (1984): 315, 322.
- O'Brien, Sharon. 'Native American Reservations are Subject to Customs and Duties Regulations'.

 United States Department of Homeland Security Customs and Border Protection. https://help.cbp.gov/app/answers/detail/a_id/756/kw/%22American%20Indians%20Born%20 in%20Canada%22.
- Office to Monitor and Combat Trafficking in Persons. *The Link Between Extractive Industries and Human Trafficking*. Washington, D.C.: US Department of State, 2017.
- Office of the Prime Minister. 'Prime Minister Underlines Commitment to Fight Sex Crimes and Trafficking'. 9 June 2017.
- Office of the Prime Minister. 'United States Canada Joint Arctic Leaders' Statement'. Last modified 20 December 2016. http://pm.gc.ca/eng/news/2016/12/20/united-states-canada-joint-arctic-leaders-statement.
- Office of the Prime Minister. 'Prime Minister Announces Expansion of the Canadian Forces Facilities and Operations in the Canadian Arctic'. News release. 10 August 2007.
- Office of the Prime Minister of Canada. 'Select Actions Being Taken Under the United States-Canada Joint Arctic Leaders' Statement'. Last modified 20 December 2016. http://pm.gc.ca/eng/news/2016/12/20/select-actions-being-taken-under-united-states-canada-joint-arctic-leaders-statement.
- Office of Senator Lisa Murkowski. 'Murkowski Unveils Legislation to Reinvigorate America's Arctic Role'. Press Release. 12 December 2018.
- Office of the Under Secretary for Civilian Security, Democracy, and Human Rights. *Trafficking in Persons*. Washington, D.C.: U.S. Department of State, 2017.
- Ofuoku, Albert. 'Human trafficking in Nigeria and its implications for food security'. *International Journal of Rural Studies* 17 (2010): 1.
- Oliver-Smith, Anthony. 'Successes and Failures in Post-disaster Resettlement'. *Disasters* 15 (1991): 12–23.
- Oliver-Smith, Anthony. 'Anthropological Research on Hazards and Disasters'. Annual Review of Anthropology 25 (1996): 303–28.
- Oliver-Smith, Anthony, and Susanna M. Hoffman. *The Angry Earth: Disaster in Anthropological Perspective*. New York: Routledge, 1999.

- Omonbude, Ekpen J. Cross-border Oil and Gas Pipelines and the Role of the Transit Country: Economics, Challenges, and Solutions. London: Palgrave Macmillan UK, 2013.
- Østhagen, Andreas. 'Coastguards in Peril: A Study of Arctic Defence Collaboration'. *Defence Studies* 15 (2015): 143–60.
- Paasi, Anssi. Territory, Boundaries and Consciousness: The Changing Geographies of the Finnish-Russian Border. Toronto: Wiley, 1996.
- Pablo, Carlito. 'Wet'suwet'en People Disagree about Pacific Trail Pipelines Project'. *The Georgia Straight*. Last modified 7 April 2014. https://www.straight.com/news/621226/wetsuweten-people-disagree-about-pacific-trail-pipelines-project.
- Paciarotti, Claudia, Angela Cesaroni, and Maurizio Bevilacqua. 'The Management of Spontaneous Volunteers: A Successful Model from a Flood Emergency in Italy'. *International Journal of Disaster Risk Reduction* 31 (2018): 260–74.
- Parlee, B., and C. Furgal. 'Well-being and Environmental Change in the Arctic: A Synthesis of Selected Research from Canada's International Polar Year Program'. Climatic Change 115, no. 1 (2012): 13–34.
- Parliament of Canada. 'Bill-C23. Preclearance Act, 2016. An Act Respecting the Preclearance of Persons and Goods in Canada and the United States'. Last modified 1 October 2016. https://openparliament.ca/bills/42-1/C-23/.
- Parthasarathy, D. 'Informality, Resilience, and the Political Implications of Disaster Governance'. Pacific Affairs 88 (2015): 551–75.
- Pelling, Mark. 'Paradigms of Risk'. *Natural Disaster and Development in a Globalizing World*, edited by Mark Pelling, 3–16. London and New York: Routledge, 2003.
- Penal Code of Denmark, Order No. 909, as amended by Act Nos. 1389 and 1400 (2005).
- Pence v. Kleppe, No. 424 F. Supp. 400 (United States District Court, D. Alaska December 20, 1976).
 Penikett, Tony. 'Arctic Security Means More Than Arctic Sovereignty'. The Globe and Mail. 26
 January 2011, last modified 3 March 2018. https://www.theglobeandmail.com/opinion/arctic-security-means-more-than-arctic-sovereignty/article563433/.
- Pennesi, Karen, Jadah Arokium, and Gordon McBean. 'Integrating Local and Scientific Weather Knowledge as a Strategy for Adaptation to Climate Change in the Arctic'. *Mitigation and Adaptation Strategies for Global Change* 17 (2012): 897–922.
- Perkinson, Michael. 'Promoting Sustainable Development in the Arctic: A Private Sector Proposal for Partnership'. Presentation. Arctic Economic Council: Top of the World Arctic Broadband Summit, Utqeagvik, AK, July 2016.
- Perrow, Charles. Normal Accidents: Living with High Risk Technologies. Chichester: Princeton University Press, 2011.
- Pescaroli, Gianluca, and Ilan Kelman. 'How Critical Infrastructure Orients International Relief in Cascading Disasters'. *Journal of Contingencies and Crisis Management* 25 (2017): 56–67.
- Pescaroli, Gianluca, and David Alexander. 'A Definition of Cascading Disasters and Cascading Effects: Going beyond the "Toppling Dominos" Metaphor'. GRF Davos Planet@Risk 3 (2015): 58-67
- Pierson, Paul. Politics in Time: History, Institutions and Social Analysis. Princeton: University Press, 2004.
- Pikialasorsuaq Commission. 'An Inuit Vision for the Future of the Pikialasorsuaq'. Last modified 23 November 2017. https://www.inuitcircumpolar.com/press-releases/an-inuit-vision-for-the-future-of-the-pikialasorsuaq-2/.
- Pincus, Rebecca. 'Large-scale Disaster Response in the Arctic: Are We Ready?'. *Arctic Yearbook* (2015): 234–46.
- Polar Research and Policy Initiative. 'Arctic Border Governance: Emerging Themes and Challenges'. *The Polar Connection*. Last modified 29 August 2017. http://polarconnection.org/event/arctic-borders-governance/.
- Polar Research and Policy Initiative. 'Delegates from 20 Nations Convene in the United Kingdom for Arctic Encounter London 2019'. *The Polar Connection*. Last modified 5 February 2019. http://polarconnection.org/arctic-encounter-london-2019/.
- Polar Research and Policy Initiative. 'Regional Security in the North: Emerging Themes and Challenges'. *The Polar Connection*. Last modified 14 June 2017. http://polarconnection.org/regional-security-north-emerging-themes-challenges/.
- Polaris Project. '2016 Hotline Statistics'. https://polarisproject.org/resources/2016-hotlinestatistics.
- Popescu, Gabriel. Bordering and Ordering the Twenty-First Century: Understanding Borders. Lanham: Rowman & Littlefield, 2011.

- Protocol to Prevent, Suppress and Punish Trafficking in Persons Especially Women and Children supplementing the United Nations Convention Against Transnational Organized Crime, G.A. Res. 25, annex II, U.N. GAOR, 55th Sess., Supp. No. 49, U.N. Doc. A/55/49 (Vol. I) (2001), entered into force 25 December 2003.
- Public Safety Canada. 'About Public Safety Canada'. Last modified 8 August 2018. https://www.publicsafety.gc.ca/cnt/bt/index-en.aspx.
- Public Safety Canada. 'National Security'. Last modified 8 August 2018. https://www.publicsafety.gc.ca/cnt/bt/index-en.aspx.
- Public Safety Canada. Cybersecurity Action Plan Between Public Safety Canada and the Department of Homeland Security. Ottawa: Public Safety Canada, 2012. https://www.publicsafety.gc.ca/cnt/rsrcs/pblctns/cybrscrt-ctn-plan/cybrscrt-ctn-plan-eng.pdf.
- Public Safety Canada. Canada-United States Action Plan for Critical Infrastructure. Department of Homeland Security and Public Safety Canada, 2010. https://www.dhs.gov/xlibrary/assets/ip_canada_us_action_plan.pdf.
- Quarantelli, E. L. Emergent Behavior at the Emergency Time Periods of Disasters. Final project report. Delaware: University of Delaware, Disaster Research Center, 1983.
- Quarantelli, E. L., P. Lagadec, and A. Boin. 'A Heuristic Approach to Future Disasters and Crises: New, Old, and In-Between Types'. *Handbook of Disaster Research*, edited by H. Rodriguez, E. L. Quarantelli, and R. Dynes, 16–41. New York: Springer, 2006.
- R. v. DeSautel, [2017] BCPC 84, Nelson Registry No. 23646.
- R. v. Gladstone, [1996] 2 S.C.R. 723, 742.
- R. v. Sparrow, [1990] 1 S.C.R. 1075.
- R. v. Van der Peet, [1996] 2 S.C.R. 507.
- Rahbek-Clemmensen, Jon, and Gry Thomasen. *Learning from the Ilulissat Initiative: State Power, Institutional Legitimacy, and Governance in the Arctic Ocean 2007–18.* Copenhagen, Denmark: University of Copenhagen Centre for Military Studies, 2018.
- Ray, Thomas W. 'A History of the DEW Line, 1946–1964'. Air Defense Command Historical Study No. 31, United States Northern Command (1965).
- Request for Lilly Endowment Grant Support: First International Inuit Community Conference.

