2020-03

EXAMINING CHINA'S POLAR SILK ROAD

Hedrick, Lance A.

Monterey, CA; Naval Postgraduate School

NAVAL POSTGRADUATE SCHOOL

MONTEREY, CALIFORNIA

THESIS

EXAMINING CHINA'S POLAR SILK ROAD

by

Lance A. Hedrick

March 2020

Thesis Advisor: Michael A. Glosny
Second Reader: James C. Moltz

THIS PAGE INTENTIONALLY LEFT BLANK

REPORT DOCUMENTATION PAGE			Form Approved OMB No. 0704-0188

1. AGENCY USE ONLY *(Leave blank)*	2. REPORT DATE March 2020	3. REPORT TYPE AND DATES COVERED Master's thesis

4. TITLE AND SUBTITLE EXAMINING CHINA'S POLAR SILK ROAD	5. FUNDING NUMBERS
6. AUTHOR(S) Lance A. Hedrick	
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) Naval Postgraduate School Monterey, CA 93943-5000	8. PERFORMING ORGANIZATION REPORT NUMBER
9. SPONSORING / MONITORING AGENCY NAME(S) AND ADDRESS(ES) N/A	10. SPONSORING / MONITORING AGENCY REPORT NUMBER

11. SUPPLEMENTARY NOTES The views expressed in this thesis are those of the author and do not reflect the official policy or position of the Department of Defense or the U.S. Government.

12a. DISTRIBUTION / AVAILABILITY STATEMENT Approved for public release. Distribution is unlimited.	12b. DISTRIBUTION CODE A

13. ABSTRACT (maximum 200 words)

China's January 2018 Arctic White Paper formally introduced the concept of a Polar Silk Road as a piece of the larger Belt and Road Initiative, while announcing China as a near-Arctic state. This thesis analyzes four areas China stated in the white paper as goals in the Arctic—scientific research, shipping routes, resource utilization, and Arctic governance—and attempts to answer the question, Has China's behavior in the Arctic over the past decade been consistent with the cooperative policy toward these four areas as stated in the white paper? China's behavior related to the four policy areas is examined with regard to each of the eight Arctic states, which make up the Arctic Council forum. The thesis finds that as China seeks to capitalize on the retreating polar ice of the Far North, its behavior has been mostly consistent with its stated cooperative goals, but Beijing's actions and the language of the white paper also lay a foundation for a more competitive policy in the future. China regards the Arctic as a global commons and wishes to promote the rights of non-Arctic states, which would potentially challenge the sovereignty of Arctic states. A more aggressive Chinese policy in the Arctic would also have implications for the U.S., which already views China as a strategic competitor in the region. The thesis concludes that while great power conflict in the Arctic is not inevitable, it is also unlikely that China's cooperative Arctic policy will continue indefinitely.

14. SUBJECT TERMS China, Russia, Arctic, Belt and Road Initiative, Polar Silk Road	15. NUMBER OF PAGES 101
	16. PRICE CODE

17. SECURITY CLASSIFICATION OF REPORT	18. SECURITY CLASSIFICATION OF THIS PAGE	19. SECURITY CLASSIFICATION OF ABSTRACT	20. LIMITATION OF ABSTRACT
Unclassified	Unclassified	Unclassified	UU

NSN 7540-01-280-5500

Standard Form 298 (Rev. 2-89)
Prescribed by ANSI Std. 239-18

THIS PAGE INTENTIONALLY LEFT BLANK

Approved for public release. Distribution is unlimited.

EXAMINING CHINA'S POLAR SILK ROAD

Lance A. Hedrick
Civilian, State Department
BA, University of Virginia, 1996
MA, College of William & Mary, 1999

Submitted in partial fulfillment of the
requirements for the degree of

MASTER OF ARTS IN SECURITY STUDIES
(FAR EAST, SOUTHEAST ASIA, THE PACIFIC)

from the

NAVAL POSTGRADUATE SCHOOL
March 2020

Approved by: Michael A. Glosny
Advisor

James C. Moltz
Second Reader

Afshon P. Ostovar
Associate Chair for Research
Department of National Security Affairs

THIS PAGE INTENTIONALLY LEFT BLANK

ABSTRACT

China's January 2018 Arctic White Paper formally introduced the concept of a Polar Silk Road as a piece of the larger Belt and Road Initiative, while announcing China as a near-Arctic state. This thesis analyzes four areas China stated in the white paper as goals in the Arctic—scientific research, shipping routes, resource utilization, and Arctic governance—and attempts to answer the question, Has China's behavior in the Arctic over the past decade been consistent with the cooperative policy toward these four areas as stated in the white paper? China's behavior related to the four policy areas is examined with regard to each of the eight Arctic states, which make up the Arctic Council forum. The thesis finds that as China seeks to capitalize on the retreating polar ice of the Far North, its behavior has been mostly consistent with its stated cooperative goals, but Beijing's actions and the language of the white paper also lay a foundation for a more competitive policy in the future. China regards the Arctic as a global commons and wishes to promote the rights of non-Arctic states, which would potentially challenge the sovereignty of Arctic states. A more aggressive Chinese policy in the Arctic would also have implications for the U.S., which already views China as a strategic competitor in the region. The thesis concludes that while great power conflict in the Arctic is not inevitable, it is also unlikely that China's cooperative Arctic policy will continue indefinitely.

THIS PAGE INTENTIONALLY LEFT BLANK

TABLE OF CONTENTS

THIS PAGE INTENTIONALLY LEFT BLANK

LIST OF FIGURES

THIS PAGE INTENTIONALLY LEFT BLANK

LIST OF TABLES

THIS PAGE INTENTIONALLY LEFT BLANK

LIST OF ACRONYMS AND ABBREVIATIONS

BRI	Belt and Road Initiative
CAA	China Arctic and Antarctic Administration
CNARC	China-Nordic Arctic Research Center
CNOOC	China National Offshore Oil Corporation
CNPC	China National Petroleum Corporation
COSCO	China Ocean Shipping Company
COSL	China Oilfield Services Limited
EEZ	Exclusive Economic Zone
LNG	Liquefied Natural Gas
NDRC	China National Development and Reform Commission
NSR	Northern Sea Route
OBOR	One Belt One Road
PNEC	China's Polar Navigation and Equipment Committee
PRIC	Polar Research Institute of China
PSR	Polar Silk Road Initiative
RFE	Russian Far East
SINOPEC	China Petroleum and Chemical Corporation
SOA	China's State Oceanic Administration
UNCLOS	United Nations Convention on the Law of the Sea

THIS PAGE INTENTIONALLY LEFT BLANK

EXECUTIVE SUMMARY

With China's January 2018 publication of a white paper on Arctic policy, the Chinese government outlined its goals for creating a "Polar Silk Road." The white paper explained China's national interests in the Arctic region and declared China to be a "near-Arctic state." Although the white paper was meant to better clarify China's policies toward the Arctic, some scholars have speculated that the terminology used could signal more ambitious geopolitical motives by the Chinese. Other scholars have noted that the stated economic and scientific priorities in the white paper are exactly that, a practical policy designed to take advantage of the opportunities arising from climate change and melting sea ice rather than a strategy meant to challenge the sovereignty of Arctic nations. This thesis examines China's activities and behaviors in relation to the Arctic, in order to determine if China has acted in a consistent manner with the cooperative policy stated in the white paper, or if Chinese actions have been inconsistent with this policy. Thus, the thesis analyzes Chinese actions over the past decade against the policy goals laid out in the white paper itself, which consist of scientific research, shipping routes, resource utilization, and Arctic governance. This thesis then analyzes how the Polar Silk Road fits within the larger Chinese Belt and Road Initiative (BRI), and the accompanying foreign partnerships established as a result. Having done this research, the thesis returns to the scholarly debate between the Cooperation and Conflict schools of thought on China's geostrategic interests, and whether to view the Polar Silk Road as threatening or opportunistic. The thesis finds that Chinese actions towards the Arctic have been mixed, with mostly consistent behavior but some inconsistencies as well. While not currently threatening Arctic sovereignty, Beijing is laying a legal foundation for the Arctic as a global commons, which brings the potential for a more competitive Chinese Arctic policy in the future. The thesis recommends that the United States would benefit from greater diplomatic resources focused on the Arctic, including filling the vacant role of U.S. special representative to the Arctic.

THIS PAGE INTENTIONALLY LEFT BLANK

ACKNOWLEDGMENTS

There are several people who deserve credit for their assistance in creating this thesis, and whom I wish to thank for their support.

First, I would like to thank the faculty in the National Security Affairs Department of the Naval Postgraduate School, as well as the staff of the Dudley Knox Library. In particular, I would like to thank Robert Looney for helping with my concept of this thesis and the chapter on energy, Christopher Twomey for his assistance on Chinese foreign policy, and Greta Marlatt for her help with my initial research.

Next, I very much appreciate the guidance and feedback from my advisor Michael Glosny and my second reader James Clay Moltz. Each were invaluable in making my idea for a thesis covering the Polar Silk Road a reality.

Finally, I am thankful for the unwavering support of friends and family throughout the writing of this thesis, and especially that of my wife Michele, who was a constant source of encouragement.

THIS PAGE INTENTIONALLY LEFT BLANK

I. INTRODUCTION

> "The region has become an arena for power and for competition, and the eight Arctic states must adapt to this new future."
>
> — U.S. Secretary of State Michael Pompeo, speaking to the Arctic Council in May 2019.[1]

In the summer of 2012, the Chinese icebreaker *Xue Long* (Snow Dragon) became the first Chinese ship to cross the Arctic Ocean from Asia to Europe via the Northern Sea Route. This passage along the Russian coast was possible due to melting sea ice resulting from climate change. The accelerated decline of ice in the Arctic allowed the China Ocean Shipping Company (COSCO) commercial vessel *Tian'en* to sail the same route in 2018, cutting several thousand kilometers off a journey between Shanghai and Europe.[2] Newly opening commercial sea lanes along with access to mineral resources and hydrocarbons are making the Arctic region more enticing to non-Arctic states such as China. But this growing Chinese interest in the Arctic has also raised concerns and uncertainties among Arctic states over a new actor in the region. This thesis will examine Chinese Arctic behavior and interests along what China now refers to as the "Polar Silk Road."

With the publication of China's January 2018 Arctic White Paper, the Chinese government outlined its goals for creating a Polar Silk Road. The white paper described China's national interests in the Arctic region and declared China to be a "near-Arctic state."[3] Yet, Chinese behavior in the Arctic predated the white paper and has been subject to scholarly debate over the past decade. Some scholars have speculated that Chinese

---

[1] Michael R. Pompeo, "Looking North: Sharpening America's Arctic Focus," U.S. Department of State, May 6, 2019, https://www.state.gov/looking-north-sharpening-americas-arctic-focus/.

[2] See Petra Dolata, "A Global Arctic? Chinese Aspirations in the North," *Canadian Global Affairs Institute,* Policy Perspective (October 2018): 3; Asia Times Staff. "Arctic Ice Route is China's New Maritime Silk Road to Europe," *Asia Times* (September 3, 2018): 1; Economist Staff, "Briefing: China's Belt and Road Initiative," *The Economist* (July 28, 2018): 13–14.

[3] State Council Information Office of the People's Republic of China, "China's Arctic Policy," January 26, 2018, 3, http://english.gov.cn/archive/white.paper/2018/01/26/content.

behavior in the Arctic signals more ambitious geopolitical motives by the Chinese.[4] Other scholars have noted that Chinese behavior in the region represents a cooperative policy designed to take advantage of the economic opportunities arising from climate change and melting sea ice.[5] These arguments mirror those for the larger Belt and Road Initiative (BRI) which is the model for the Polar Silk Road. This thesis uses the 2018 Arctic White Paper as a framework to assess consistency between China's stated goals and actual behaviors in the Arctic to answer the question, has China's behavior in the Arctic over the past decade been consistent with the Arctic White Paper policy goals? If China's behavior has been inconsistent with its stated policy goals, what then would this mean for China's geostrategic aims in the Arctic and what are the implications for other Arctic powers such as Russia and the United States?

To understand China's Polar Silk Road, it is important to take a closer look at the policy areas laid out in the 2018 Arctic White Paper itself, which consist of scientific research, shipping routes, resource utilization, and Arctic governance. The areas include the significant economic investments China is making throughout the Arctic region, primarily in the energy sector, as well as the role China is playing in Arctic governance, as an observer state to the Arctic Council. This thesis examines each of these policy areas along with China's actual behavior in the Arctic to determine where the behavior has been consistent with China's stated goals of cooperation and "win-win result," and where the behavior has diverged from stated Chinese goals.[6] As part of this assessment, the thesis considers how the Polar Silk Road is modeled off of the broader BRI, and what comparisons can be made between the two, such as issues of debt diplomacy and expansionist behavior. In particular, the thesis examines the debate between the Cooperation School and Conflict School of BRI scholars, and how these schools of thought influence similar regional responses to the Polar Silk Road. The thesis also assesses the

[4] Yun Sun, "The Intricacy of China's Arctic Policy" (Washington, DC: Stimson Center, Aug 28, 2018): 1, www.stimson.org/content/intricacy-chinas -arctic-policy.

[5] Frederic Lasserre, Linyan Huang, and Olga Alexeeva, "China's Strategy in the Arctic: Threatening or Opportunistic?" *Polar Record,* Vol. 53 (October 2015): 31.

[6] State Council Information Office of the People's Republic of China, 4.

partnerships China is making along the Polar Silk Road, in particular with Russia as these two great powers seek to capitalize on the climate change and retreating polar ice of the far north.