 Eben Hopson Memorial Archives. http://ebenhopson.com/request-for-lilly-endowment-grant-support-first-international-inuit-conference/.
- Riddell-Dixon, Elizabeth. Breaking The Ice: Canada, Sovereignty and the Arctic Extended Continental Shelf. Toronto, Ontario: Dundurn Press, 2017.
- Rights of the Aboriginal Peoples of Canada, Part II of the Constitution Act, 1982, being Schedule B to the Canada Act 1982: c. 11.
- Rittel, Horst W. J., and Melvin M. Webber. 'Dilemmas in a General Theory of Planning'. *Policy Sciences* 4 (1973): 155–69.
- Rizer, Arthur, and Sheri R. Glaser. 'Breach: The National Security Implications of Human Trafficking'. Widener Law Review 17 (2011): 69.
- 'The Road Less Travelled: Migrants Traverse the Arctic on Bicycles'. *Toronto Star.* 5 September 2015.
- Roasa, Dustin. 'The D.I.Y. Disaster Plan: How Informal Networks Battled Bangkok's Worst Flood'. The Rockefeller Foundation's Informal City Dialogues 1 (2013).
- Roos, Heather. Phase I: Service and Capacity Review for Victims of Sexual Exploitation and Human Trafficking in Nunavut. Ottawa: Roos-Remillard Consulting Services, 2013.
- Rosenau, James N. 'Governance, Order, and Change in World Politics'. *Governance without Government: Order and Change in World Politics*, edited by James N. Rosenau and Ernst-Otto Czempiel, 1–29. Cambridge: Cambridge University Press, 1992.
- Roy, Heather. 'Canada's Inuit Face Human Trafficking Fears'. Al Jazeera. 14 March 2014.
- Royal Canadian Mounted Police. 'Canada-U.S. Shiprider'. Last modified 26 October 2016. http://www.rcmp-grc.gc.ca/ibet-eipf/shiprider-eng.htm.
- Royal Canadian Mounted Police. Missing and Murdered Aboriginal Women: A National Operational Overview 3. Ottawa: RCMP, 2014.
- Royal Canadian Mounted Police. *Domestic Human Trafficking for Sexual Exploitation in Canada*. Ottawa: Human Trafficking National Coordination Centre, 2013.
- Royal Canadian Mounted Police. *Human Trafficking in Canada*. Ottawa: RCMP Criminal Intelligence, 2010.
- Ruddell, Rick. 'Boomtown Policing: Responding to the Dark Side of Resource Development'. Policing 5 (2011): 330.

- Rudloff, Bettina. The EU as a Fishing Actor in the Arctic: Stocktaking of Institutional Involvement and Existing Conflicts. Berlin: Stiftung Wissenschaft und Politik, 2010.
- Sack, Robert. Human Territoriality: Its Theory and History. Cambridge: Cambridge University Press, 1986.
- 'Safety Hazards Plague Small Border Posts, Federal Evaluation Says'. CBC News. 23 March 2015. https://www.cbc.ca/news/canada/windsor/safety-hazards-plague-small-border-posts-federal-evaluation-says-1.3005223.
- Said Aini, Mat, Ahmadun Fakhur'l-Razi, Mohamed Daud, and Mohammad Hamdan Wahid. 'Transnational Forest Fire Fighting: The Malaysian Experience'. *Disaster Prevention and Management: An International Journal* 9, no. 4 (2000): 282–87.
- Sakakibara, Chie. "Our Home is Drowning": Iñupiat Storytelling and Climate Change in Point Hope, Alaska'. *Geographical Review* 98, no. 4 (2008): 456–75.
- Satzewich, V., and L. Wong. 'Immigration, Ethnicity, and Race: the Transformation of Transnationalism, Localism, and Identities'. *Changing Canada*, edited by Wallace Clement and Leah F. Vosko, 363–92. McGill-Oueen's University Press, 2003.
- Savage, Luiza. 'Why Everyone Wants a Piece of the Arctic'. Maclean's. 13 May 2013.
- Scheid, Brian. 'Offshore Oil Production in Greenland Inevitable: Prime Minister'. *S and P Global Platts.* 26 September 2014. https://www.spglobal.com/platts/en/market-insights/latest-news/oil/092614-offshore-oil-production-in-greenland-inevitable-prime-minister.
- Schmidt, Vivien A. 'Discursive Institutionalism: The Explanatory Power of Ideas and Discourse'. *The Annual Review of Political Science* 11 (2008): 303–26.
- Schmidt, Vivien A. 'Taking Ideas and Discourse Seriously: Explaining Change Through Discursive Institutionalism as the Fourth New Institutionalism'. *European Political Science Review* 2, no. 1 (2010): 1–25.
- Schönfeldt, Kristina (ed.). *The Arctic in International Law and Policy*. Portland: Hart Publishing, 2017. Schreiber, Melody. 'Inuit Mental Health Is on Thin Ice but a Return to Nature Could Help'. *Pacific Standard*. Last modified 23 March 2018. https://psmag.com/environment/solving-the-suicide-crisis-in-the-arctic-circle.
- Scott, Mackenzie. 'Beyond Expectations: Highway makes Tuktoyaktuk an All-season Destination'. CBC News. 17 July 2018. https://www.cbc.ca/news/canada/north/tourists-tuktoyaktuk-inuvik-highway-1.4749295.
- Scruggs, Greg. 'North American Indigenous Chafe at Restrictions Along US-Canada Border', Reuters, 27 April 2019, http://news.trust.org/item/20190427021802-sqnk6
- Scruggs, Greg. 'Advice from the Arctic: 4 Key Development Challenges Facing the Far North', Devex, 1 May 2019, https://www.devex.com/news/advice-from-the-arctic-4-key-development-challenges-facing-the-far-north-94819
- Scudder, Thayer, and Elizabeth Colson. 'From Welfare to Development: A Conceptual Framework for the Analysis of Dislocated People'. *Involuntary Migration and Resettlement; The Problems and Responses of Dislocated People*, edited by Art Hansen and Anthony Oliver-Smith, 267–87. Boulder: Westview Press, 1982.
- SEARCH. 'Study of Environmental Arctic Change'. Last modified 2018. https://www.searcharcticscience.org/.
- Sellheim, Nikolas. Review of Arctic Opening: Insecurity and Opportunity, by Christian Le Mière and Jeffrey Mazo. Polar Record 50 (2014): 254.
- Sevunts, Levon. 'Nine Countries and EU Set to Sign "Historic" Agreement to Protect Central Arctic Ocean'. *The Independent Barents Observer*, 3 October 2018. https://thebarentsobserver.com/en/arctic/2018/10/nine-countries-and-eu-set-sign-historic-agreement-protect-central-arctic-ocean.
- Shaluf, Ibrahim Mohamed. 'A Review of Disaster and Crisis'. *Disaster Prevention and Management:* An International Journal 16 (2007): 704–17.
- Shearer, Christine. Kivalina: A Climate Change Story. Chicago: Haymarket Books, 2011.
- Shimizu, Mika, and Allen L. Clark. 'Interconnected Risks, Cascading Disasters and Disaster Management Policy: A Gap Analysis'. *Planet@Risk* 3 (2015).
- Shipping and Environmental Arctic Leadership Act, Senate Bill 3740, 115th Cong. (2018).
- Siekierska, Alicja. 'Exposed in the North: Canada Falls Behind in Developing the Arctic'. *Financial Post.* 16 March 2018. https://business.financialpost.com/transportation/finland-feature.
- Singleton, Sara. 'Not Our Borders: Indigenous People and the Struggle to Maintain Shared Lives and Cultures in Post-9/11 North America'. *Border Policy Research Institute* 1 (2004). Accessed 7 August 2018. https://cedar.wwu.edu/bpri_publications/106/.