A. RESEARCH QUESTION AND MAJOR FINDINGS

The main research question of this thesis asks whether China's behavior in the Arctic has been consistent with the stated policy goals of the Arctic White Paper, and the significance of this research question rests in the global great power competition now extending into the more accessible Arctic region. The Polar Silk Road initiative firmly brings a rising China into the sphere of current Arctic powers Russia and the United States. Chinese President Xi Jinping first declared in 2014 that China intended to be a "polar great power," even though China geographically is at least 900 miles from the Arctic.[7] More recently, U.S. Secretary of State Michael Pompeo remarked in advance of the 2019 Arctic Council meetings that both China and Russia have shown aggressive policies in the Arctic that "deserve the special attention of this Council."[8] Both President Xi and Secretary Pompeo's remarks highlight the already increased geopolitical competition in the Arctic region, which in turn makes the question of Chinese behavior along its Polar Silk Road worthy of research. In addition, this research question adds to recent scholarship on Chinese Arctic policy, while expanding existing literature analyzing the 2018 Arctic White Paper. A number of relevant academic articles and books review Chinese Arctic policy of the past decade, along with Chinese relations with Arctic Council states. But little scholarship thus far has focused on the white paper and subsequent actions of China after declaring itself a "near-Arctic state."[9] This thesis updates existing scholarship on Chinese Arctic policy while adding new analysis to the topic via focus on whether Chinese behavior in the Arctic is consistent with the 2018 Arctic White Paper.

---

[7] Anne-Marie Brady, *China as a Polar Great Power* (Cambridge: Cambridge University Press, 2017), 3.

[8] Michael R. Pompeo, "Looking North: Sharpening America's Arctic Focus," May 6, 2019.

[9] State Council Information Office of the People's Republic of China, 3.

Three hypotheses emerge to explain the consistency of Chinese behavior with Chinese goals in the Arctic. The first hypothesis is that China's behavior and actions in the Arctic are consistent with its stated policy goals to play a cooperative status quo role in Arctic governance. This hypothesis draws on the theme of China pursuing a practical, opportunistic policy in the Arctic focused on economic gain. The second hypothesis is that China's behavior and actions are inconsistent with its policy goals and that China is seeking to become a revisionist power in the Arctic. This hypothesis draws on the theme of geopolitical intent, and China's need to control strategic resources and shipping lanes while seeking greater influence in the Arctic. A third hypothesis is that China's actions are mostly consistent with stated goals in the Arctic but along with this cooperative policy is a competitive intent to stake a larger claim in the region. This hypothesis acknowledges Chinese behavior thus far as status quo, but at the same time laying a foundation for a potentially more assertive revisionist policy in the future.

This thesis finds that the third hypothesis of mixed behavior best fits China's Arctic policy over the past decade. While China's actions related to the Arctic have been mostly consistent with the cooperative, win-win policies of the white paper, Beijing has also been laying a foundation for a more competitive policy in the future. In each of the four policy areas of scientific research, shipping routes, resource utilization, and Arctic governance is an underlying foundation for a more competitive policy, but especially in Arctic governance China wants a larger role deserving of a great power. The language of the white paper itself focuses on the rights of non-Arctic states and sets up a potential "global commons" argument for greater access to sea lanes and natural resources in the region. Should China choose to advance internationalizing the Arctic its behavior would be inconsistent with its current cooperative policy, but it would also be consistent with the vague language of the white paper. Overall, this more competitive policy is not inevitable, but neither is it unlikely, and the Arctic states need to be mindful of this possibility.

B. LITERATURE REVIEW – BELT AND ROAD INITIATIVE

China's One Belt, One Road Initiative (OBOR), or more commonly known as the BRI, was announced in 2013 by President Xi Jinping as a program to link China to Europe and other markets via land and sea. From the start, both scholars and western governments were skeptical of Chinese intentions to invest heavily in its neighbors, fearing a geopolitical strategy to turn Eurasian countries into tributary states. Others viewed the BRI as a reasonable means to provide needed infrastructure development to countries in need of the financial assistance.[10] These opposing schools of thought and associated literature can be classified as the Conflict School and the Cooperation School.[11]

The Cooperation School argues that the BRI is primarily a geoeconomic program. Scholars such as Peter Cai assert that, "focusing on the geopolitical dimensions of OBOR obscures its principally geoeconomic drivers."[12] This school acknowledges geopolitical aspects of BRI, but argues that there is no master-plan on the part of the Chinese government to threaten the sovereignty of participating BRI states. Overall, the Cooperation School views Chinese BRI goals to be the ones listed in the 2015 Silk Road White Paper, which highlights "win-win cooperation."[13]

In contrast, the Conflict School argues that there is a significant geopolitical component to the BRI. Scholars such as Joel Wuthnow suggest that official Chinese commentary on the BRI downplays strategic benefits, and that, "avoiding discussion of the Initiative's strategic rationale helps to reduce suspicions of China's intentions."[14] This

---

[10] Economist Staff, "Briefing: China's Belt and Road Initiative," *The Economist* (July 28, 2018): 13–14.

[11] See P. Whitney Lackenbauer, Adam Lajeunesse, James Manicom, and Frederic Lassere, eds. *China's Arctic Ambitions and What They Mean for Canada* (Calgary: Calgary University Press, 2018): 9–12.

[12] Peter Cai, "Understanding China's Belt and Road Initiative," *Lowy Institute for International Policy* (March 22, 2017): 1–3.

[13] State Council Information Office of the People's Republic of China, "Vision and Actions on Jointly Building Silk Road Economic Belt and 21st-Century Maritime Silk Road," March 28, 2015.

[14] Joel Wuthnow, "Chinese Perspectives on the Belt and Road Initiative: Strategic Rationales, Risks, and Implications," Center for the Study of Chinese Military Affairs, Institute for National Strategic Studies, China Strategic Perspectives, no. 12 (National Defense University, October 2017):1-7.

school views China's behavior on geostrategic terms, seeking greater influence in weaker Eurasian countries through a strategy of debt diplomacy.[15]

Recent literature has noted growing evidence of the Conflict School's interpretation of BRI as "ultimately a vehicle for China's geopolitical ambitions."[16] For instance, there are several examples of states that chose to cancel or scale back projects based on the costs or concerns over paying back Chinese loans. The most referenced example of this being Sri Lanka's recent decision to give China a 99-year port lease after being unable to repay infrastructure loans.[17] There have been similar cases worldwide involving railways, mines, and pipelines which the Conflict School would argue shows a systematic geostrategic program to gain influence or territory via economic means. As the Arctic White Paper ties the Polar Silk Road program to the BRI, many of the goals listed in the Silk Road White Paper correspond to those in the Arctic White Paper. Thus, the Conflict School views the Polar Silk Road in the same terms as the BRI, with an unstated but primarily geopolitical aim.

C. LITERATURE REVIEW – POLAR SILK ROAD

There is much scholarship on Chinese Arctic policy prior to the Arctic White Paper, which this thesis draws upon to better determine the extent to which Chinese behavior is consistent with its official Arctic policy. As with the broader BRI, there is much scholarly debate on whether China's Polar Silk Road policy is an opportunistic economic initiative as the Cooperation School would argue, or a more threatening geostrategic program to control the Arctic region as the Conflict School would argue. As Kong Soon Lim points out,

> The existing literature has been divided on China's Arctic ambitions. The idealist views China as a cooperative and collaborative partner because it is in its best interest to do so. On the contrary, the pragmatist argues that

[15] See John Hurley, Scott Morris, and Gailyn Portelance, "Examining the Debt Implications of the Belt and Road Initiative from a Policy Perspective," *Center for Global Development,* CGD Policy Paper 121 (March 2018).

[16] Daniel Kliman, Rush Doshi, Kristine Lee, and Zack Cooper, "Grading China's Belt and Road," *Center for a New American Security* (April 2019): 3.

[17] Kliman, Doshi, Lee, and Cooper, 4–5.

> China's position in the Arctic are merely expressed by 'unctuous and circumlocutory diplomatic language' that are inconsistent with its practices.[18]

Thus, the Arctic literature mirrors the BRI literature in many ways as scholars seek to interpret China's Arctic investments and partnerships in light of those of the larger BRI.

Enough has been written on the political economy of China's Arctic policy to divide this scholarship into distinct themes similar to those of the BRI. Thus, the scholars who would comprise the Cooperation Group for the BRI argue that China is acting as a status quo state in its policy and behavior in the Arctic. Su Ping, Marc Lanteigne, Frederic Lasserre, and Henry Tillman are four scholars who make this argument that China views the Arctic in practical terms as a region that offers significant economic opportunity and benefits to China, and that thus far the Chinese have respected the sovereignty of Arctic states and followed the conventions of the Arctic as much as any other nation.[19]

This Cooperation Group of scholars argue that China has made clear it intends to follow the rules of the Arctic and abide by international law, while promoting cooperative policies with the Arctic states. Frederic Lasserre asserts that China's actions in the Arctic thus far are indicative of "conduct that is neither threatening nor different from that of any other international player."[20] This school of thought views Chinese opportunism as taking advantage of the natural resources and sea lanes being made accessible by climate change. Su Ping and Marc Lanteigne argue that, "there has been a tendency in western reporting and analysis to paint China's developing Arctic interests as revisionist."[21] Yet, over the last few decades China has built scientific credentials in the Arctic and up to and after the

---

[18] Kong Soon Lim, "China's Arctic Policy and the Polar Silk Road Vision," Northern Research Forum, *Arctic Yearbook 2018,* 2.

[19] See Frederic Lasserre, Linyan Huang, and Olga Alexeeva, "China's Strategy in the Arctic: Threatening or Opportunistic?," 31–42; Su Ping and Marc Lanteigne, "China's Developing Arctic Policies: Myths and Misconceptions," *Journal of China and international Relations*, vol. 3, no. 1 (December 2015): 1–25; Henry Tillman, Yang Jian, and Egill Thor Nielsson, "The Polar Silk Road: China's New Frontier of International Cooperation," *China Quarterly of International Strategic Studies, vol.* 4, no. 3 (2018): 345–362.

[20] Lasserre, Huang, and Alexeeva, 39.

[21] Ping and Lanteigne, 15.

release of the white paper has pledged to follow the status quo rules of Arctic participants. Henry Tillman, Yang Jian, and Egill Thor Nielsson note that "China had worked closely with other Arctic stakeholders even before issuing its Arctic policy."[22] In fact, Lasserre notes that it was mandatory that China recognize the sovereignty and jurisdiction of Arctic countries when China was granted observer status on the Arctic Council.[23] In addition, China has not actively sought to challenge the sovereignty of the Arctic states since the white paper was published, and has in fact sought cooperation with them. Ping and Lanteigne add that, "although China is a newcomer in the Arctic Council, the country has a long history of cooperating with Arctic institutions."[24] This Arctic Cooperation Group all paint China's Arctic interests in a collaborative manner, consistent with the "win-win" language of the Arctic White Paper.

Conversely, scholars who would comprise the Conflict School of the BRI literature argue for a more revisionist Chinese approach to Arctic policy. Elizabeth Wishnick, Anne-Marie Brady, David Curtis Wright, and Gisela Grieger are four scholars who make the argument that China is seeking geostrategic goals in its Arctic policy and that China wants to exert geopolitical influence over the region.[25] These scholars view China's ambitions in the Arctic as more self-serving than cooperative, and this Arctic Conflict Group believes that China seeks increased influence over the region that could threaten the current Arctic states. Elizabeth Wishnick argues that, "China is playing a long game," and that, "China is pursuing an Arctic policy that supports its grand strategy to shape the international order in such a way that China's interests as a global power are accommodated."[26] Anne-Marie

---

[22] Tillman, Jian, and Nielsson, 351.

[23] Lasserre, Huang, and Alexeeva, 35.

[24] Ping and Lanteigne, 8.

[25] See Elizabeth Wishnick, *China's Interests and Goals in the Arctic: Implications for the United States* (Carlisle, PA: U.S. Army War College Strategic Studies Institute, 2017), 1–96; Anne-Marie Brady, "China's Undeclared Arctic Foreign Policy," *Polar Initiative Policy Brief Series Arctic 2014*, Washington, DC: Wilson Center Polar Initiative, September 2014, 1–4; Gisela Grieger, "China's Arctic Policy: How China Aligns Rights and Interests," European Parliamentary Research Service, PE 620.231 (May 2018): 1–8; David Curtis Wright, *The Dragon Eyes the Top of the World: Arctic Policy Debate and Discussion in China* (Newport, RI: U.S. Naval War College China Maritime Studies Institute, 2011), 1–43.

[26] Wishnick, 59–60.

Brady suggests that, "China talks down its interests in the Arctic to foreign audiences, meanwhile talking them up to domestic audiences."[27] Brady notes that the Chinese government utilizes strategic ambiguity in its Arctic strategy and downplays its Arctic interests in what these scholars would interpret as a policy to shape global perceptions of China as a benign state in order to further China's goals in the polar region.[28] Gisela Grieger argues that, "the white paper is therefore principally intended to shape positive perceptions of China as a peaceful and cooperative partner among a foreign audience…"[29] Thus, this group of scholars has suspicions that the Arctic White Paper does not convey the actual goals of Chinese Arctic policy.

The views of this Arctic Conflict Group are summed up by Anne-Marie Brady when she claims that, "China's focus on becoming a great polar power represents a fundamental reorientation—a completely new way of looking at the world."[30] Brady argues that China has revisionist goals for the Arctic that are masked by its policy statements. David Curtis Wright adds that, "The United States should neither underestimate China's burgeoning interests in the Arctic region nor allow itself to be outdone by China."[31] Yet, China's actions in the Arctic thus far have been mostly focused on economic investments and partnerships, not on challenging the status quo of Arctic governance. However, much like the BRI examples these geoeconomic actions in the Arctic are interpreted by this group as threatening over the long term.

D. RESEARCH DESIGN AND ORGANIZATION

There are several different avenues of scholarship that require research for this thesis, including analysis of the official Chinese statements included in the 2015 Silk Road White Paper and 2018 Arctic White Paper. Academic literature discussing Chinese foreign policy is primary, particularly on Arctic policy over the past decade. For greater

[27] Brady, "China's Undeclared Arctic Foreign Policy," 3.

[28] Brady, China as a Polar Great Power, 7–8.

[29] Grieger, 3.

[30] Brady, China as a Polar Great Power, 14.

[31] Wright, 35.

background, literature on polar climate change is important as is the melting polar ice which is driving Chinese interests in the Arctic. For the body of the thesis, the white paper lays out specific policy areas which the thesis analyzes based on Chinese behavior and actions in these areas. For Chapter II of the thesis, scholarship on Chinese scientific research in the Arctic lays out the justifications China uses to claim a stake in the region, while literature on Arctic shipping lanes and the viability of passage across the Arctic Ocean is a cornerstone of Chinese economic interest in the far north. For Chapter III, the resource utilization noted in the white paper consists of the exploration and exploitation of natural resources in the Arctic, so literature on energy policy and economic investments in the region is critical. Also valuable is literature that describes the increasing Chinese partnerships with Russia beyond the energy investments, such as those in the Russian Far East and Siberia. For Chapter IV, literature on the Arctic Council and Chinese pursuit of a global commons policy in the Arctic will be utilized, with a particular focus on the legal frameworks of the region including the UN Convention on the Law of the Sea (UNCLOS). Finally, the concluding chapter will require research in each of these areas as well as U.S. and Russian Arctic policy to assess the implications of Chinese Arctic policy on the other Arctic great powers.

The 2018 Arctic White Paper is the framework for the thesis, utilizing the stated goals of the Polar Silk Road policy to compare against Chinese behavior in the Arctic. Thus, this introduction chapter has begun with an analysis of the Belt and Road Initiative as the model for the Polar Silk Road, and has discussed the climate change which is making possible China's Arctic ambitions. Chapter II analyzes China's stated goals of scientific research and utilization of newly opening Arctic shipping routes. Chapter III analyzes China's goals of resource utilization, to include economic investments and energy partnerships in the Arctic. Chapter IV analyzes China's stated views of Arctic governance and legal frameworks in the region, as both following the current structure of the Arctic Council as well as claiming a greater stake in the Arctic Ocean. Each chapter will compare the stated white paper goals with Chinese activities towards each of the Arctic states over the past decade. The concluding chapter will assess the consistency of China's behavior in the Arctic with its policy goals, including indicators of Chinese actions that would signify

a status quo or revisionist outlook towards the Arctic. Returning to the scholarly debate on China's geostrategic interests, the thesis assesses whether to view the Polar Silk Road as threatening or opportunistic. Finally, the conclusion examines the implications of China's Arctic policy and activities on the Arctic states, especially towards Arctic powers Russia and the United States, with additional recommendations for U.S. Arctic policy.

THIS PAGE INTENTIONALLY LEFT BLANK

II. SCIENTIFIC RESEARCH AND SHIPPING ROUTES

The 2018 Arctic White Paper details China's historical links to the Arctic, especially highlighting the areas of scientific research and shipping routes that are of particular interest to Beijing.[32] Long before the white paper was issued, China had established a presence in the Arctic through research stations and maritime expeditions, using polar science as a means to explore the far north.[33] This chapter will examine China's scientific interests in the Arctic and how this foothold has expanded into utilizing new polar shipping routes in the region. These shipping routes resulting from melting sea ice could have significant commercial and strategic implications for China and other Arctic states in the years to come. The chapter will then analyze China's behaviors in the Arctic regarding scientific research and shipping routes to determine if they have been consistent with China's stated policy of win-win cooperation in the Arctic White Paper. Finally, the chapter will discuss what China's behaviors in these areas could mean for future cooperation/ conflict in the Arctic, providing indicators to monitor for either result. Overall, in each of these areas China's actions have been generally consistent with the white paper, but China has also utilized polar science and shipping to lay the foundation for a potentially less cooperative and more competitive Arctic policy over the next decade.

[32] State Council Information Office of the People's Republic of China, "China's Arctic Policy," January 26, 2018, 3, http://english.gov.cn/archive/white.paper/2018/01/26/content.

[33] See Anne-Marie Brady, *China as a Polar Great Power* (Cambridge: Cambridge University Press, 2017), chapter 5.

[34]

Figure 1. China's Polar Research Vessel and Icebreaker *Xue Long*. Source: China Tech Gadget.

A. SCIENTIFIC RESEARCH

In the Arctic White Paper the Chinese government notes that "China prioritizes scientific research," and it is in this area that the non-Arctic nation has been most active in the far north.[35] Indeed, since the 1980s the Chinese Academy of Sciences has been involved in scientific research in the Arctic, and in 1989 China established the Polar Research Institute of China (PRIC) in Shanghai.[36] By 1993, China had purchased the world's largest non-nuclear icebreaker from Ukraine it christened the *Xue Long* (Snow Dragon, Figure 1), which would become China's primary polar research and supply vessel.[37] The *Xue Long* has led nine research expeditions to the Arctic starting in the late 1990s and China has sought to further expand its scientific presence with research stations

[34] Caitlin Campbell, *China and the Arctic: Objectives and Obstacles* (Washington, DC: U.S.-China Economic and Security Commission Staff Research Report, April 2012), 1.

[35] State Council Information Office of the People's Republic of China, 5.

[36] Frederic Lasserre, Linyan Huang, and Olga Alexeeva, "China's Strategy in the Arctic: Threatening or Opportunistic?" *Polar Record,* Vol. 53 (October 2015): 32.

[37] Brady, 154.

and additional vessels over the last fifteen years.[38] China's established its first polar research station, *Huang He Zhan* (Yellow River Station), in Svalbard, Norway in 2004 which was meant to intensify China's polar research programs.[39] In 2010, China erected its first Arctic iceberg station supplied by the *Xue Long* and in 2012 began building the Aurora Observatory in Iceland as a joint scientific project with that country.[40] Over this time, China has primarily studied the Arctic ice and atmosphere to better understand climate change affecting China, but has established an even larger polar science presence in Antarctica.

Chinese scientific research in the Arctic has been on a much smaller scale than similar Chinese polar research in Antarctica, leading some scholars to believe that China's scientific justification for expanded interest in the Arctic is mostly meant as a legitimizing factor.[41] China has four polar research stations operating in Antarctica, with a fifth planned, and opened its first Antarctic research station in 1984, twenty years before the Arctic Yellow River Station.[42] China's Arctic scientific research is far behind similar research in Antarctica, and the Chinese government has instead focused much of its Arctic research funding on policy and legal research, suggesting that the political issues of Arctic governance are more important than polar science, which can be studied with more resources in Antarctica.[43] Nevertheless, it has been the Arctic which has seen the greatest recent focus of China's polar efforts, with over half of all Chinese polar science writing focused on the Arctic since 2009.[44]

---

[38] Brady, 138.

[39] Nong Hong, *China's Interests in the Arctic: Opportunities and Challenges* (Washington, DC: Institute for China-America Studies, March 2018), 14.

[40] Brady, 150–152.

[41] Yun Sun, "The Intricacy of China's Arctic Policy" (Washington, DC: Stimson Center, Aug 28, 2018): 3, www.stimson.org/content/intricacy-chinas -arctic-policy.

[42] Brady, 138–140.

[43] Sun, 3–4.

[44] Brady, 172.

The Chinese Arctic and Antarctic Administration (CAA) oversees China's Polar expeditions and research projects, while the PRIC manages the *Xue Long* and polar research stations.[45] These organizations have sought out both bilateral and multilateral polar research opportunities with Arctic partners. For instance, China has had robust cooperation with Norway on Arctic environmental research, and participates in global polar research organizations such as the International Arctic Science Committee.[46] In 2013, a grouping of ten Chinese and Scandinavian research institutes and universities established the China-Nordic Arctic Research Center (CNARC) to promote polar science in connection with the PRIC in Shanghai.[47] China's current phase of polar research (2016-2020) is focused on not only climate change, but also the joint Arctic White Paper interests of resource utilization and new Arctic shipping routes.[48]

In July 2019, China deployed its first domestically built polar icebreaker, *Xue Long 2*, which will join the *Xue Long* for China's 36th expedition to the Antarctic in late 2019.[49] Along with the state-of-the-art electric-powered *Xue Long 2*, China has also published tenders for the future construction of a nuclear-powered icebreaker.[50] The CAA describes the Xue Long 2 as a "mobile research station," which will significantly increase China's polar voyages in the near term with new technologies and the world's greatest icebreaking capabilities of its shipping class.[51] Development of the *Xue Long 2* coupled with a significant increase in funding for polar facilities from the mid 2000s are concrete actions being taken by China to bolster not only its scientific research but also its presence in the

---

[45] Hong, 14–15.

[46] Campbell, 4.

[47] See Yojana Sharma, "New China-Nordic Centre to Boost Arctic Research," *University World News* (7 June 2013), 1–3, https://www.universityworldnews.com/post.php?story=20130607104457114.

[48] Brady, 171.

[49] Deng Xiaoci, "Icebreaker *Xue Long 2* Joins Service on China National Maritime Day," *Global Times* (11 July 2019), 1, https://www.pressreader.com/usa/global-times-us-edition/20190711/281582357199673.

[50] Maud Descamps, "The Ice Silk Road: Is China a 'Near-Arctic' State?" The Institute for Security and Development Policy, *Focus Asia* (February 2019), 3.

[51] Brady, 155.

Arctic, although the bulk of this funding has been spent on the Antarctic stations with China only more recently becoming interested in Arctic research.[52]

Camilla Sorenson notes that, "Scientific research has long been the core element of China's Arctic diplomacy."[53] The Arctic White Paper places specific emphasis on China's scientific endeavors in the Arctic, and links the transnational issue of climate change to China's presence in the region as a "near-Arctic state."[54] The recent focus on establishing a larger presence in the region through research stations, additional icebreakers, and joint expeditions reinforces China's public statements on its growing interests in the Arctic. From the standpoint of Chinese behaviors related to scientific research, China's actions have thus far generally matched the stated cooperative goals of the Arctic White Paper in the near term, while in the long-term China's increased presence in the Arctic via facilities, joint projects, and larger icebreakers could lay the foundation for a more political role in the region, as Sorenson implies. This more political role in the region could result in Chinese Arctic policy remaining cooperative or conversely to turn competitive in nature.

B. SHIPPING ROUTES

As previously noted, Chinese polar research is currently focused on the new Arctic shipping routes, and its 2018 polar science expedition had the navigability of Arctic sea lanes as one primary objective.[55] Over the past decade, climate change has resulted in accelerated melting of sea-ice in the Arctic Ocean, to the point that the expanse of ice in September 2017 was 25 percent less than the autumn averages of the previous 35 years.[56] Polar shipping has thus become far more attractive due to the retreating ice and longer navigation seasons resulting from a warming Arctic, which over time may allow regular

---

[52] Brady, 164–165.

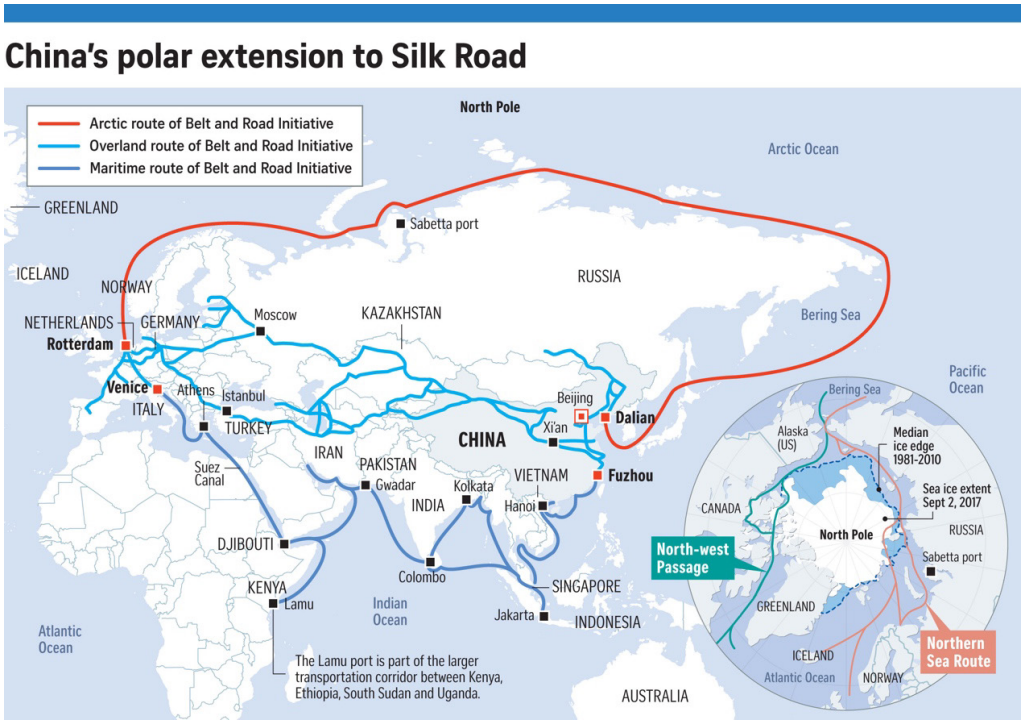
[53] Camilla T.N. Sorensen, "China as an Arctic Great Power" (Policy Brief, Royal Danish Defence College Institute for Strategy, 2018), 3.

[54] State Council Information Office of the People's Republic of China, 3.

[55] Trym Aleksander Eiterjord, "The Growing Institutionalization of China's Polar Silk Road," *The Diplomat* (October 7, 2018): 1.

[56] Kristina Spohr, "The Scramble for the Arctic," *New Statesman* (March 2018): 23–27.

commercial shipping without the icebreaker escorts currently required.[57] As global warming lengthens the navigating season through the Arctic waters, China is preparing to take advantage of this opportunity, and actively using the *Xue Long* and *Xue Long 2* to explore additional polar sea lanes.[58] In fact, Beijing initially declared the new Arctic shipping routes as part of the BRI, and sought cooperation with Arctic states to develop these routes (Figure 2).[59]



[60]

Figure 2. Polar Sea Routes as Part of the BRI Shipping Routes. Sources: China's National Development and Reform Commission, The Arctic Institute, National Snow and Ice Data Centre, Reuters, *Straits Times*.