- Smith, Evan, and Marinella Marmo. 'Examining the Body through Technology: Age Disputes and the UK Border System'. *Anti-Trafficking Review* 3 (2013): 67.
- Smith, Linda, and Samantha Healy Vardaman. 'The Problem of Demand in Combatting Sex Trafficking'. *Revue international de droit pénal* 81 (2010): 607.
- Spruhan, Paul. 'The Canadian Indian Free Passage Right: The Last Stronghold of Explicit Race Restriction in United States Immigration Law'. North Dakota Law Review 85 (2009): 301.
- Sputnik International. 'Greenland's Arctic Oil Exploration Unlikely to Bring Results in 5–10 Years'.

 24 May 2016. https://sputniknews.com/world/201605241040180017-greenland-oil-exploration/.
- Stallings, Robert A., and E. L. Quarantelli. 'Emergent Citizen Groups and Emergency Management'. *Public Administration Review* 45 (January 1985): 93–100.
- Stanford, Jim. 'Staples, Deindustrialisation, and Foreign Investment: Canada's Economic Journey Back to the Future'. *Studies in Political Economy* 82 (2008): 7–34.
- "Start Waking Up": Report Warns of Inuit Child Selling, Cites Anecdotal Evidence of Abuse, Trafficking'. National Post. 30 January 2014.
- State of Alaska. Final Report and Recommendations. Anchorage, Alaska: Task Force on the Crimes of Human Trafficking, Promoting Prostitution and Sex Trafficking, 2013.
- Statistics Canada. 'Aboriginal Peoples in Canada: First Nations People, Métis and Inuir'. Accessed 7 August 2018. http://www12.statcan.gc.ca/nhs-enm/2011/as-sa/99-011-x/99-011-x2011001-eng.cfm.
- Statistics Canada. 'Table 24-10-0041-01 International Travellers Entering or Returning to Canada, by Type of Transport'. Last modified 19 August 2018. https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=2410004101.
- Stevenson, Christopher. 'Hans Off!: The Struggle for Hans Island and the Potential Ramifications for International Dispute Resolution'. *Boston College International and Comparative Law Review* 30 (2007): 263–75.
- Steward, E.J., S. E. L. Howell, D. Draper, J. Yackel, and A. Tivy. 'Sea Ice in Canada's Arctic: Implications for Cruise Tourism'. Arctic 60, no. 4 (2007): 370.
- Stojanov, Robert, Ilan Kelman, A. K. M. Ullah, Barbora Duží, David Procházka, and Klára Blahůtová. 'Local Expert Perceptions of Migration as a Climate Change Adaptation in Bangladesh'. Sustainability 8, no. 12 (2016): 1223.
- Supplementary Convention on the Abolition of Slavery, the Slave Trade, and Institutions and Practices Similar to Slavery, 226 U.N.T.S. 3 (1956).
- Sweet, Victoria. 'Rising Waters, Rising Threats: The Human Trafficking of Indigenous Women in the Circumpolar Region of the United States and Canada'. *Yearbook of Polar Law* 6 (2014): 162
- Sydnes, Are Kristoffer, Maria Sydnes, and Yngve Antonsen. 'International Cooperation on Search and Rescue in the Arctic'. *Arctic Review on Law and Politics* 8 (2017).
- Szpak, Agnieszka. 'Human Security of the Indigenous Peoples in the Arctic. The Sami Case'. International Studies 20 (2017): 75.
- Tacoli, Cecilia. 'Crisis or Adaptation? Migration and Climate Change in a Context of High Mobility'. Environment and Urbanization 21 (2009): 513–25.
- Tendler, Judith. 'Small Firms, the Informal Sector, and the Devil's Deal'. *IDS Bulletin* 33, no. 3 (2002): 1–15. doi:10.1111/j.1759-5436.2002.tb00035.x.
- Têtu, Pierre-Louis, Jackie Dawson, and Julia Olsen. 'Navigating Governance Systems & Management Practices for Pleasure Craft Tourism in the Arctic'. Arctic Yearbook 2018: Arctic Development in Theory & In Practice, edited by Lassi Heininen and Heather Exner-Pirot, 141–60. Akureyri, Iceland: Northern Research Forum, 2018.
- 'This Day in History: June 15'. History.com, accessed 7 August 2018. https://www.history.com/this-day-in-history/u-s-canadian-border-established.
- Thomson, Jimmy. 'What Does China's New Arctic Policy Mean for Canada?'. CBC News. 27 January 2018. Last modified 27 January 2018. https://www.cbc.ca/news/canada/north/what-does-china-s-new-arctic-policy-mean-for-canada-1.4506754.
- Thrasher, Kevin M. 'Exercise Musk Ox: Lost Opportunities'. MA thesis, Carleton University, 1998. Tickner, J. Ann. *Gendering World Politics*. New York: Columbia University Press, 2001.
- Tierney, Kathleen. 'Disaster Governance: Social, Political, and Economic Dimensions'. *Annual Review of Environment and Resources* 37 (2012): 341–63.
- Titz, Alexandra, Terry Cannon, and Fred Krüger. 'Uncovering "Community": Challenging an Elusive Concept in Development and Disaster Related Work'. Societies 8 (2018): 71

- Trainor, S. F., F. S. Chapin, H. P. Huntington, D. C. Natcher, and G. Kofinas. 'Arctic Climate Impacts: Environmental Injustice in Canada and the United States'. *Local Environment* 12, no. 6 (2007): 627–43.
- Transport Canada. 'National Trade Corridors Fund'. Last modified 11 April 2018. https://www.canada.ca/en/transport-canada/news/2018/04/national-trade-corridors-fund.html.
- Transport Canada. *Border Infrastructure Investment Plan Canada United States December 2014*. Transport Canada, 2014. https://www.tc.gc.ca/media/documents/policy/BIIP_20.pdf.
- Transport Canada. Border Infrastructure Investment Plan Canada United States April 2013. Transport Canada, 2013. https://www.tc.gc.ca/media/documents/mediaroom/BIIP-Eng-Final.pdf.
- Treaty of Amity, Commerce and Navigation, Between His Britannick Majesty; and The United States of America, by Their President, With the Advice and Consent of Their Senate. 19 November 1794. United States Treaty Series 105, registration no. 8 Stat. 116. http://avalon.law.yale.edu/18th_century/jay.asp.
- Treaty of Peace and Amity Between His Britannic Majesty and the United States of America, by Their President, with the Advice and Consent of Their Senate. 24 December 1814. Registration no. 8 Stat. 218. Accessed 7 August 2018. http://avalon.law.yale.edu/19th_century/ghent.asp.
- "Trump Vows to Fight "Epidemic" of Human Trafficking'. Associated Press News. 23 February 2017.
- Truth and Reconciliation Commission of Canada (TRC). Honouring the Truth, Reconciling for the Future: Summary of the Final Report of the Truth and Reconciliation Commission of Canada. Winnipeg, MB: Truth and Reconciliation Commission of Canada, 2015.
- Twigg, John, and Irina Mosel. 'Emergent Groups and Spontaneous Volunteers in Urban Disaster Response'. *Environment and Urbanization* 29 (2017): 443–58.
- UArctic. 'Reducing Spring Flood Impacts: An International Project Implemented by "Natural Hazards" Thematic Network'. Last modified 12 May 2016. http://www.uarctic.org/news/2016/5/reducing-spring-flood-impacts-an-international-project-implemented-by-natural-hazards-thematic-network/.
- Umbrella Final Agreement between the Government of Canada, the Council for Yukon Indians and the Government of the Yukon, § 5.5.0 Yukon First Nation Management Powers (1993). http://www.eco.gov.yk.ca/pdf/umbrellafinalagreement.pdf.
- UNISDR. 'Sendai Framework for Disaster Risk Reduction'. Last modified 2015. https://www.preventionweb.net/files/43291_sendaiframeworkfordrren.pdf.
- UNISDR. 'UNISDR terminology on disaster risk reduction'. Last modified May 2009. https://www.unisdr.org/files/7817_UNISDRTerminologyEnglish.pdf.
- UNISDR, UNO. 'Sendai framework for disaster risk reduction 2015–2030'. Proceedings of the 3rd United Nations World Conference on DRR, Sendai, Japan (2015): 14–18.
- United Nations. United Nations Declaration on the Rights of Indigenous Peoples. United Nations, 2008
- United Nations Convention on the Law of the Sea, 1833 UNTS 3; 21 ILM 1261 (1982).
- United Nations Declaration on the Rights of Indigenous People. Accessed August 29, 2018. https://www.un.org/esa/socdev/unpfii/documents/DRIPS_en.pdf.
- United Nations Development Programme. *Human Development Report*. New York: United Nations, 1994.
- United Nations Educational, Scientific and Cultural Organization. Human Trafficking in Nigeria: Root Causes and Recommendations. Paris: UNESCO, 2006.
- United Nations General Assembly. *United Nations Declaration on the Rights of Indigenous Peoples:* Resolution / Adopted by the General Assembly. 2 October 2007. A/RES/61/295. https://www.refworld.org/docid/471355a82.html.
- United Nations General Assembly. International Covenant on Economic, Social and Cultural Rights. 16 December 1966. United Nations, Treaty Series, vol. 993. https://www.refworld.org/docid/3ae6b36c0.html.
- United Nations General Assembly. *International Covenant on Civil and Political Rights*. 16 December 1966. United Nations, Treaty Series, vol. 999. https://www.refworld.org/docid/3ae6b3aa0.html.
- United Nations Human Rights Council. Access to Justice in the Promotion and Protection of the Right of Indigenous Peoples. Study by the Expert Mechanism on the Rights of Indigenous Peoples, UN Doc. A/HRC/24/50 (30 July 2013), Annex Expert Mechanism Advice No. 5 (2013): Access to justice in the promotion and protection of the right of indigenous peoples, para 2.