[57] Michael Schach and Reinhard Madlener, "Impacts of an Ice-Free Northeast Passage on LNG Markets and Geopolitics," *Energy Policy* (2018) Vol. 122, 438–448.

[58] Henry Tillman, Yang Jian, and Egill Thor Nielsson, "The Polar Silk Road: China's New Frontier of Economic Cooperation," *China Quarterly of International Strategic Studies, vol.* 4, no. 3 (2018): 351.

[59] Sorensen, 3.

[60] Goh Sui Noi, "China's Polar Ambitions Cause Anxiety," *Straits Times* (20 February 2018), https://www.straitstimes.com/asia/east-asia/chinas-polar-ambitions-cause-anxiety.

In 2017, China's State Oceanic Administration (SOA) co-released a statement with the National Development and Reform Commission (NDRC) highlighting the Arctic as a "blue economic passage" and thus a primary piece of the BRI.[61] Indeed, this route could reduce the distance to Europe from China by 40 percent over routes transversing the Suez Canal and Malacca Straits.[62] With the European Union as China's largest trading partner, this potential short-cut from Asia to Europe is a significant financial opportunity for Chinese firms, and thus a primary focus of Arctic research. By late 2017, Xi Jinping called on Russian cooperation to make the Arctic Ocean a "silk road on ice," before the formal concept of the Polar Silk Road was officially introduced.[63] Thus, the potential of newly accessible sea lanes on the Northern Sea Route (NSR), which runs along Russia's Arctic coast from Murmansk to the Bering Strait, has been a top-level focus of Chinese economic interests for the Polar Silk Road.

Chinese shipping activities along the NSR have indeed been more frequent over the past decade, and have been generally consistent with the stated goals of the Arctic White Paper. China has had shipping partnerships with Russia since 2010, when Sovcomflot Group signed an Arctic oil transshipment framework with China National Petroleum Company (CNPC).[64] In 2012, the *Xue Long* became the first Chinese ship to cross the Arctic Ocean from Asia to Europe via the NSR. This was followed in 2013 when the China National Shipping Company (COSCO) vessel *Yong Sheng* made the first Chinese Arctic commercial voyage, utilizing the NSR to travel from Asia to Rotterdam.[65] By September 2018, COSCO had specially reinforced the cargo ship *Tian'en* to survive the ice and cut 12

[61] Marc Lanteigne, "Northern Crossroads: Sino-Russian Cooperation in the Arctic," *The National Bureau of Asian Research* (March 2018): 2.

[62] Fytatzi, Katerina and Sarah Fowler. "Polar Silk Road Will Reshape Trade and Geopolitics," *Oxford Analytica Daily Brief* (September 18, 2018): 1–5, https://dailybrief.oxan.com/Analysis/DB238508.

[63] Spohr, 27.

[64] Tom Roseth, "Russia's China Policy in the Arctic," *Strategic Analysis, vol.* 38, no. 6 (November 2014): 12.

[65] Henry Tillman, Yang Jian, and Egill Thor Nielsson, 347.

days and 300 tons of fuel from the traditional Indian Ocean route.[66] COSCO planned to conduct at least 14 transits of the Arctic in 2019.[67] China's building of the Xue Long 2 and tenders offered for a third icebreaker show behavior consistent with Beijing's growing economic interests in the Arctic shipping routes. Yet, along with the logistics of polar shipping are the legal frameworks of utilizing these new sea lanes.

China's Arctic White Paper notes that non-Arctic states have rights in the Arctic pursuant to the Spitsbergen Treaty and the United Nations Convention on the Law of the Sea (UNCLOS).[68] China uses the 1920 Spitsbergen Treaty (or Svalbard Treaty) as a "global commons" justification for Chinese Arctic research, while use of the UNCLOS prioritizes the Arctic as an international issue.[69] This allows China to locate the Yellow River Research Station in Svalbard, Norway as well as allowing the *Xue Long* access to Arctic waters for scientific purposes. China's international view of the Arctic sea lanes in particular challenges Russia's interpretation of UNCLOS as giving it sovereignty over the NSR, and with that Russian control over Arctic shipping, which this thesis will discuss in more detail in Chapter IV.

For the time being, China and Russia seek partnership along the NSR, as agreed upon by President Xi and Russian Prime Minister Medvedev in 2017.[70] China has estimated that between 5 and 15 percent of its international trade could pass through the NSR by 2020.[71] Meanwhile, Russia aggressively claims the right to regulate shipping through the NSR, charging transit fees and requiring the use of Russian icebreakers.[72] China has yet to use international law to challenge Russian sovereignty over the NSR, or

---

[66] *Asia Times* Staff. "Arctic Ice Route is China's New Maritime Silk Road to Europe," *Asia Times* (September 3, 2018): 1–2, https://www.asiatimes.com/2018/09/article/arctic-ice-route-is-chinas-new-maritime-silk-road-to-europe/.

[67] Malte Humpert, "COSCO Continues to Step Up Its Operations in the Arctic," *High North News* (June 13, 2019): 1–2.

[68] State Council Information Office of the People's Republic of China, 2–3.

[69] Sun, 3.

[70] Tillman, Jian, and Nielsson, 348.

[71] Lasserre, Huang, and Alexeeva, 37.

[72] OxResearch Daily Brief Service, 3.

shown any behavior indicative of this apart from building another icebreaker and reinforcing its own cargo vessels. As Russia scholar Lincoln Flake notes, "Russia is as eager to profit from its Arctic sea lanes as China is to use them," making cooperation practical for both countries in the near-term.[73] This cooperation on the part of China is thus far consistent with Chinese goals in utilizing polar shipping routes.

China is also researching additional shipping routes across the Arctic, but faces various challenges in using these routes or indeed the NSR itself. Both the NSR and the Northwest Passage that rings the northern Canadian coastline are currently still only navigable during ice-free summer months. The third route, the Transpolar Sea Route which crosses the middle of the Arctic Ocean in international waters, can only be accessed by heavy icebreakers and will likely remain impassible for regular commercial shipping for decades.[74] In addition, the Northwest Passage is not a deep-water route and cannot be used by larger tankers and carriers.[75] Similarly, icebreakers along the NSR can only produce 25-meter-wide passages, which are not large enough for the 50-meter-wide largest container ships.[76] Along with these restrictions, Arctic sea routes lack sufficient infrastructure, port facilities, and search and rescue capacity, with the potential for significant environmental damage should an accident occur.[77] This in turn makes insurance rates excessively high for any vessels operating in polar waters.[78] Given all of these factors, including unpredictable weather conditions and transit times, it remains to be seen whether the Arctic Ocean will be a viable route for mass commercial shipping.

---

[73] Lincoln Flake, "Russia and China in the Arctic: A Team of Rivals," *Strategic Analysis, vol.* 37, no. 6 (December 2013): 8.

[74] Clara Ma, "The United States and China in the Arctic" Yale University Department of Political Science, One-term Senior Essay in International Relations (April 2019), 22.

[75] Lanteigne, 7.

[76] Matt Schrader, "Is China Changing the Game in Trans-Polar Shipping?" *Jamestown Foundation China Brief,* Vol. 18, Issue 7 (April 2018): 2.

[77] Nengye Liu and Kamrul Hossain, "China and the Development of International Law on Arctic Shipping: Challenges and Opportunities," The University of Adelaide, Research Paper no. 38 (2017): 234.

[78] Schrader, 2.

Having expanded the BRI into the Arctic as the "Silk Road on Ice," China has taken a number of additional actions to grow its polar shipping capabilities. First, the Chinese government in 2018 established a new forum under the China Institute of Navigation called the Polar Navigation and Equipment Committee (PNEC) which will focus its efforts on both Arctic navigation and maritime infrastructure.[79] Indeed, the new sea lanes have growth potential not only for polar shipping, but also the Chinese shipbuilding industry as well. The late 2018 voyage of the *Tian'en* also showed that along with new research icebreakers, China is focusing on new ice-class cargo vessels as well, and COSCO has contracted Shanghai shipyard to build three new ice-class cargo ships to bolster China's commercial fleet.[80] The *Xue Long 2* was itself a collaborative effort between a Finnish company and Chinese shipbuilders, in which the latter could learn the specifics of building polar vessels.[81] Similarly, recent months have also seen the launch of ice-reinforced Liquefied Natural Gas (LNG) carriers, an important part of Sino-Russian Arctic cooperation which requires a great deal of investment.[82] This behavior from Beijing shows a concerted effort to build the Silk Road on Ice even with the various natural and logistical risks associated with Arctic shipping.

While Beijing's Arctic activities in the areas of scientific research and shipping routes have thus far been cooperative with Arctic states in the spirit of the Arctic White Paper, there is also a more competitive aspect to China's polar behavior. Yun Sun comments that, "being integrated into the Belt and Road Initiative brings the Arctic projects new attention and resources from the Chinese central government."[83] Indeed, the increased funding for Arctic projects is a relatively new endeavor for Beijing that has expanded beyond the original theme of polar science, and brought about new central government organizations such as the PRIC and PNEC to manage these growing interests. The new

---

[79] Eiterjord, 1.

[80] Sun, 13.

[81] Eiterjord, 2.

[82] Caroline McDonald, "The Rising Tide of Maritime Shipping Risks," *Risk Management* (March 1, 2018): 2, https://www.rmmagazine.com/2018/03/01/the-rising-tide-of-martime-shipping-risks.

[83] Sun, 14.

Arctic sea lanes also provide the largest ship-owning country in the world a strategic option to avoid the traditional Strait of Malacca and Suez Canal routes, long considered by China to be strategic chokepoints.[84] As in the area of scientific research, China is laying the foundation for a much larger role in Arctic shipping, for not only economic but also strategic purposes.

C. CONCLUSIONS

Over the past decade, China's Arctic activities in scientific research and shipping have followed the collaborative public statements put forth by Beijing, and have been consistent with China's Arctic policy of win-win cooperation. In the examples of the Aurora joint observatory project with Iceland, the collaboration with Nordic nations on the CNARC, and the shipping partnerships with Russia in the use of the NSR, China has consistently followed its stated Polar Silk Road goals of cooperation and positive engagement with Arctic states. Other examples of this consistent behavior include bilateral polar science such as the 2018 joint Arctic research expedition with the Russian Pacific Ocean Research Institute, and multilateral shipping research with non-Arctic states such as the 2014 declaration to collaborate with South Korea and Japan on logistics systems and launching services on the NSR.[85]

Cooperation School scholars argue that China seeks to legitimately conduct polar scientific research while also taking advantage of the economic opportunities provided by ice-free sea lanes in the far north. Nong Hong of the PRC-supported Institute for China-America Studies notes that China has valid environmental interests in conducting this polar research, as climate models indicate that the melting of Arctic ice will flood Chinese coastlines and force relocation of millions of people in the coming decades.[86] Similarly, Frederic Lasserre attests that China has developed an interest in Arctic science covering

[84] Liu and Hossain, 233.

[85] See Eiterjord, 2, and Liu and Hossain, 233.

[86] Hong, 15.

four main areas: oceanography, biology, atmospheric science, and glaciology.[87] Overall, the Cooperation School views Chinese polar science as legitimate environmental research that has sought collaboration from Arctic states.[88]

However, China's aggressive buildup of Arctic infrastructure and icebreakers over actual scientific research may indicate a more strategic use of polar science as a means to become a more prominent Arctic actor. This would be inconsistent with the Arctic White Paper goals of status quo cooperation as it would mean that Beijing is not focused on science but rather on politics in the Arctic. For example, less than 10 percent of Chinese polar science spending is devoted to scientific research, while a much larger portion of funds is tied to capacity building and maintaining a presence in both the Arctic and Antarctic.[89] In addition, China was required to have an established polar science program as a criterion for observer status in the main political forum of the Arctic, the Arctic Council, which China joined as an observer state in 2013.[90] Laying this foundation for a political role on the Arctic Council may have been a larger overall goal than scientific research for China.

The Conflict School views Chinese polar science as primarily a way to establish a presence in the region and influence polar affairs.[91] Gisela Grieger argues, "China's Arctic research interest is largely strategic…scientific information is needed to foster China's geostrategic ambitions related to air links, shipping, and resource extraction."[92] Anne Marie Brady agrees that these behaviors on the part of China to encourage international polar scientific collaboration also serve to build Chinese bona fides in the region.[93] David

---

[87] Frederic Lasserre, "China and the Arctic: Threat or Cooperation Potential for Canada" *Canadian International Council,* China Papers no. 11 (June 2010), 3.

[88] See Hong, 21.

[89] Brady, 170–171.

[90] Ma, 22.

[91] See Brady, 171–173.

[92] Gisela Grieger, "China's Arctic Policy: How China Aligns Rights and Interests," European Parliamentary Research Service, PE 620.231 (May 2018): 5–6.

[93] Brady, 175.

Curtis Wright notes the works of Chinese Arctic commentator Li Zhenfu when he writes that "Chinese scientific activity in the Arctic is clearly subservient and tributary to the nation's geopolitical considerations and regional strategic posturing."[94] Overall, these Conflict School scholars view China's scientific policy in the Arctic as laying a foundation for Arctic power competition in the future.

Scholars also note several indicators that may show additional Chinese interest in Arctic science/shipping in the coming decade, that would need to be analyzed for their consistency with the Arctic White Paper goals. Matt Schrader notes that these indicators involve greater Chinese investment in infrastructure on Russia's northern coast, more Chinese investment in northern European shipping infrastructure, and more Sino-Russian development of extra-wide icebreakers.[95] As will be discussed in Chapter III, some of these infrastructure investments are already underway. Should China use these investments for overt political gain with Arctic States as Conflict School scholars fear, then this behavior would be inconsistent with current policy goals, while if these investments bolster win-win collaboration with the Arctic states per the Cooperation School, then they would be consistent with the stated policy of the white paper. Overall, from a baseline of Arctic scientific research in the 1990s China has greatly expanded its polar presence and involvement with Arctic states, transitioning polar science to shipping navigation and sea lanes, then further to the white paper goals of resource exploitation and extraction which this thesis will discuss in the next chapter.