- United Nations Interagency Framework Team for Prevention. 'Extractive Industries and Conflict'.

 Toolkit and Guidance for Preventing and Managing Land and Natural Resources Conflict. New York: United Nations. 2012.
- United Nations Intergovernmental Plan on Climate Change. *Global Warming of 15 C. Special Report. Summary for Policy-Makers*. Geneva: World Meteorological Organization, 2018.
- United Nations Office on Drugs and Crime. 'Signatories to the United Nations Convention Against Transnational Crime'. https://www.unodc.org/unodc/en/treaties/CTOC/signatures.html.
- United Nations Permanent Forum on Indigenous Issues. System-wide Action Plan for Ensuring a Coherent Approach to Achieving the Ends of the United Nations Declaration on the Rights of Indigenous Peoples. UN Doc. E/C.19/2016/5 (19 February 2016). https://digitallibrary.un.org/record/821872/files/E_C.19_2016_5-EN.pdf.
- United Nations Permanent Forum on Indigenous Issues. Cross-border Issues, Including Recognition of the Right of Indigenous Peoples to Trade in Goods and Services Across Borders and Militarized Areas. Study by Forum member Megan Davis. UN Doc. E/C.19/2015/9. 17 February 2015. http://www.un.org/en/ga/search/view_doc.asp?symbol=E/C.19/2015/9.
- United States Coast Guard. 'US Coast Guard: Arctic Shield 2017 Fact Sheet'. Policy Brief. 2 February 2018.
- United States Congress, House of Representatives, Subcommittee on Coast Guard and Maritime Transportation (Committee on Transport and Infrastructure). 'Testimony of Molly McCammon, Executive Director, Alaska Ocean Observing System'. Maritime Transportation in the Arctic: The U.S. Role: Hearing before the Subcommittee on Coast Guard and Maritime Transportation, 115th Cong. 7 June 2018.
- United States Congress, House of Representatives, Subcommittee. 'Testimony of David Kennedy, Senior Advisor, NOAA Arctic Program'. Maritime Transportation in the Arctic: The U.S. Role: Hearing. 7 June 2018.
- United States Constitution, amend. XIV, § 1.
- United States Constitution, art. VI, § 2.
- United States Customs and Border Protection. 'Human Trafficking'. Last modified 16 January 2015. https://www.cbp.gov/border-security/human-trafficking.
- United States Department of Homeland Security Customs and Border Protection. 'Western Hemisphere Travel Initiative, Document Requirements for Land and Sea Travel'. Accessed 7 August 2018. https://www.cbp.gov/travel/us-citizens/western-hemisphere-travel-initiative.
- United States Department of Homeland Security. Final Rule and Notice. Vol. 73, No. 65. 2008. 18384-8397
- United States Department of the Interior, US Geological Survey. '90 Billion Barrels of Oil and 1,670 Trillion Cubic Feet of Natural Gas Assessed in the Arctic'. Last modified 22 July 2008. https://www.usgs.gov/media/audio/90-billion-barrels-oil-and-1670-trillion-cubic-feet-natural-gas-assessed-arctic.
- United States Department of Justice. National Strategy to Combat Human Trafficking. Washington, DC: US Government, 2017.
- United States Department of Justice, Office of the Attorney General. 'Memorandum on Possession or Use of the Feathers or Other Parts of Federally Protected Birds for Tribal Cultural or Religious Purposes'. Accessed 7 August 2018. https://www.justice.gov/sites/default/files/ag/legacy/2012/10/22/ef-policy.pdf.
- United States Embassy and Consulates in Canada. 'First Nations and Native Americans'. Accessed 7 August 2018. https://ca.usembassy.gov/visas/first-nations-and-native-americans/.
- United States Fish and Wildlife Service. 'Notice to the Wildlife Import/Export Community re: Transport of Eagle Items Within North America'. Accessed 7 August 2018. https://www.fws.gov/le/public-bulletin-transport-eagle-items.html.
- United States National Security Presidential Directive 22: Trafficking in Persons. Washington, DC: White House, 2002.
- United States v. Garrow, No. 88 F.2d 318 (Court of Customs and Patent Appeals March 1, 1937). United States v. Karnuth, No. 74 F. Supp. 660 (District Court, W. D. New York November 28, 1947).
- United States v. Karnuth, No. 279 U.S. 231 (April 8, 1929).
- United States v. McCandless, No. 25 F.2d 71 (Circuit Court of Appeals, Third Circuit March 9, 1928).
- United States v. Wurts, No. 303 U.S. 414 (March 14, 1938).
- United States. 'Workbook: Border Crossing Annual Data'. Last accessed 13 January 2019. https://explore.dot.gov/t/BTS/views/BTSBorderCrossingAnnualData/BorderCrossingTableDashboard?: embed=y&:showShareOptions=true&:display_count=no&:showVizHome=no.

- Universal Declaration Of Human Rights, GA res. 217A (III), UN Doc A/810.
- Utter, Jack. American Indians: Answers to Today's Questions. Oklahoma: University of Oklahoma Press, 1993: 105–06.
- Vanderklippe, Nathan. 'Canada's North at Risk For Terrorism, Human Trafficking'. *The Globe and Mail*. 15 November 2010.
- Van Hinte, Tim, Thomas I. Gunton, and J.C. Day. 'Evaluation of the Assessment Process for Major Projects: A Case Study of Oil and Gas Pipelines in Canada'. *Impact Assessment and Project Appraisal* 25, no. 2 (2007): 123–37.
- Van Voorst, Roanne. 'Formal and Informal Flood Governance in Jakarta, Indonesia'. Habitat International 52 (2016): 5–10.
- Van Well, Lisa, Peter van der Keur, Atte Harjanne, Emmanuel Pagneux, Adriaan Perrels, and Hans Jørgen Henriksen. 'Resilience to Natural Hazards: An Analysis of Territorial Governance in the Nordic Countries'. *International Journal of Disaster Risk Reduction* 31 (2018): 1283–94.
- Vancouver Maritime Museum. 'St. Roch National Historic Site'. 2019. https://www.vancouvermaritimemuseum.com/permanent-exhibit/st-roch-national-historic-site.
- Victims of Trafficking and Violence Protection Act, Public Law 106-386 [H.R. 3244] (2000).
- Wachtendorf, Tricia. 'A River Runs Through It: Cross Border Interaction During the 1997 Red River Flood'. Master thesis, University of Delaware, Disaster Research Center, 1999.
- Wachtendorf, Tricia. 'When Disasters Defy Borders: What We Can Learn from the Red River Flood about Transnational Disasters'. *The Australian Journal of Emergency Management* 15, (2000): 36–41.
- Wallace, Anthony F.C. Tornado in Worcester: An Exploratory Study of Individual and Community Behavior in an Extreme Situation. Washington D.C.: NAS/NRC Committee on Disaster Studies, 1956
- Warren, J., J. Berner, and T. Curtis. 'Climate Change and Human Health: Infrastructure Impacts to Small Remote Communities in the North'. *International Journal of Circumpolar Health* 64, no. 5 (2005): 487–97.
- Watkins, Mel. 'Politics in the Time and Space of Globalization'. *Changing Canada: Political Economy as Transformation*, edited by W. Clement and L. F. Vosko, 3–24. Montreal and Kingston: McGill-Oueen's University Press 2003.
- Watt v. Liebelt, [1999] 2 F.C. 455
- Watts, Jonathan. 'We Have 12 years to Limit Climate Change Catastrophe, Warns UN'. *The Guardian*. 8 October 2018.
- Watts, Nick, Markus Amann, Sonja Ayeb-Karlsson, Kristine Belesova, Timothy Bouley, Maxwell Boykoff, Peter Byass, et al. 'The Lancet Countdown on Health and Climate Change: From 25 Years of Inaction to a Global Transformation for Public Health'. *The Lancet* 391 (2018): 581–630
- Weber, Bob. 'Inuit Want Free Travel Over Arctic Waters'. Canadian Press. 24 November 2017.
- Weller, Marc. 'Towards a General Comment on Self-determination and Autonomy'. Working Paper submitted to the Commission on Human Rights, Sub-commission on the Promotion and Protection of Human Rights, Working Group on Minorities, 11th Session. UN Doc. E/CN.4/Sub.2/AC.5/2005/WP.5 (25 May 2005).
- Wells, Paul. The Longer I'm Prime Minister: Stephen Harper and Canada, 2006–. Toronto, Ontario: Random House Canada, 2013.
- White House, Office of the Press Secretary. 'Remarks by the President at the White House Tribal Nations Conference'. 16 December 2010. http://www.whitehouse.gov/the-press-office/2010/12/16/remarks-president-white-house-tribal-nations-conference.
- White House, Office of the Press Secretary. 'Arctic Region Policy'. National Security Presidential Directive/NPSD-66, Homeland Security Presidential Directive/HSPD-25, Policy Memo (2009).
- Whittaker, Joshua, Blythe McLennan, and John Handmer. 'A Review of Informal Volunteerism in Emergencies and Disasters: Definition, Opportunities and Challenges'. *International Journal of Disaster Risk Reduction* 13 (2015): 358–68.
- WHO. 'Climate Change and Health'. Last modified 1 February 2018. https://www.who.int/news-room/fact-sheets/detail/climate-change-and-health.
- WHO. Quantitative Risk Assessment of the Effects of Climate Change on Selected Causes of Death, 2030s and 2050. World Health Organisation, 2014.
- Wiener, B., P. O'Keefe, and K. Westgate. 'Global Systems and Local Disasters: The Untapped Power of Peoples' Science'. *Disasters* 1 (1977): 47–57.
- Wikipedia. 'Alcan-Beaver Creek Border Crossing'. Last modified 9 August 2018. https://en.wikipedia.org/wiki/Alcan_-Beaver_Creek_Border_Crossing.

- Wilson Rowe, Elana. Arctic Governance: Power in Cross-Border Cooperation. Manchester, UK: Manchester University Press, 2018.
- Wisner, Ben, Piers Blaikie, Terry Cannon, and Ian Davis. At Risk: Natural Hazards, People's Vulnerability and Disasters. 2nd ed. London and New York: Routledge, 2004.
- Wisner, Ben, and J. C. Gaillard. 'An Introduction to Neglected Disasters'. *Jàmbá: Journal of Disaster Risk Studies* 2 (2009): 151–58.
- World Commission on Environment and Development. *Our Common Future*. Oxford: Oxford University Press, 1987.
- Yeoman, Ian, and Michelle Mars. 'Robots, Men and Sex Tourism'. Futures 44 (2012): 365.
- York, R., E. A. Rosa, and T. Dietz. 'Footprints on the Earth: The Environmental Consequences of Modernity'. American Sociological Review 68 (2003): 279–300.
- Young, Oran R. 'Governing the Arctic Ocean'. Marine Policy 72 (2016): 271-77.
- Young, Oran R. 'The Future of the Arctic: Cauldron of Conflict or Zone of Peace?'. International Affairs 87 (2011): 185–93.
- Young, Oran R. 'Institutional Interplay: The Environmental Consequences of Cross-Scale Interactions'. *The Drama of the Commons*, edited by E. Ostrom, T. Dietz, N. Dolšak, P. Stern, S. Stonich, and E. Weber, 263–92. Washington, DC: The National Academies Press, 2002.
- Young, T. Kue, Boris Revich, and Leena Soininen. 'Suicide in Circumpolar Regions: An Introduction and Overview'. *International Journal of Circumpolar Health* 74 (2015): 27349.
- Yukon Government. Yukon Hunting Regulations Summary 2019–2020. Last modified 5 June 2019. https://yukon.ca/sites/yukon.ca/files/env/env-yukon-hunting-regulations-summary_en.pdf.
- Yukon Government. 'Government of Canada Invests in the Modernization of Intelligent Transportation Systems in Yukon'. Last modified 17 May 2018. https://yukon.ca/en/news/government-canada-invests-modernization-intelligent-transportation-systems-yukon.
- Yukon Government. Department of Tourism and Culture. *Yukon Tourism Visitation Report December* 2016. Department of Tourism and Culture, 2016. http://www.tc.gov.yk.ca/pdf/12-Dec2016-indicator-report.pdf.
- Yukon Government. Department of Tourism and Culture. *Yukon Tourism Visitation Report December* 2015. Department of Tourism and Culture, 2015. http://www.tc.gov.yk.ca/pdf/12-dec-2015-indicator-report.pdf.
- Yukon Government. Yukon Bureau of Statistics. *Yukon Monthly Statistical Review April 2016*. Yukon Bureau of Statistics, 2016. http://www.eco.gov.yk.ca/stats/pdf/mr_apr2016.pdf.

Index

49th Parallel 44	Anderson, R. 238–9
69th Parallel 158	Angry Inuk 79
141st Meridian, as Yukon-Alaska boundary 136	Annan, K. 277
ARC: America Indianata and Complex	Antarctica 208–9
ABCs see American Indians born in Canada	Arctic Archipelago 23, 29–30
(ABCs)	see also Arctic regions
aboriginal communities 40	Arctic Climate Impact Assessment (2004) 4
and American Indians born in Canada	Arctic Council 44, 112, 116, 123, 196, 224,
(ABCs) status 39–40	278
as Canadian Rangers 24–5, 30	defining the Arctic 95
and hunting 42, 44–5	on environmental change 4–5
Impact Benefit Agreements 24 rights of 41–2, 44–5, 67, 242	and Inuit cultural integrity 83 Arctic Domain Awareness Center
see also indigenous populations	(ADAC) 116–17
adventure tourism 107	Arctic Human Development Report (2004) 5
aerospace	Arctic Ocean 5, 93–4, 96, 101, 107, 161, 218
and border inspection facilities 135, 145–6	Arctic occair 3, 93—7, 90, 101, 107, 101, 218 Arctic peoples' conference (1973) 71
during Second World War 158	Arctic regions 143–4
security 101, 163–4	accessibility of 98
see also aviation	climate 95, 270
'agency' 238	colonisation of 235–6
air borders 145–6	as 'community of communities' 204–5
see also aerospace	contamination of 4, 24
airports 145–6, 163–4	defining 95
Akins v. Saxbe (1974) 47	exploitation of 100
Alaska 130, 261, 272, 316–18	geographical situation 44, 95
49th Parallel 44	infrastructure 98, 108–9, 121, 155
oil drilling in 30	investment in 160, 209, 267–9
and Territorial North 135–40	melting ice 29–30, 93, 98, 103, 107, 147,
Alaska-Canada Highway 27, 136-7, 158	266–8, 270
Alaska Native Claims Settlement Act (ANCSA)	natural resources 102
(1971) 105–6, 205	physical environment 96-7, 103-4
Alaska-Siberian Air Road 158	population 5, 95–6
albedo effect 6	raising awareness of 131
Alberta 143	rapid environmental transformation 6
Alcan 137	threats to 4–5, 94–5, 99, 109–10, 119–20,
Aleutian Islands Campaign 101	291
Allen, J. 203	as trading route 30
American Declaration on the Rights of	warming of 94, 98, 103, 160, 203, 267,
Indigenous Peoples (2016) 78	270
American Indians born in Canada (ABCs)	as 'zone of peace' 200
bloodline requirements 37-40, 49	Arctic Research Laboratory (ARL) 158
cross-border mobility 35–51	Arctic Risk Management Network
deportation of 37	(ARMNet) 310–22
eligibility for 37–40	Arctic Shipping Electronic Commercial
Inuit as 45	Clearances Program (ASECC) 149
passports 49	Arctic sustainment package 124
rights of access 35-8	Arctic Waters Pollution Prevention Act
see also indigenous populations	(1970) 201
Anchorage 144, 261	Arctic Winter Games 81–2
earthquake (1964) 296	Attu 158