---

[94] See David Curtis Wright, *The Dragon Eyes the Top of the World: Arctic Policy Debate and Discussion in China* (Newport, RI: U.S. Naval War College China Maritime Studies Institute, 2011): 9.

[95] Schrader, 3.

THIS PAGE INTENTIONALLY LEFT BLANK

III. RESOURCE UTILIZATION – ECONOMIC INVESTMENT AND ENERGY PARTNERSHIPS

In addition to scientific research and developing the new polar shipping routes resulting from climate change, China's Arctic White Paper notes resource exploration and exploitation as a primary interest for Beijing in the far north.[96] This chapter will examine China's quest for natural resources in the Arctic and the related Polar Silk Road infrastructure investments in Arctic states, analyzing this behavior to determine if it has aligned with the cooperative policy and "win-win result" of China's 2018 Arctic strategy.[97] This section will place particular emphasis on China's growing demand for energy resources, and the significant potential of hydrocarbon extraction in the Arctic brought on by the rising polar temperatures. This increased demand for oil and natural gas has created a new partnership between China and its Arctic neighbor and fellow great power Russia, which has both economic and strategic implications. Finally, this chapter will discuss various challenges for China in making these Arctic investments, and conclude with an assessment of Beijing's behaviors regarding polar resources and their overall consistency with the stated goals of the Arctic White Paper. Overall, similar to scientific research and shipping, the investments surrounding Chinese resource exploration and exploitation in the Arctic are generally consistent with the cooperative policies of the Arctic White Paper, but lay the foundation for a more competitive policy in the longer term.

David Curtis Wright notes that, "A Chinese admiral said in early 2010 that since China has 20 percent of the world's population, it should have 20 percent of the Arctic's resources."[98] While not official policy then or now, China has indeed sought to take advantage of the vast array of natural resources that a thawing Arctic has to offer, from rare earth minerals to fishing rights to hydrocarbons. Much of this activity has been via Chinese

---

[96] State Council Information Office of the People's Republic of China, "China's Arctic Policy" (January 26, 2018): 7, http://english.gov.cn/archive/white.paper/2018/01/26/content.

[97] State Council Information Office of the People's Republic of China, 3.

[98] David Curtis Wright, *The Dragon Eyes the Top of the World: Arctic Policy Debate and Discussion in China* (Newport, RI: U.S. Naval War College China Maritime Studies Institute, 2011), 7.

state-owned companies seeking investment partnerships with counterparts in Arctic states, while there have also been a variety of infrastructure investments as well, following the model of the Belt and Road Initiative (BRI). A 2017 CNA study notes that from 2005–2017 China invested nearly 1.4 trillion dollars in the Arctic states.[99] This rapid expansion of Chinese Arctic investment has coincided with Beijing's increased scientific research and shipping in the region discussed in the previous chapter. These investments follow the Polar Silk Road strategy of Arctic development to provide the means to both exploit Arctic resources and transport those resources back to China. This next section breaks down China's major resource and infrastructure investments in the Arctic, focusing first on non-energy investment in Arctic states as these interactions have set the stage for the more important energy-related investments to follow.

A. NATURAL RESOURCES AND INFRASTRUCTURE INVESTMENT

In addition to its notable investments in Arctic energy resources, China also has separate financial investments in Arctic states, from mining to infrastructure deals. These investments, driven largely by state-owned companies, follow the BRI model and constitute the Polar Silk Road. In fact, China has thus far invested $90 billion in Arctic infrastructure projects over the last few years, with additional agreements in the works.[100] In the mining arena, rare earth metals in addition to copper and zinc have been of great interest to Chinese companies for more than a decade.[101] Polar fishing rights are also of particular interest to Beijing as China has the world's largest fishing fleet and notes food security as a top priority.[102] BRI-style infrastructure investments to bolster Arctic transport over land and sea play a significant role in the Polar Silk Road as well. In this section, Chinese non-energy investments will be broken down by country, with individual

---

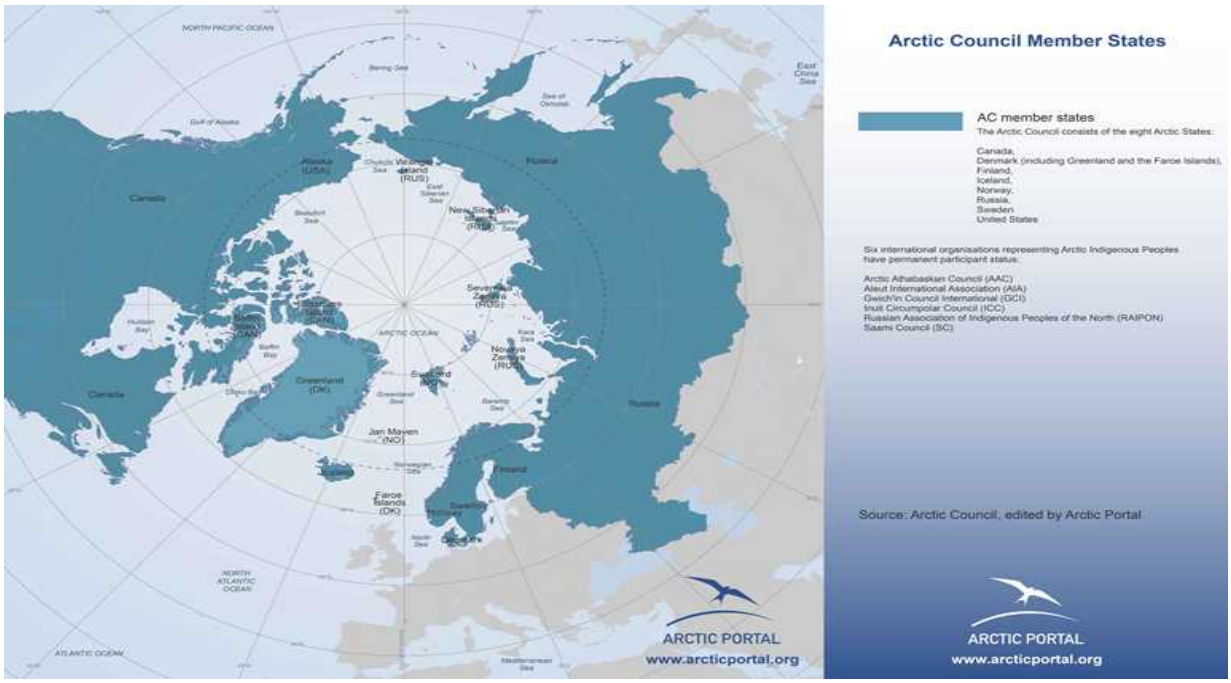
[99] Mark Rosen and Cara Thuringer, "Unconstrained Foreign Direct Investment: An Emerging Challenge to Arctic Security," *CNA Occasional Paper Series* (November 2017): 54.

[100] John Grady, "Panel: China Investing in Infrastructure near the Arctic," *USNI News*, April 7, 2018, https://news.usni.org/2018/04/27/panel-china-investing-infrastructure-near-arctic.

[101] Elizabeth Wishnick, *China's Interests and Goals in the Arctic: Implications for the United States* (Carlisle, PA: U.S. Army War College Strategic Studies Institute, 2017): 47.

[102] Anne-Marie Brady, *China as a Polar Great Power* (Cambridge: Cambridge University Press, 2017), 97.

assessments of whether these activities are consistent with China's stated Arctic policy. Figure 3 shows the Arctic Council member countries: Iceland, Greenland (Denmark), Norway, Sweden, Finland, Canada, Russia, and the United States. Overall, most Chinese non-energy investments in Arctic states are consistent with the stated white paper goals, with a few exceptions that are inconsistent with China's Arctic policy.



[103]

Figure 3. The Eight Arctic Council Member States. Source: Arctic Council, Edited by Arctic Portal.

Iceland is a good place to begin the analysis of Chinese economic activities in the Arctic, as both countries have had robust economic and political engagement over the past decade. In 2005, Beijing and Reykjavik initiated talks on a free trade agreement, China's first with a European government.[104] Iceland faced a severe banking crisis in 2008 and in

[103] Arctic Portal, "Arctic Council Member States," April 2016, https://arcticportal.org/maps-arctic-council.

[104] Su Ping and Marc Lanteigne, "China's Developing Arctic Policies: Myths and Misconceptions," *Journal of China and International Relations, Vol.* 3 No 1 (December 2015),16.

2010 engaged in a $500 million currency swap with China. By 2012, Chinese Premier Wen Jiabao was visiting Iceland to discuss bilateral deals, as well as Reykjavik's support for China's observer status in the Arctic Council forum.[105] In 2013, the free trade agreement between the two countries was finally signed, and plans for a sizable new Chinese embassy began. At the time, there was speculation that Chinese economic interest and investment in tiny Iceland was for geopolitical purposes to gain a foothold in the Arctic and garner support for Arctic Council membership.[106] Yet, China has also sought additional investment after securing observer status on the Arctic Council in 2013, in the form of energy partnerships to be discussed later in this chapter. For its part, Iceland has sought to promote itself as a logistical hub on the Polar Silk Road.[107] Overall, China's economic behavior in Iceland has been consistent with the cooperative policy goals of the Arctic White Paper, and Reykjavik has eagerly welcomed Chinese investments to bolster a weakened economy.

Unlike Iceland, China's investments in Greenland are focused primarily on mining deals for extracting the territory's abundant mineral resources, which are highly sought after by China. When in 2009 Greenland was granted self-rule from Denmark, it sought out investors to extract these mineral resources. China has initiated three mining projects in Greenland since 2009, including its first overall Arctic investment deal by the company Jiangxi Union to prospect for copper, zinc, and lead.[108] Similar to Iceland, there have been fears of China taking control of Greenland's resources as well as claiming a stake in an independent Greenland should the territory gain full independence.[109] In one specific instance, China invested in a British mining venture in Greenland, which went bankrupt

---

[105] Jingchao Peng and Njord Wegge, "China's Bilateral Diplomacy in the Arctic," *Polar Geography,* Vol. 38, No 3 (2015): 10.

[106] Wishnick, 46.

[107] Camilla T.N. Sorensen, "China as an Arctic Great Power," Royal Danish Defence College, *Policy Brief* (February 2018): 4.

[108] Wishnick, 47.

[109] Alexandre Cornet, "From the 'Polar Silk Road' to the Arctic Rimland: A Case Study of the Belt and Road Challenges for the European Union," The French Institute for International and Strategic Affairs, *Asia Focus* #90 (October 2018): 15.

and was purchased in 2015 by a Hong Kong-based company, giving China its first controlling stake in an Arctic resource investment.[110] While these actions may echo the Chinese debt diplomacy of the BRI, which some scholars also refer to as "resource diplomacy," low mineral prices have made further development of this particular project unprofitable for now.[111] Of even greater concern to the international community has been China's investment in rare earths extraction in Greenland, a market which China already dominates.[112] However, it is important to note that China is only one of many countries seeking to invest in Greenland's considerable mineral resources, including many Western nations seeking economic opportunities.[113] Overall, economic factors consistent with China's cooperative Arctic policy led China's investments for natural resources in Greenland, where China's actions were welcomed by a territory eager for investors, although taking control of the mining venture and trying to monopolize the rare earths showed that more inconsistent competitive aims were also present.

China's investments in the other Nordic countries have been fewer than those in Iceland and Greenland, and have attracted far less international attention as Norway, Sweden, and Finland are seen as less vulnerable to Chinese economic influence. Yet there are still several examples of Chinese infrastructure investment in these countries that have been mostly consistent with white paper goals. For instance, Chinese companies have sought investment opportunities in expanding the Swedish port of Lysekil and surrounding railroads and bridges.[114] Sweden attracted over $3 billion in Chinese investments in the first half of 2018, the most of any European country over that timeframe.[115] Meanwhile, Finland and Norway have sought partnership with China on a project called the "Arctic Corridor" which would create transportation hubs through ports and railways along the

[110] Wishnick, 48.

[111] Peng and Wegge, 10.

[112] Wishnick, 48.

[113] Ping and Lanteigne, 5.

[114] Sorensen, 4.

[115] Dan Peleschuk, "Scandinavia, Baltics Set to Become China's Newest Playground," *OZY The Daily Dose* (21 April 2019), https://www.ozy.com/fast-forward/scandinavia-baltics-set-to-become-chinas-newest-playground/93653/.

Scandinavian section of the NSR.[116] The infrastructure investments of the Arctic Corridor are still in development, as China seeks to repair its political relations with Norway.

The awarding of a Nobel Prize to a Chinese dissident in 2010 led to strained relations between China and Norway, which previously had been negotiating a free-trade agreement.[117] This has caused once robust relations between the countries to falter, at the expense of Arctic Corridor projects. Although China and Norway reopened diplomatic ties in 2016, Chinese economic activities in Scandinavia have been mostly limited to future infrastructure projects and scientific partnerships such as the Polar Research Institute in Shanghai.[118] Chinese economic behavior in the Nordic countries have yet to fully develop but have been consistent with China's Arctic policy goals in the case of infrastructure projects, particularly in the case of Sweden. Should the Arctic Corridor and other infrastructure projects come to fruition, they have the potential to make Finland and Norway a large part of the Polar Silk Road and bolstered economic cooperation between China and these nations as well. However, China has also used its economic weight for political purposes in the case of Norway and the stalled free trade agreement, which is inconsistent with the cooperative goals of the white paper and could happen again to any of the Arctic states should one of them have a political disagreement with Beijing.