aviation 163–4	Calder decision 244
see also aerospace	Canada 141
Axworthy, L. 204	Arctic Foreign Policy 29–30, 33
	border building 25–6, 31–2
Bald and Golden Eagle Protection Act	see also borders
(BGEPA) 48	challenges to historic Arctic claims 29–30
Barents Sea 107	Constitution Act (1867) 39–40
Barnes, J. 215	Constitution Act (1982) 41
bathymetry, Arctic Ocean 96	as custodian of Arctic 30
Bay of Bengal 272	'North First' approach 209–10
Beaufort Sea 107, 137, 216, 218, 221,	Operation Muskox (1946) 26, 27
226	right to enter 40–1, 141
Beaufort Sea Partnership 224–9	see also cross-border mobility
Beaver Creek 136–7, 139, 140, 144 Belt and Road Initiative 111	sovereignty and territorial limits 23,
	26–32, 177, 193–4, 201–2, 209 St. Book, 22, 26, 28
Berger, T. 211 Paring Strait 06, 101, 117, 209	St. Roch 23, 26, 28 Territorial North 135
Bering Strait 96, 101, 117, 208 Berkes, F. 222–3	traditional security operators 5
Berlin Wall, fall of 3	United States border 27, 135, 171
Beyond the Border framework (2011)	see also borders
171–84	Canada-US North Warning System 104
bilateral defence arrangements 24	Canadian Alliance party 194
binational relationships 24, 28	Canadian Border Services Agency
Blackfeet tribe 48	(CBSA) 134, 138–9, 141–2, 144–9, 274
bloodline requirements, for American Indians	Canadian Rangers 24–5, 27–8, 30, 130, 279
born in Canada (ABCs) 37–40, 49	carbon dioxide (CO ₂) 103
Boos, G. 35	caribou 81
borders	Caron, F. 50, 140-2
air 145-6	Caspian Sea 161
boundary surveys 136	Certificate of Indian Status 48
cross-border mobility 35-51, 69, 75-9,	Chater, A. 188
137–43, 197	China see People's Republic of China (PRC)
customs and immigration 134, 137, 143,	Chukchi Sea 107
148–9	Chukota 69
customs duties 47	circumpolar regions see Arctic regions
dividing communities 139–40	civil society 236
establishing 25–6, 31–2	climate change 119, 266–7, 270, 272–3, 289
exploitation of 99	risks to circumpolar regions 4–5, 6,
geographic nature of 23	216–19, 289–93
inspection stations 136–7, 144–5 land crossings 135–40, 142	and vulnerability 216–19 'climate migrants' 272–3
managing 134–7, 171–84	Coast Guard 94, 99, 147, 157, 265
maritime 29, 135, 146–7, 180–2	coastlines 218
open 273	coastal slumping 6
and passports 49, 69, 139, 197	erosion of 104, 316–17
as physical structures 27, 32	weather severity 94, 103–4
reimagining 237	see also continental shelf
security 134, 144–5, 148–51, 273	Cold War 4-5, 26-8, 30, 71, 101, 110-11,
shifting 24	159, 200, 202, 220, 223
stakeholders 183–4	collaborative approaches
and tourism 138, 144, 145-6	to environmental challenges 122
unique nature of 25, 135	to governance 221–9
see also human trafficking	to resource management 112
boundary surveys 136	to security 121, 207
see also borders	colonialism 235–8, 317
British colonial period 27	colonisation 235–6
British Columbia 135–7, 240	commerce see trade and commerce
GasLink pipeline 24	consent, right to 74
rights to hunt in 42	Constitution Act (1867) 39–40
British Columbia Court of Appeal (BCCA),	Constitution Act (1982) 41
R. v. Desautel (2017) 42	contamination
Bromfield, N. 260	of Arctic regions 4, 24
Brundtland Report 3–4 Brunet-Jailly, E. 227, 238	see also pollution continental shelf 192–4
buffer zone 3	Convention on International Trade in
Byers, M. 192	Endangered Species (CITES) 82–3
-,,/-	

Copenhagen School, five security sectors 175–80 crime drug smuggling 119 organised 121 see also human trafficking; law enforcement cross-border cooperation 85 governance 215 mobility 35–51, 69, 75–9, 137–43, 197 trade 47	environment rapid transformation of 6 and security 7, 110, 178–9 see also climate change; disaster response (DR); global warming 'environmental refugees' 271–3 Eric Nielsen International Airport 145 Eskimo see Inuit communities Europe, and colonisation 236 Everett, K. 134, 143, 171 exclusive economic zone (EEZ) 110
see also borders	Fathali, H. 35
cruise ships 124, 148, 269-70	Federal Bureau of Investigation (FBI) 6
Crystal Serenity 107–8	5–6
cultural traditions	'Fee per Barrel' contracts 248–9
erosion of 44, 48	Finland 44
and trade 47–9	First Nations communities see indigenous
customs and immigration 134, 137, 143,	populations
148–9	fishing 107, 140, 268
customs duties 47	illegal 94
cutters 157	Flanagan, T. 236–7
cyber security 113	food
Dangeli, M. 43	ecosystems 104 security 83
Daniels v. Canada (2013) 39–40	sovereignty of 82
Daylu Dena Council 140	see also hunting; trade
DDT (dichloro-diphenyl-trichloroethane) 4	food web, changes to 104
Deepwater Horizon, oil spill 300	forest fires 104
Delta Air Lines Flight 128 (2018) 163	formal disaster governance (FDG) 290,
Demarcation Point 155	294–8, 300
Dempster Highway 137	Foucault, M. 227
Denmark 44, 46, 67, 106, 190-1, 264-5	Francis v. The Queen (1956) 41
deportation, of American Indians born in	Fraser crossing 136, 138, 144
Canada (ABCs) 37	freedom
Desautel, R. 42 see also R. v. Desautel (2017)	of expression 78 of movement
Deskaheh 70–1	see cross-border mobility
Deutsch, K. 27	Fukuyama, F. 3
Diabo, P. 37	funding, government services 245–8
disaster response (DR) 94, 113, 147-8, 271	fur seals 100
disaster risk reduction (DRR) 309-22	
disaster risk reduction and response	Gaetan, E.K. 278
(DRR/R) 289-303	Garland, A. 309
Distant Early Warning (DEW) Line 3, 28, 158,	gas
219, 223	in Greenland 194–6
'Doctrine of Discovery' 236	and investment 268
drug smuggling 119 Duda, P.I. 289	see also liquefied natural gas (LNG) GasLink pipeline 24
Dutch Harbour 158	Gen, M. 93, 116
Dutch Harbour 150	geopolitics 23, 26, 119
eagle feathers, trade in 48	globalisation 215, 221–2
Easton, N. 136, 139	and shifting borders 24
ecology, historical 309	global warming 6, 94, 98, 103, 160, 203, 267,
economics 238–51	270
investment in Arctic regions 160, 209, 267–9	Goodwin v. Karnuth (1947) 38 Gorbachev, M. 200
and security 179-80	governance
taxation 245–9	and 'agency' 238
transfer payments 235, 245–6, 248–51,	collaborative approaches to 221-9
254, 255	cross-border 215
Edwardsen, C. 74	funding for 245–8
Ekéus, R. 207 Electronic Travel Authorisation (eTA) 69	multi-level 219–23 self-governance 243–6
endangered species see protected species	shared 105–6
energy infrastructure 239–43	transnational 24
=-	