Perhaps not surprisingly, China has the most Arctic developmental investments in its likeminded authoritarian neighbor Russia. While many of these investments are connected with Sino-Russian oil and gas partnerships, others are infrastructure projects to revitalize the Russian Far East (RFE) and Siberia, or bolster transportation networks along the NSR. Several such projects include Chinese investments in the port at Arkangelsk, a railway link between the White Sea and the Urals, and a new deep-water port on the northern Dvina river.[119] In 2018, Polar Silk Road projects along the NSR were named as priority areas for up to $10 billion in jointly committed investments between Chinese and

---

[116] Henry Tillman, Yang Jian, and Egill Thor Nielsson, "The Polar Silk Road: China's New Frontier of Economic Cooperation," *China Quarterly of International Strategic Studies, vol.* 4, no. 3 (2018): 356.

[117] Peng and Wegge, 11.

[118] Peng and Wegge, 12.

[119] Tillman, Jian, and Nielsson, 355.

Russian partners.[120] China is also sourcing raw materials from the RFE and eastern Siberia such as timber which is of great demand to Chinese buyers. Yet, the Sino-Russian economic partnership faces many challenges, as Russia also fears losing control of these natural resources in the RFE to Chinese investments.[121] In fact, Russia initially objected to China's observer status on the Arctic Council, but needs Chinese investment as Western sanctions have weakened Russia's economy.[122] Overall, China's investments in Russia seem beneficial to both countries as do Chinese actions thus far, but Russian mistrust of a rising China and the debt diplomacy experienced by other countries by the BRI could derail these Polar Silk Road collaborative opportunities.

China's developmental investments in the Arctic are thus widespread, particularly in the smaller or less developed Arctic states and Russia, while China's economic activities have thus far been mostly consistent with the cooperative goals listed in the Arctic White Paper. However, one can argue that many of China's Arctic investments have included longer term strategic goals along with the short term economic ones. The examples of Iceland and Greenland highlight the fact that China has engaged in win-win investment welcomed by these countries, but has also laid an economic foundation enabling it to influence the politics of these countries over the longer term, whether on the Arctic Council or as part of a more independent Greenland. In the case of Norway, China has clearly used economic actions to serve political means. Thus, while China's Arctic investment behavior is mostly consistent with its economic policy goals, it is also conducive to political gains via debt and resource diplomacy, as well as stalling development projects such as the Arctic Corridor for political payback, each of which are inconsistent with the cooperative policy goals of the Arctic White Paper.

---

[120] Tillman, Jian, and Nielsson, 356.

[121] Rasmus Gjedsso Bertelsen and Vincent Gallucci, "The return of China, post-Cold War Russia and the Arctic: Changes on land and at sea," *Marine Policy, vol.* 72 (April 2016): 243.

[122] Peng and Wegge, 7.

B. ENERGY PARTNERSHIPS

China's Arctic energy partnerships are linked to the other Polar Silk Road investments, but are perhaps the most important of them all to Beijing. China is the world's top energy consumer and climate change is making oil and gas extraction in the Arctic more accessible, in turn making the infrastructure investments in Arctic ports along the NSR even more valuable to Chinese interests. A top priority for China over the past two decades has been diversification of its energy imports, both in type and from what countries, in order to increase its overall energy security status.[123] Driving Chinese interest in Arctic energy is a U.S. Geological Survey report from 2008 estimating that nearly 30 percent of global undiscovered but recoverable natural gas and 13 percent of undiscovered but recoverable oil resources were located within the Arctic Circle.[124] Energy security is so important to China that the resource utilization goal of the Arctic White Paper is perhaps downplayed. For instance, in 2010 a Polar Research Institute of China (PRIC) report highlighted the strategic importance of Arctic oil and natural gas to China's energy needs.[125] This could lead to a more competitive Chinese policy for Arctic energy resources in the longer term. However, China's actions in securing energy partnerships with Arctic states have thus far aligned with the cooperative goals of the white paper. This section will focus first on the Arctic states in general, followed by a more comprehensive analysis of the Sino-Russian hydrocarbon partnership.

Iceland, Canada, and the United States each have ongoing energy deals with China, at varying degrees of importance to each country. Reykjavik in particular has a significant energy partnership with Beijing that involves both oil and gas exploration as well as geothermal energy agreements. In 2012, China and Iceland first signed agreements to partner in geothermal energy cooperation, and as of 2018 China Petroleum and Chemical Corporation (SINOPEC) and Iceland's Arctic Green Energy Corporation (AGEC) have

---

[123] See Meghan L. O'Sullivan, Windfall: How the New Energy Abundance Upends Global Politics and Strengthens America's Power (New York: Simon and Schuster, 2017), 229–231.

[124] Christopher Weidacher Hsiung," *The Polar Journal,* vol. 6, no. 2 (2016): 243.

[125] Brady, 91.

developed joint projects in 40 Chinese cities.[126] In 2014, Iceland's government granted a consortium which included China National Offshore Oil Corporation (CNOOC) a license to explore for hydrocarbons off its continental shelf.[127] Much like China's non-energy investments in Iceland, there has been robust cooperation in various aspects of the energy sector between the two countries which has been consistent with the white paper policy goals.

Norway is another potentially key partner for China on Arctic energy resources, as Oslo has significant oil and natural gas reserves as well as expertise in cold-water drilling.[128] In 2008 CNOOC subsidiary China Oilfield Services Limited (COSL) bought Norwegian drilling company Awilco Offshore for $2.5 billion to gain the advanced technology and know-how for Arctic operations, and COSL has subsequently signed deals with Russian energy firms Rosneft and Statoil for exploratory drilling in Russia.[129] Thus, Chinese energy investments are not limited to only the hydrocarbons themselves, but also the extraction process and related infrastructure and transportation projects. In the case of the Norwegian drilling firm, China is seeking not only energy itself but also the means to extract its own resources, which has a more strategic angle over the long-term. While the Norway-China energy partnership is currently consistent with China's cooperative goals, the foundation of a more competitive policy is also there.

Canada and the United States each have several Arctic energy agreements ongoing or in negotiation with China, with Ottawa in particular having a rather significant relationship with Beijing. Nearly 25 percent of Canadian exports to China are either energy or minerals, and from 2007 to 2013, SINOPEC and CNOOC invested over $119 million into Canada's energy sector.[130] Notably, in 2013 CNOOC initiated a takeover of Canada's

---

[126] Tillman, Jian, and Nielsson, 350.

[127] Wishnick, 46.

[128] Caitlin Campbell, "China and the Arctic: Objectives and Obstacles," *U.S.-China Economic and Security Review Commission*, Staff Research Report (April 13, 2012): 5.

[129] Hsiung, 248.

[130] Peng and Wegge, 8.

Nexen Energy for $15 billion, creating CNOOC Petroleum North America.[131] Scholars note that Canada is concerned about the cost of accepting these Chinese investments leading to diminished control over its resources, and partnering with Chinese state-owned companies that are perceived to be tools of the Chinese government.[132] In fact, Canada had initially joined Russia to deny China observer status on the Arctic Council.[133] Similarly, mistrust remains an issue for Sino-U.S. Arctic cooperation, resulting in limited collaboration. However, in 2018 the Alaska Gasline Development Corporation entered into a joint development agreement with SINOPEC that could over time be worth $43 billion for natural gas exports to China.[134] These noteworthy energy partnerships with Canada and the U.S. are evidence that the North American Arctic nations are finding areas of economic cooperation with China, even with the ongoing suspicions over China's strategic intentions.

Russia has the most significant Arctic energy partnerships with China, based on Russian needs for capital and Chinese eagerness to bolster its energy security. In addition, most of those undiscovered Arctic hydrocarbon resources are potentially in Russian territory, and Russia is keen to exploit these resources for financial gain. As Russia scholar Thomas Rotnem posits, "Russia's real interest in the region—extracting the vast stores of hydrocarbons and precious gems and metals that underlie Russia's adjoining Arctic seas."[135] Exploiting these potential riches has been a primary goal for Russia over the past decade, but the Kremlin's annexation of Crimea in 2014 and subsequent Western sanctions have threatened to disrupt Russia's plans. As Rotnem states, "The sanctions adversely affected Russia's Arctic enterprise, the promised future of Russia's hydrocarbon economy, by banning Western companies from providing investment funds, equipment, and

---

[131] Hsiung, 249.

[132] Peng and Wegge, 8.

[133] Wishnick, 51.

[134] Kong Soon Lim, "China's Arctic Policy and the Polar Silk Road Vision," Northern Research Forum, *Arctic Yearbook 2018*, 11.

[135] Thomas Rotnem, "Putin's Arctic Strategy: Collaboration or Conflict After Ukraine?," *Problems of Post-Communism,* vol. 65, no. 1 (2018): 1.

technology for Arctic oil and gas exploitation."[136] Thus, Russia needed to find other investment partners and energy markets, and China was poised to step into that role. As a result, Russia's energy giant Gazprom and China's China National Petroleum Corporation (CNPC) signed two landmark gas-sales agreements in 2014.[137] These agreements cemented an energy partnership between the two great powers, and has led to further deals in the years since.

In 2017, Russian President Validmir Putin declared that Russia would become the world's biggest liquefied natural gas (LNG) producer.[138] Putin based this statement on the LNG supply that would result from Russian exploitation of Arctic natural gas and its transport along the Northern Sea Route (NSR). In fact, China's largest Arctic energy investment is in Russia's massive Yamal LNG project, operated by Russian energy firm Novatek on the Siberian Yamal peninsula. This $27 billion project is 20 percent owned by CNPC and nearly 10 percent owned by China's Silk Road Fund, tying the Yamal LNG project directly to the Polar Silk Road.[139] China has also invested in the transportation aspects of this project, as Yamal LNG's icebreaking Arc7 class tankers are planned to operate along the NSR to bring energy to Chinese consumers.[140] In fact, as early as 2010 the Russian Sovcomflot Group and CNPC signed a long-term cooperation agreement to partner on Arctic petroleum and LNG shipping.[141] The 2014 gas-sales agreements also included two natural gas pipelines, the Power of Siberia running to northeast China and the Altai running to China's northwest corner.[142] This cooperation on Arctic LNG pipelines and icebreaking LNG tankers has scholars talking of a "major Russian-Chinese energy

---

[136] Rotnem, 9.

[137] Bertleson and Gallucci, 243.

[138] Michael Schach and Reinhard Madlener, "Impacts of an Ice-Free Northeast Passage on LNG Markets and Geopolitics," *Energy Policy* (2018) Vol. 122, 438–448.

[139] Tillman, Jian, and Nielsson, 352–354.

[140] Schach and Madlener, 446.

[141] Nong Hong, "China's Interests in the Arctic: Opportunities and Challenges," Institute for China-America Studies (March 2018): 8.

[142] O'Sullivan, 202.

alliance."[143] Indeed, Chinese actions related to energy partnership with Russia has been consistent with the resource utilization goal and stated win-win result of the Arctic White Paper.

However, there are also significant challenges to the Sino-Russian energy agreements that preclude calling it a strategic partnership. Much like the earlier analysis of Sino-Russian developmental investments, Russia is wary of Chinese energy investments and "maintains a highly skeptical attitude towards opening its Arctic resources to non-Arctic states."[144] Elizabeth Wishnick adds that "Russia's Arctic identity and China's emerging identity as a great power drive them apart on Arctic affairs."[145] In addition, energy scholar Meghan O'Sullivan argues that the energy abundance from the global shale gas boom will make China less tethered to Russian energy in the future as Beijing seeks to "diversify its supplies and balance its reliance on as many sources as possible."[146] Finally, as Russia scholar Bobo Lo remarks, there are many outstanding issues to Russo-Chinese energy deals which still need to be worked out, and it is not a Chinese company but instead U.S. energy firm ExxonMobil that remains the largest outside investor in the Russian Far East.[147] Thus, it is presumptive to refer to this energy partnership as a strategic alliance between Russia and China as this practical economic partnership could turn competitive.

In addition to the geopolitical challenges tied to the significant potential of Arctic energy and mining projects there are also significant environmental challenges for resource extraction in the polar region. Similar to the risks involved in polar shipping, the extreme temperatures and unpredictable weather conditions make the start-up costs for oil drilling, mineral mining, and infrastructure projects excessively high. Also, the technological challenges of Arctic drilling are more complex than that of deep-water operations elsewhere, increasing the potential for accidents which could lead to extensive

---

[143] Schach and Madlener, 441.

[144] Peng and Wegge, 7.

[145] Wishnick, 44.

[146] O'Sullivan, 206–207.

[147] See Bobo Lo, *Russia and the New World Disorder* (Washington, DC: Brookings Institution Press, 2015), 146–148.

environmental damage.[148] Another obstacle is the warming temperatures actually making the permafrost more unstable, threatening land-based infrastructure projects as well. Thus, the environmental challenges of resource development and infrastructure projects in the Arctic necessitate such high costs that combined with the fluctuations in global prices for hydrocarbon and mineral resources pose a significant risk for any Chinese polar investments.

China's Arctic energy partnerships have thus far aligned with the cooperative economic policy goals touted by the Chinese government. Beijing's investments in energy exploration and exploitation in each of the Arctic states are welcomed by both companies and governments, but suspicions remain in particularly the larger powers Russia, Canada, and the United States that there exist potential longer term competitive goals in these partnerships as well, as the takeover of Nexen Energy suggests. China's growing energy demands and needs for energy security have caused Beijing to seek diversification of its energy imports and its Arctic energy deals cover both geo-economic and geo-strategic interests. Should China decide to use these energy investments to control Arctic energy supplies as a type of resource diplomacy then this behavior would be inconsistent with its current cooperative policy goals. Yet this does not change the fact that thus far, Arctic states are eagerly partnering with China to secure these partnerships.

While Chinese behavior in the Arctic when it comes to energy resources has thus far been benign and cooperative, there has also been an aggressiveness in seeking to claim these resources over the past decade which could indicate a less cooperative policy behind the public white paper. For instance, it is estimated that 88 percent of the Arctic Ocean seabed would be under the sovereignty of Arctic states should all the current polar continental shelf claims be accepted as presented.[149] This leaves at least 12 percent of the seabed beyond national jurisdiction per Articles 136 and 137 of the United Nations Convention of the Law of the Sea (UNCLOS).[150] Per the Arctic White Paper, China

[148] Hsiung, 248.

[149] Hong, 11.

[150] United Nations Treaty Collection, "United Nations Convention on the Law of the Sea," (10 December 1982): https://www.un.org/Depts/los/convention-agreements/texts/unclos/.

respects the sovereign rights of Arctic states "pursuant to treaties such as UNCLOS."[151] Thus, in the case of the Norwegian drilling company purchase, there may be more competitive aims to gain Western expertise in resource extraction that could be utilized by Chinese companies in what they may eventually consider to be international waters of the Arctic. This long-term outlook of a global commons Arctic could in turn lead to friction with the Arctic states, especially in the case of a defensive and equally aggressive Russia. So, while China's activities have been cooperative over the past decade, this may change to a more competitive policy in the coming decade, depending on China's longer-term assessments of its own energy security.

C. CONCLUSIONS

Overall, Chinese economic investments in Arctic resource exploration and exploitation have been consistent with stated Arctic policy goals, but lay a foundation for a potentially inconsistent policy in the future should China utilize its investments for debt or resource diplomacy or move forward on its global commons view of the Arctic Ocean. This more competitive Arctic policy could result from China's investments to gain greater political influence in Iceland and Greenland, and possible resource diplomacy from energy partnerships in order to secure a steady flow of oil and gas to Chinese cities. The examples of China purchasing the Canadian energy firm and Norwegian drilling company also hint at more competitive energy security goals. Thus, much like the larger BRI which is the model for this policy, the resource utilization goals for the Polar Silk Road should be considered both geo-economic and geo-strategic, or rather economic in the short-term while laying a strategic foundation over time.

As with China's BRI investments elsewhere, there are two schools of thought over China's increasing economic interests in the Arctic. As analyzed in the short term, China's bilateral investment opportunities in Arctic states have followed the collaborative pattern argued by the Cooperation School scholars, with a focus on respect for sovereignty and the joint development of Arctic infrastructure and resource utilization. In particular, Chinese

[151] State Council Information Office of the People's Republic of China, 2.

Arctic investments have been subject to what scholars such as Su Ping and Marc Lanteigne describe as "misinterpretation and occasional alarmism."[152] Ping and Lanteigne claim that economic opportunism plays a significant role in these investments.[153] Similarly, Frederic Lassere notes that, "Beijing's strategy…seems more driven by opportunism than by a long-term desire to challenge the littoral states' sovereignty."[154] It is true that Chinese investments thus far have not challenged the sovereignty of the Arctic States, or provided any sources of conflict.

However, over the longer term, China's aggressive spending could have the more competitive aim of using the multilateral legal determinations of UNCLOS to push a global commons agenda that Conflict School scholars would argue could eventually provide direct ownership of natural resources in the Arctic Ocean. As Anne Marie Brady attests, "China regards Arctic routes as international straits," and "believes that the Arctic's global mineral and hydrocarbon resources should be opened up to the global market."[155] The following chapter will discuss these legal and political themes of Arctic sovereignty and governance in greater depth, but it is safe to say that the next decade will be important in monitoring Chinese behavior in the Arctic. Specifically, one should look for indicators that would note a more competitive Arctic policy from Beijing, including increased focus on the polar resource rights of non-Arctic states in forums such as the Arctic Council. Yet, as noted earlier, China's long-term investment strategy in the Arctic is also predicated on the continued melting of polar sea-ice and perhaps most importantly, Beijing's future energy security status.

The added dimension of time is also an important potential indicator for continued Chinese consistently to the Arctic White Paper goals. In Table 1, Chinese behaviors in the Arctic are assessed in both the short and long terms, with a positive sign signifying consistent actions with the white paper and a negative sign signifying inconsistent

---

[152] Ping and Lanteigne, 5.

[153] Ping and Lanteigne, 12.

[154] Frederic Lasserre, Linyan Huang, and Olga Alexeeva, "China's Strategy in the Arctic: Threatening or Opportunistic?" *Polar Record,* Vol. 53 (October 2015): 31.

[155] Brady, 264.

behavior. As the chart indicates, thus far China's cooperative economic engagement with Arctic Council states has been mostly consistent, in both energy and non-energy investments, towards each of the eight member states apart from Norway, which had the 2010 political fallout with Beijing, and the United States, currently locked in a trade war with China. However, looking longer term out to 2030, the possibilities for this cooperation to turn competitive grow in most nations, designated by the question mark, and in the case of a continued global commons approach to the region, Chinese policies become inconsistent towards Russia and Canada which view the NSR and Northwest passage as sovereign waters. While it is difficult to make quality predictions for the consistency of Chinese policy with the Arctic states, this chart shows how much the possibilities may contrast between current and long-term assessments. For example, both Iceland and Greenland have positive current economic engagement with China that follows Beijing's stated cooperative Arctic goals, but in the case that China uses this economic influence to sway political decisions in these countries, the behaviors could turn inconsistent with stated Chinese policy. Similarly, the foundation being laid for a more competitive Arctic policy in the future is inconsistent with China's current stated policy goals and results in a more negative long-term outlook in regard to the great power actors in the Arctic, Russia and the United States.

Table 1. Consistency of China's Behavior to Arctic Policy Investment Goals with Arctic Council States over Time.

Arctic Council Country	Energy (short/long term)	Non-Energy (short/long term)
Russia	+/-	+/-
Iceland	+/+	+/?
Greenland	+/+	+/?
Norway	-/?	-/?
Sweden	+/+	+/+
Finland	+/?	+/?
Canada	+/?	+/-
United States	+/?	-/?

This chapter has assessed mostly consistent Chinese behavior toward its stated goals for the Polar Silk Road initiative, and in almost every case Chinese investments and partnerships have been welcomed by the Arctic states, even though suspicions of Chinese competitive aims persist. For the Arctic states, the implications of China's actions thus far have been minimal, and show a status quo preference for Arctic sovereignty and governance. However, should Chinese actions diverge from the win-win cooperation of the Arctic White Paper, and China promote a more global commons approach to Arctic sovereignty and governance, then Arctic states will face the challenge of a rising great power seeking a more revisionist role in the region. This revisionist policy would be a particular threat to Russian NSR and hydrocarbon claims in the Arctic Ocean. But at least in the near-term, both nations find their economic cooperation to be more beneficial than strategic competition, which thus far is true for each of the Arctic states and China when it comes to the rich natural resources of the far north.

THIS PAGE INTENTIONALLY LEFT BLANK

IV. ARCTIC GOVERNANCE AND LEGAL FRAMEWORKS

This chapter will examine the 2018 Arctic White Paper's ambiguous language toward Arctic governance and the legal territorial sovereignty of the Arctic states. It starts with Beijing's political history in the polar regions before moving on to China's current status in the Arctic Council. The chapter will then assess China's behavior in the Arctic with respect to the stated goals of the Arctic White Paper, specifically via the legal frameworks of the Arctic, before concluding with viewpoints from the Conflict and Cooperation schools, indicators of future consistent/inconsistent behavior, and implications for the Arctic states. Overall, China's short-term actions are consistent with the cooperative respect for Arctic sovereignty highlighted in the white paper, but at the same time Beijing is laying a longer-term foundation for a potentially competitive global commons argument for non-Arctic states through its ambiguous language in the white paper.

China's role in Arctic governance and its accompanying legal frameworks is a primary issue addressed by the white paper, and encompasses Beijing's polar activities of scientific research, shipping, and resource utilization previously discussed. The white paper notes that China "upholds the current Arctic governance system with the UN Charter and UNCLOS at its core."[156] Thus, per the white paper Beijing plans to follow international laws such as the United Nations Convention of the Law of the Sea (UNCLOS), as well as the current political framework of the Arctic which is represented by the eight-member Arctic Council forum. Yet the document also notes that "there is no comprehensive treaty for all Arctic affairs," and that states from outside the Arctic have "rights in respect of scientific research, navigation, overflight, fishing, laying of submarine cables and pipelines in the high seas and other relevant sea areas in the Arctic Ocean, and rights to resource exploration and exploitation in the Area, pursuant to treaties such as UNCLOS and general international law."[157] Thus, China emphasizes in the white paper

[156] State Council Information Office of the People's Republic of China, "China's Arctic Policy," (January 26, 2018): 8, http://english.gov.cn/archive/white.paper/2018/01/26/content.

[157] State Council Information Office of the People's Republic of China, 2.

that it is willing to follow the existing international rules in the Arctic, but also frames the Arctic region as a political work in progress in which non-Arctic states have rights and privileges.

Over the past decade, China has predominantly cooperated with Arctic states on governance issues and has not challenged the established legal frameworks of the Arctic. China has joined the Arctic Council forum as a non-Arctic observer state and participated in other Arctic forums such as the Iceland-based Arctic Circle organization.[158] That Beijing has not challenged the status quo makeup of Arctic institutions and the rules set forth in the Arctic is mostly due to the fact that China has thus far gotten what it wants out of the current Arctic governance structure in the form of access for scientific research, shipping, and investment. As Shaun Breslin attests in the context of whether China is a status quo or revisionist power, "In broad terms China has embraced multilateral forms of cooperation and governance. This does not mean, however, that it is satisfied with the distribution of power in many international institutions, or some of the norms and principles that underpin them."[159] Thus, while at the same time cooperating with Arctic institutions, the white paper shows that China's Arctic policy is also ambiguous when it comes to the rights of non-Arctic states in the region. This chapter will examine in more detail China's behavior towards Arctic governance and legal frameworks.

A. ARCTIC GOVERNANCE

As Breslin notes, China has been a willing participant in international institutions, but is also dissatisfied with the power structures that at times place Beijing in a secondary role. Anne Marie Brady relates a relevant anecdote when she describes a 1983 incident involving China's then top polar official, Guo Kun. Guo and his delegation had been invited to Canberra to participate in the Consultative Meeting for the Antarctic Treaty (ACTM) but were humiliated by being asked to leave the conference room when the meeting turned to deliberative topics, because China had just signed on to the Antarctic

[158] See Arctic Circle China Forum "China and the Arctic," (Shanghai: 10–11 May 2019) arcticcircle.org/Media/arctic-circle-china-forum-program.

[159] Shaun Breslin, "Global Reordering and China's Rise: Adoption, Adaptation, and Reform," The International Spectator, Vol.53, No.1 (2018): 57.

Treaty several months earlier and was not yet considered a full party to the treaty. Guo vowed to never attend another ATCM until China had an Antarctic base and the subsequent right to speak on Antarctic affairs.[160] This event from three decades ago encapsulates China's current viewpoint on Arctic policy and the reason for publishing the Arctic White Paper. Just as with Antarctica in the 1980s, Beijing is currently seeking the right to be a more relevant political actor in Arctic affairs and not sit at the back of the room when it comes Arctic governance. China learned its lesson from Antarctica that it needed to build a presence in the Arctic, which it did in 2004 with the establishment of the Yellow River Research Station, and then seek a political role as it did in 2007, when Beijing first applied for observer status on the Arctic Council. As Brady states, Beijing now emphasizes its "right to speak" on polar affairs and asserts its "rights and interests" in the polar regions.[161]

The Arctic Council, formed in 1996, consists of the eight littoral Arctic states and serves as the leading intergovernmental forum for Arctic governance. The Arctic Council promotes "cooperation, coordination, and interaction among the Arctic states."[162] While this forum is based on consensus between its members, there is no underlying treaty for the Arctic region like that in Antarctica. China first applied for admission to the Council as an observer in 2007, as non-Arctic states cannot be full Council members. Table 2 lists the Arctic Council members and their initial support/opposition to Chinese membership on the Council, as well as those with ongoing territorial claims in the region. China's application was deferred until 2011 when a number of other actors/nations, including the EU, India, and Singapore, had also requested observer status.[163] Canada and Russia initially resisted granting observer status to China, fearing that non-Arctic powers could claim too large a role in the regional forum. Russia, in particular, was concerned that China could perhaps challenge Russian maritime sovereignty in the Arctic.[164] However, by 2013 China had

[160] Anne-Marie Brady, China as a Polar Great Power (Cambridge: Cambridge University Press, 2017), 187.

[161] Brady, 188.

[162] Arctic Council, "The Arctic Council: A Backgrounder," (20 May 2015), https://arctic-council.org/index.php/en/about-us.

[163]Elizabeth Wishnick, China's Interests and Goals in the Arctic: Implications for the United States, (Carlisle, PA: U.S. Army War College Strategic Studies Institute, 2017): 50.

[164] Wishnick, 51.

agreed to respect the rights of indigenous peoples and respect the sovereignty of Arctic states, easing Canadian and Russian opposition, and was finally granted observer status.[165]

Table 2. Arctic Council Member State Initial Support/Opposition for Chinese Membership and Current Arctic Territorial Claims.

Arctic Council Country	Support Chinese admission	Oppose Chinese admission	Current Arctic territorial claims
Russia		x	x
Iceland	x		x
Denmark/Greenland	x		x
Norway	x		x
Sweden	x		
Finland	x		
Canada		x	x
United States	x		x

According to Elizabeth Wishnick, this Arctic Council compromise was actually brokered by U.S. Secretary of State John Kerry, who argued for specific rules that observer states were required to recognize before being granted Council participation, which included respecting the sovereignty of Arctic states and abiding by existing legal frameworks.[166] More recently, skepticism over China's role in the Arctic has returned, with U.S. Secretary of State Pompeo warning of China's potential for aggressive behavior in the Arctic at the 2019 Arctic Council meetings.[167] These latest meetings in Rovaniemi, Finland were the first in which the participants could not agree on a joint declaration, which

[165] Wishnick, 52.