Great Britain 35–7, 72, 197	Indigenous and Tribal Peoples Convention
boundary surveys 136	(1989) 77
and colonisation 235–6	indigenous populations 39–41, 44
Great Wall of China 27	bloodline requirements 37–40, 49
Greenland 70, 102, 106, 188–98, 264, 268	ceremonies and traditions 68–9, 139
Griffiths, F. 204	and citizenship 36–7
guns, and indigenous traditions 139	cross-border mobility 35–51, 69, 75–9, 137–43, 197
Hadrian's Wall 27	cultural traditions 44, 48, 81–2, 105,
Haines 137, 144	123-4, 140-1
Hans Island 190–1	discrimination of 73
Harper, S. 193–4, 205, 210	divided communities 139–40
Hataley, T. 23	of French-Canadian origin 39
Haudenosaunee 70	history 70, 79, 100, 105
hazardous chemicals 113	and hunting 42, 44–5, 68, 139–40, 225
see also pollution	identification cards 142
healthcare 202	identity of 44, 140–1
HERMYS project 310–22	infrastructure needs 83
historical ecology 309	Inuvialuit 221
Holshouser, T.D. 155	Lakes Tribe of the Colville Confederated
Homeland Security, US Department of 5, 49,	Tribes 42
93, 116, 134	land rights of 39–40, 75, 82–5, 149–50,
Hoogensen, G. 278	205–6, 225, 244
Hooghe, L. 222	languages 43, 70
Hopson, E. 67, 71, 83	Métis 39–40
Hudson Bay 171	and migration 271–3
Huebert, R. 191, 202	nomadic lifestyle 70
humanitarian assistance (HA) 94	as part of new narrative 30
human trafficking 7, 94, 119, 121, 260–81	passports 49, 69, 197
hunting	and protected species trade/use of 48-9,
freedom of 68	69, 105
right to 42, 44–5, 139–40, 225	rights of 7, 35–8, 41–2, 44–5, 72–3, 73–9,
subsistence 44–5, 74–5	140–2
hydrocarbons, extraction of 5	Sami people 272
hydrodynamics 121	self-determination 70, 74, 76, 84, 102,
	238, 245
ice	self-governance 243–6
coverage 103	shared governance 105-6, 221-2
melting 29–30, 93, 98, 103, 147, 266–8,	as stakeholders 183–4
270	trade and commerce 47–9, 78–84, 106
permafrost 94, 104, 317	Tsimshian Nation 43
reduced thickness of 107	Vuntut Gwitchin First Nation 200–1
shore-fast 94, 104	White River First Nation 139
icebreakers 109–11, 155, 160, 202, 267	see also aboriginal communities; American
Iceland 44	Indians born in Canada (ABCs); Inuit
identity politics 3	communities
Ilulissat Declaration (2008) 191	informal disaster governance (IDG) 299–302
immigration 43, 134, 150–1	information, sharing 120, 130
foreign nationals 150	infrastructure 98, 108–9, 121, 143–4, 155–60
undocumented 150–1	aviation 163–4
see also cross-border mobility	pipelines 240–3, 249
Immigration Act (1924) 36–8	shipping 161–3
Immigration and Nationality Act (INA)	telecommunications 164–5
(1952) 35, 37–8	intelligence 120, 124
Immigration and Refugee Protection Act	see also security
(2001) 40	Intelligence Reform and Terrorism Prevention
Impact Benefit Agreements 24	Act (IRTPA) (2004) 49
incentives 245–51	International Bill of Rights 76
inclusivity 112	International Cooperative Engagement
'Indians'	Program for Polar Research
Certificate of Indian Status 48	(ICE-PPR) 122
defining 38, 40	International Inuit Business Council
'and Lands reserved for the Indians' 39–40	(IIBC) 80-1
non-status 39–40, 48	International Labor Organization (ILO) 77–8
see also American Indians born in Canada	International Panel on Climate Change
(ABCs)	(IPCC) 216

Inuit Circumpolar Council (ICC) 45–7, 71–3, 80, 84, 85	Marine Mammal Protection Act (MMPA) 49 maritime
Inuit communities 39–40, 45–7	borders 29, 135, 146–7, 180–2
cultural integrity 67–86	security 94–5, 99, 119–20, 148–9, 156–7
history 70, 79	tourism 93, 147–8
language 70	transportation 107
political development 70–9	maritime domain awareness (MDA) 120
see also indigenous populations	Marks, G. 222
Inuit Nunaat 68, 70, 81	materialism 32
Inupiat 67	McCandless see United States v. McCandless
Inuvialuit 221	(1927)
Inuvialuit Final Agreement (IFA) (1984) 221,	McLawsen, G. 35
223, 225	melting ice 29–30, 93, 98, 103, 107, 147,
Inuvialuit Settlement Region (ISR) 225, 227	266–8, 270
ivory 83	Menezes, D.R. 3
1101) 00	Métis communities 39–40
Jay, J. 51	Michel, C. 208
Jay Treaty (1794) 35–58, 140–1	migration 271–3
abrogation of 37	military
Article III 36–7, 47, 79, 197	contaminated sites 24
documents 51–8	enforcement 109–10
reciprocal rights 40–3	fortifications and outposts 27, 158–60
suspension of 36	infrastructure 160
and trade 47–9	occupation 158
Jay Treaty Card 49	security 7, 176–7, 204
Johnny, D. 139-40	supply roads 27
	see also war and conflict
Kainai tribe 48	mineral
Kalaallit Nunaat 69	extraction 93–4
Kee, R. 93, 116	rights 244
Keohane, R. 219	Ministry of Indian Affairs 246
Keskitalo, H. 216-17	mobility see cross-border mobility
Kiska 158	Morton, D. 201
Kitimat 24	Mosurska, A. 309
Klondike Highway 137, 144	
Komsomolets 292, 296	National Energy Board (NEB) 242-3
	Native Americans 141, 236
Labrador 171	native tribes see American Indians born in
Lajeunesse, A. 134	Canada (ABCs); indigenous populations
Lakes Tribe of the Colville Confederated	naturalisation 37
Tribes 42	see also indigenous populations
land rights 39-40, 75, 82-5, 149-50, 205-6,	Naval Arctic Research Laboratory
244	(NARL) 158–9
'Lands reserved for the Indians' 39-40	Nicol, H.N. 3, 116, 134, 171
law enforcement 109-10, 141, 148-9	Nigeria 272
see also borders: security; human trafficking	Norman Wells Pipeline 249
League of Nations, Inuit visits to 71	North America
Leuprecht, C. 23	complex security issues 6
Lilly Endowment 67, 83	differing nature of the North 25
liquefied natural gas (LNG) 111, 124	'southern paradigms' 25
Little Gold Creek 136–7	North American Aerospace Defense Command
Little Salmon Carmacks First Nation 140	(NORAD) 24, 28, 101, 113, 121, 265
littoral zones 96, 109	North American Free Trade Agreement
Lloyd's of London, on Arctic investment 267,	(NAFTA) (1994) 219
269	North Atlantic Treaty Organization
Locke, J. 236	(NATO) 101–2, 110, 113, 193
London, J. 204	Northern Sea Route 108, 161, 267
longitudinal coordination 208	North Pole 193
	Northwest Passage 23, 30, 93, 103, 107, 124,
Manitoba 146, 171	148, 177, 201–2, 267, 269
Maori 71	Northwest Territories 135–43
marine	Northwest Territories Provincial Nominee
ecosystems 104	Program (NTNP) 150
fisheries 107	Norway 44
mammals 104	Norwegian Sea 107
wildlife 100	nuclear weapons 24, 102

Nunavut 135, 261 Nye, J. 219	Programs and Services Transfer Agreements (PSTAs) 245
	property, preservation of 236
oceans	protected species, trade in 48–9, 69, 82–3
Arctic 5, 93–4, 96, 101, 161, 218 Atlantic 96	public goods 242–3
Indo-Pacific 161	Quebec 171
Mediterranean-Atlantic 161	C
see also maritime	racial bias, for American Indians born in
Ogen, K. 240	Canada (ABCs) 37–8
oil 234 in Greenland 194–6	Ratana, T.W. 71 reindeer 272
pollution 147–8, 273, 294	relocation 319
prices 107, 268	see also migration
spill 113, 148, 273, 292, 300	Report on First Nation border crossing issues
Old Crow 200–1, 205	(2017) 50–1
Ontario 171	resettlement 24
Operation Muskox (1946) 26, 27 organised crime 121	resources availability of 130, 194–6, 233
Organization of American States (OAS) 78	extraction of 5, 93–4, 107
Østhagen, A. 207	as investment opportunities 268
Ottawa 223	management of 112
Ottawa Declaration (1996) 95, 265	see also oil; petroleum
Our Common Future (1987) 3–4	Riddell-Dixon, E. 193–4
Paasi, A. 31	rights see indigenous populations: rights of; United Nations: Declaration on the
passports 49, 69, 139, 197	Rights of Indigenous Peoples (2007)
Peace of Paris see Treaty of Paris (1783)	risk
Pearl Harbour 158	of disaster 291–2
Penikett, T. 200	management 309
People's Republic of China (PRC) 111, 119	mitigation 119 perception 318
Arctic shipping policies 30	see also Arctic regions: threats to; disaster
Great Wall of 27	risk reduction and response (DRR/R)
'polar silk road' 30, 111	Royal Canadian Mounted Police (RCMP) 6,
Perestroika 3	234
permafrost 94, 104, 317	Russian Federation 44, 69, 102, 119, 123
Perry, M. 260 petrochemicals 107	Arctic population 96 military programmes 110
petroleum 233	Northern Sea Route 103
Pierson, P. 32	Siberian Yupik 71–2
Pikialasorsuaq Commission 85	R. v. Desautel (2017) 42, 44–5
pipelines 240–3, 249	R. v. Sparrow (1990) 41–2
Point Hope 67 Poker Creek 137	R. v. Van der Peet (1996) 41–2
polar bears 104	Sack, R. 31
'polar silk road' 30, 111	Sambo Dorough, D. 67
political issues 193-4, 204-5, 220-1	Sami people 272
'agency' 238	Saskatchewan 143
Canadian Alliance party 194	sea levels, rising 272
geopolitics 23, 26, 119 identity politics 3	seal skin 69 search and rescue (SAR) 94, 121, 123, 147,
impact on border building 31	176, 290, 293–4
realpolitik impacts 32–3	Second World War, Aleutian Islands
see also governance; sovereignty and	Campaign 101
territorial limits	Secure Certificate of Indian Status (SCIS) 142
pollution 147–8, 273, 294 population	Securitisation Theory 175 security 94–5
Arctic regions 5, 95–6	aerospace 101, 163–4
growth 4	'big picture' 97
indigenous 7	border 134, 144–5, 148–51, 273
resettlements 24	collaborative approaches to 121, 207
see also indigenous populations ports 137, 142	colonial contexts 235–7 cyber 113
see also borders: maritime; shipping	'deep conception of' 207
poverty 210, 273	and disaster response (DR) 94, 113

economic 179–80	St. Roch 23, 26, 28
environmental 7, 110	sub-Arctic regions
five security sectors 175–80	rapid environmental transformation 6
food 83	threats to 4–5
framework 210–11	see also Arctic regions
and infrastructure issues 156–7	submarine operations 123, 202
investment in 124, 156–7, 209	antisubmarine capabilities 123
law enforcement 109–10	Cold War 101
maritime 94, 99, 119–20, 148–9, 156–7	subsistence-based lifestyles 100, 105
military 204	subsistence hunting 44–5, 74–5
nature of 4	Suez Canal 161
planning ahead 124	Supreme Court of Canada (SCC)
redefining 5–7	clarification of term 'Indian' 40
scenarios 124	Francis v. The Queen 41
sharing information 120, 130 terrorism 150–1, 172	R. v. Sparrow (1990) 41–2
threats 6, 94–5, 99, 109–10, 113, 119–20	R. v. Van der Peet (1996) 41–2 surveillance 120
traditional 5–6	see also security
understanding of context 121, 200–3	Sweden 44
use of technology 120, 124	Sweden 44
self-determination 70, 74, 76, 84, 102, 238,	Taiwan Strait 33
245	Tariff Act (1897) 47
self-governance 243–4	taxation 245–9
see also governance	technology, and security 120, 124
Self-Governing Yukon First Nations	telecommunications 164–5
(SGYFN) 238-55	terra nullius (no man's land) 236
Settlement Land 241–4	Territorial North 135, 149
see also land rights; 'Lands reserved for the	see also Northwest Territories
Indians'	territory
sex work 269, 275	definitions and perspectives of 78-82
see also human trafficking	demarcation of 27
sharing information 120, 130	land rights 39-40, 75, 82-5
Shemenski, R. 208	territorial integrity 83–5
shipping 155, 161–3, 270	see also borders
cruise ships 124, 148	terrorism 150–1, 172
hazardous cargos 113, 147	Teslin Tlingit Council 140
icebreakers 109–11, 155, 160, 202, 267	thermodynamics 121
increased levels of 147–8 safe drafts 108	Tikiagaq 70 Togothar Today for our Children Tomorrow
transpolar 93, 108	Together Today for our Children Tomorrow (1977) 249, 255
see also maritime: security; Northwest	Top of the World Highway 136
Passage	tourism 107, 269
Shishmaref 319	adventure 107
shore-fast ice 94, 104	and border control 138, 144, 145-6
Siberian Yupik 71–2	cruise ships 269–70
Sinixt people 42	and human trafficking 269, 280
Skagway 137-8, 144	maritime 93, 147-8
slavery 261	unsafe 94
see also human trafficking	trade and commerce 47-9, 78-84
Sm'algyax 43	in a changing environment 106
snowmobile 26	exclusive economic zone (EEZ) 110
sovereignty and territorial limits 23, 26–32,	in protected species/wildlife 48–9, 69
177, 193–4, 201–2, 209, 236	see also customs and immigration; shipping
see also borders	trafficking, human 7, 94, 119, 121, 260–81
Soviet Union 102	Trafficking Protocol (2002) 262
see also Russian Federation	transfer payments 235, 245–6, 248–51
space-based intelligence, surveillance and	transnational energy corporations (TNCs) 239
reconnaissance (ISR) 120	transnational governance 24
Special Economic Zones (SEZs) 239–40	transpolar shipping 93, 108
sport, Arctic Winter Games 81–2	transportation 143–4, 158 see also infrastructure; shipping
Spratly Islands 3, 33 SS Manhattan 201	trapping 140
SS Revenue Cutter Bear 157	see also hunting
stakeholders 183–4, 222–3	Treadwell, M. 155
see also governance	Treaty of Ghent (1815) 36, 47
Stevenson, C. 191–2	Treaty of Paris (1783) 36
•	÷

Treaty of Waitangi (1840) 71	walrus 100, 104
Tr'ondëk Hwëch'in First Nation 140	ivory 69
Tsimshian Nation 43	war and conflict in the Arctic regions 101-2,
Tuktoyaktuk 137, 146	110–11, 158–60
Two Row Wampum 71	Cold War 4-5, 26-8, 30, 71, 101, 110-11
I I h II - Ei I A (I IEA)	159, 200, 202, 220, 223
Umbrella Final Agreement (UFA)	Second World War 101, 158
(1990) 239–44	see also military
undocumented immigration 150–1	warming, of Arctic regions 94, 98, 103, 160,
Union of Soviet Socialist Republics	203, 267, 270
(USSR) 101–2	War of 1812 36
Unist'ot'en clan 241	Washington, G., on Jay Treaty (1794) 56
United Nations	Washington-Alaska Military Cable and
Convention on the Law of the Sea	Telegraph System (WAMCATS)
(UNCLOS) (1994) 29, 107, 161, 192–3,	157–8
207	Watt v. Liebelt (1998) 42
Declaration on the Rights of Indigenous	weather
Peoples (UNDRIP) (2007) 50, 68, 73–8,	disaster risks 292
84, 183, 238	severe 94, 103–4, 270, 292
Economic and Social Council	Weller, M. 84
(ECOSOC) 73	Wells, P. 194
General Assembly (UNGA) 73	Western Hemisphere Travel Initiative
Working Group on Indigenous Populations	(WHTI) 49
(WGIP) (1982) 73	Westphalian state system 24, 27, 32, 135,
World Tourism Office 280	235–7
United States	Wet'suwet'en territory 240–1, 250
border inspection stations 136–7	whales 100
boundary surveys 136	and Inuit culture 74
Canadian border 27, 171	White River First Nation 139–40, 140
see also borders	Whitney Lackenbauer, P. 134
Department of Homeland Security 5, 49,	wildlife
93, 116, 134	management 225
Federal Bureau of Investigation (FBI) 6 5-6	marine 100, 104
Revenue Cutter Service 157	threats to 104
security agencies 121	trade in protected species 48-9, 69, 82-3
War of 1812 36	Wildlife Act (2008) 42
US v. Garrow 47	Williams, P. 116
US v. McCandless (1927) 37	Williston 268–9
Utqia ģ vik 316–21	Wilson, N. 233
Utqia ġ vik Declaration (2018) 81–2	women, and sexual violence 269
VJJ 101 2	Working Group on Indigenous Populations
Vaedderen 191–2	(WGIP) (1982) 73
Vanderklippe, N. 276	X 1 105 45 150 151 004 5 000 46
Van der Peet see R. v. Van der Peet (1996)	Yukon 135–45, 150, 171, 234–5, 238–46
vulnerability	Yukon First Nation see Self-Governing Yukon
defining 216–17	First Nations (SGYFN)
impact of 219–21	(, , , , , , , , , , , , , , , , , , ,
Vuntut Gwitchin First Nation 200–1	'zone of peace' 200

The North American Arctic addresses the emergence of a new security relationship within the North American North. It focuses on current and emerging security issues that confront the North American Arctic and that shape relationships between and with neighbouring states (Alaska in the US; Yukon, Northwest Territories and Nunavut in Canada; Greenland and Russia).

Identifying the degree to which 'domain awareness' has redefined the traditional military focus, while a new human rights discourse undercuts traditional ways of managing sovereignty and territory, the volume's contributors question normative security arrangements. Although security itself is not an obsolete concept, our understanding of what constitutes real human-centred security has become outdated. The contributors argue that there are new regionally specific threats originating from a wide range of events and possibilities, and very different subjectivities that can be brought to understand the shape of Arctic security and security relationships in the twenty-first century.

The North American Arctic provides a framework or lens through which many new developments are assessed in order to understand their impact on a changing circumpolar region at different scales – from the level of community to the broader national and regional scale.

Dwayne Ryan Menezes is Founder and Managing Director of Polar Research and Policy Initiative (PRPI) and Honorary Fellow at the UCL Institute of Risk and Disaster Reduction.

Heather N. Nicol is Professor in the School of the Environment and Acting Director of the School for the Study of Canada at Trent University (Canada).







Cover image:
© arctic-tern / iStock
Cover design:
www.ironicitalics.com