[166] Wishnick, 53–54.

[167] See Michael R. Pompeo, "Looking North: Sharpening America's Arctic Focus," U.S. Department of State (May 6, 2019).

Icelandic Secretary of State Sturla Sigurjonsson noted was due to the new "higher profile" that the Arctic has received.[168] As the new Chair of the Arctic Council, Iceland wants to make the council into a stronger forum for cooperation, and its foreign minister noted the potential difficulties for this greater cooperation as "the geostrategic situation in the region has changed."[169] Yet immediately after the Arctic Council meetings, Iceland and other Arctic states sent delegations to Shanghai to participate in follow-on Arctic Circle Group discussions, suggesting that not all Arctic states are as skeptical as the U.S. over China's role in the region.[170]

Over time, the United States, Canada, and Russia have each expressed their doubts over Chinese intentions regarding Arctic governance, but in Ottawa and Moscow there now seems to be less skepticism than before. For example, in 2013 Russian Prime Minister Dmitry Medvedev stated that the Arctic region should be governed by the Arctic states themselves, but by 2015 Foreign Minister Sergei Lavrov accepted Chinese participation on economic projects in the forum.[171] Similarly, former Canadian PM Stephen Harper complained in 2014 of the growing number of observer states on the Arctic Council, asking that observer states "understand and respect the sovereignty…and…their presence doesn't override or impede upon the deliberations of permanent members."[172] But by 2019, Canadian MP Andrew Leslie, who attended the recent Arctic Circle Group meetings in Shanghai, remarked that Canada "welcomes" Chinese participation in the Arctic."[173] For its part, China's behavior has thus far been consistent with the rules for Arctic Council participation in becoming an observer state to the Council and has not challenged its

---

[168] Atie Staalesen, "As Arctic talks move to China, leaders downplay divides," The Independent Barents Observer (May 13, 2019), https://www.arctictoday.com/as-arctic-talks-move-to-china-leaders-downplay-divides/, 1.

[169] Staalesen, 2.

[170] Staalesen, 1.

[171] Wishnick, 51.

[172] P. Whitney Lackenbauer, "Canada and the Asian Observers to the Arctic Council: Anxiety and Opportunity," Asia Policy 18, No.1 (2014): 25–26.

[173] Nathan Vanderklippe, "Agreeing on the Arctic: Amid Dispute, Canada sides with China over the U.S. on how to manage the North," The Globe and Mail, (May 10, 2019), https://www.theglobeandmail.com/world/article-agreeing-on-the-arctic-why-canada-sides-with-china-over-the-us-on/, 1.

governance, shown by the fact that its observer status requires renewal every four years and China has remained a member.[174] But the Arctic White Paper also contains language that goes beyond "respect the sovereignty, sovereign rights, and jurisdiction enjoyed by the Arctic states in this region," as China also notes that "respect should be reciprocal," and that the Arctic states should "respect the overall interests of the international community in the Arctic."[175] This and similar language throughout the white paper lays the foundation for a potentially more competitive Chinese Arctic policy in the longer-term, which views the Arctic Ocean as more of an international waterway and the resources underneath as more a global commons.

B. LEGAL FRAMEWORKS

The Arctic White Paper recognizes two legal frameworks in the Arctic multiple times over the course of the ten-page document: UNCLOS and the Spitsbergen Treaty. Each of these frameworks provide China with opportunities in the formation of international law in the Arctic. For instance, UNCLOS provides a legal basis for Arctic shipping and freedom of navigation in the high seas. Specifically, Article 234 of UNCLOS allows Arctic coastal states to be more restrictive of passage in ice-covered waters, which Russia and Canada interpret as giving them greater control of the Northern Sea Route (NSR) and Northwest Passage along their respective coastlines.[176] This "Arctic exception" gives the coastal states authority to enact laws preventing maritime pollution for 200 nautical miles from their coastlines on the basis of sea-ice endangering Arctic Ocean navigation.[177] Yet the melting sea-ice of the Arctic Ocean provides a potential challenge to this interpretation of Article 234, giving China an opportunity to interpret

[174] Sebastian Knecht, "New Observers Queuing Up: Why the Arctic Council should expand – and expel," The Arctic Insititute, (April 20, 2015), https://www.thearcticinstitute.org/new-observers-queuing-up/.

[175] State Council Information Office of the People's Republic of China, 4.

[176] Melody Schreiber, "Russia and Canada may lose their legal claim to Arctic Seaways as ice melts, experts say," Arctic Today (4 April 2019), 1.

[177] Michael Byers, Who Owns the Arctic? Understanding Sovereignty Disputes in the North (Vancouver, Douglas and McIntyre: 2009) 47.

Article 234 as more favorable to international rules than the rules established by the Arctic states.[178]

Similarly, China highlights the 1922 Spitsbergen (Svalbard) Treaty which allows for international signatories to have access to the waters and resources surrounding the Norwegian archipelago of Svalbard as a kind of global commons area.[179] Svalbard is where China built its Arctic Yellow River Research Station in 2004. Noting this pre-PRC China treaty up front in the white paper possibly gives some perspective as to how Beijing views the Arctic, as more of an international region in which non-Arctic states have their own set of rights. Ambassador Lan Lijun stated during the 2012 Arctic Council meetings, "Arctic issues are trans-regional, such as climate change and international shipping, which involve the interests of non-Arctic states."[180]

Invoking the Spitsbergen Treaty multiple times in the white paper potentially lays a foundation for a more assertive Chinese policy in the future that could push the rights of non-Arctic states in the Arctic Council. This more competitive policy would be both inconsistent with the cooperative status quo nature of the white paper, but also consistent with the global commons argument the document puts forth. Marlene Laruelle argues that China has made clear that while it currently intends to support the Arctic status quo, it also seeks to "internationalize" the region to obtain a broader role for non-Arctic states.[181] Should China pursue a global commons argument to open up an ice-free Arctic to non-Arctic states this would be in opposition to the current Arctic framework which is focused on maintaining a more closed region via the sovereign rights of the coastal Arctic states, particularly along the Northwest Passage and NSR. This could eventually lead to friction with a Russian state that views it Arctic sovereignty as integral to its security.

---

[178] Nengye Liu and Kamrul Hossain, "China and the Development of International Law on Arctic Shipping: Challenges and Opportunities," The University of Adelaide, Research Paper No. 2017–38 (2017), 16.

[179] ArcticPortal.Org, March 10, 2019, library.arcticportal.org/1909/1/The_Svalbard_Treaty_9ssFy.pdf.

[180] Nong Hong, China's Interests in the Arctic: Opportunities and Challenges, (Washington, DC: Institute for China-America Studies, March 2018), 4.

[181] Marlene Laruelle, Russia's Arctic Strategies and the Future of the Far North, (London: Routledge, 2014): xvi.

C. CHINESE BEHAVIOR TOWARDS ARCTIC GOVERNANCE/LEGAL FRAMEWORKS

Thus far, only the language of the white paper has been considered, as it established the objectives and process for Chinese Arctic policy in early 2018. More important to this thesis is China's behavior in the region with regard to Arctic governance and legal frameworks, including statements from officials, as well as academic work and bureaucratic expansion. For instance, Chinese Admiral Yin Zhuo remarked in 2012 that the Arctic belonged "to all the peoples around the world," which stirred controversy at the time for seemingly challenging Arctic sovereignty, but was meant to only refer to the central area of the Arctic Ocean outside the exclusive economic zones (EEZ) of the Arctic states.[182] Figure 4 shows the area of the Arctic Ocean claimed by Arctic states and the limited high seas area that China views as international waters, currently ice-covered. However, Admiral Zhuo's remark is an important indicator that China may not view the territorial claims of Arctic states as sovereign territory itself, which would include Russia's unsettled Lomonosov Ridge claim to UNCLOS for a large section of the Arctic sea and the resources beneath.[183] Caitlin Campbell notes that Russia's current territorial claims to sections of the continental shelf comprise nearly half of the Arctic region, which is of concern to China as it could restrict access to large swathes of the Arctic.[184]

[182] Su Ping and Marc Lanteigne, "China's Developing Arctic Policies: Myths and Misconceptions," Journal of China and international Relations, Vol. 3, No. 1 (December 2015): 12.

[183] Caitlin Campbell, China and the Arctic: Objectives and Obstacles (Washington, DC: U.S.-China Economic and Security Commission Staff Research Report, April 2012), 8.

[184] Campbell, 8.

185

Figure 4. Arctic Territorial Claims by the Arctic States. Source: *Encyclopedia Britannica*.

Beyond statements from officials, Beijing has increased funding on legal research pertaining to the Arctic, focused on avenues to expand China's rights in the region.[186] There have also been a series of legal articles from China Ocean University in Qingdao starting in 2009 which have focused on Arctic law and treaties, including UNCLOS and

[185] Ian Birdwell, "Rival Claims to a Changing Arctic," The Maritime Executive, (Aug 15, 2016), https://www.maritime-executive.com/article/rival-claims-to-the-changing-arctic.

[186] Yun Sun, "The Intricacy of China's Arctic Policy," Stimson Center (Aug 28, 2018): 4, www.stimson.org/content/intricacy-chinas -arctic-policy.

Spitsbergen.[187] In particular, Ocean University law professor Guo Peiqing noted in 2008 that "circumpolar nations have to understand that Arctic affairs are not only regional issues but also international ones."[188] Along with this academic activity, there have also been additional government bureaucracies established over the last decade to focus on polar issues, including the Arctic Affairs Coordination Group, formed by the State Council in 2011 to set and synchronize the policies of over fifteen government agencies/institutions involved in China's Arctic policy.[189] This activity focused on Arctic legal and governmental policy shows Beijing's increased interest in the far north, but it remains limited compared to Chinese commercial investment, maritime shipping, and scientific actions in the region.

D. ASSESSMENTS

While China has been active in Arctic affairs over the past decade, its behavior has neither challenged the sovereignty of the Arctic states nor the governance system of the Arctic Council thus far. This behavior is consistent with the stated policies of the Arctic White Paper, which notes that "states from outside the Arctic region do not have territorial sovereignty in the Arctic."[190] But as Campbell points out, "The issue of territorial control over the Arctic has figured prominently in Chinese and other discussions of the Arctic."[191] Thus the white paper's focus on UNCLOS and the Spitsbergen Treaty, along with the plethora of academic and legal articles being produced in China on these international treaties. This focus on the international aspects of the Arctic is also shown by the statements from Chinese government officials from Admiral Zhuo to President Xi Jinping when he refers to China as a "polar great power."[192] Official Chinese statements supporting a global commons status of the Arctic are few, but comments such as the following from China's

[187] David Curtis Wright, "The Dragon Eyes the Top of the World: Arctic Policy Debate and Discussion in China," Naval War College China Maritime Studies Institute, No.8 (August 2011), 9–10.

[188] Wright, 29.

[189] See Sun, 5–10.

[190] State Council Information Office of the People's Republic of China, 2.

[191] Campbell, 8.

[192] See Brady, 3.

assistant minister of foreign affairs Hu Zhengyue in 2009 suggest this more international viewpoint when he stated that "Arctic countries should protect the balance between the interests of states with shore-lines on the Arctic Ocean and the shared interests of the international community."[193] China has indeed sought a greater role in Arctic affairs through its observer membership on the Arctic Council and increased bureaucratic focus on the region. As analyzed in the previous two chapters, Beijing has also stepped up its actions and in particular its spending in the realms of scientific research, resource utilization, and shipping interests in the Arctic.[194] Based on all of this activity thus far discussed, it is likely that China will seek to expand its voice in Arctic governance, and take on the great power role in the Arctic articulated by Xi Jinping. To this end, while China's behavior in Arctic governance has thus far been consistent with the cooperative statements of the white paper, the document also includes passages that lay the foundation for a more competitive policy in regards to Arctic governance in the future, using the legal frameworks so frequently mentioned in the paper.

The Arctic White Paper passages that potentially set up this more competitive Arctic policy are those that focus on UNCLOS and the Spitsbergen Treaty and the subsequent rights and privileges of non-Arctic states in the region. For example, the white paper notes that "the Arctic Ocean covers an area of more than 12 million square kilometers, in which coastal States and other States share maritime rights and interests in accordance with international law."[195] UNCLOS Article 136 in fact rules that waters outside national jurisdiction should be viewed as high seas.[196] Just as Russia interprets the "Arctic exception" of Article 234 of UNCLOS to give it expanded territorial rights in the Arctic Ocean, China could utilize Article 136 to seek recognition of a more ice-free NSR as international waters. This would create the potential for conflict should the two great powers disagree over the lucrative Arctic sea-lanes, or should China decide to use its own

[193] Wright, 29.

[194] See Brady, 179.

[195] State Council Information Office of the People's Republic of China, 2.

[196] United Nations Treaty Collection, "United Nations Convention on the Law of the Sea," (10 December 1982): https://www.un.org/Depts/los/convention_agreements/texts/unclos/.

icebreakers to accompany its cargo vessels and not pay Russian transit fees. Lincoln Flake asserts that both Russia and China "view the Arctic through distinct geo-strategic lenses which in turn has shaped their approach to the region's governance."[197] Flake goes on to argue that Russia prefers a closed-sea Arctic in which non-Arctic entities enter only with permission, while China prefers an open-sea policy and views the Arctic Ocean as a "common heritage for all mankind."[198] Michael Byers notes that even if Russia is granted an extended continental shelf, this would provide "no rights whatsoever to the ocean surface or any resources located in the water column itself."[199] So China could utilize UNCLOS to promote the "high seas" aspect of an Arctic global commons should it choose to do so.

Similarly, the white paper notes that "there is no comprehensive treaty for Arctic affairs."[200] While supporting the current Arctic governance structure, the document also notes the "liberty" and "equality" of the Spitsbergen Treaty providing Arctic access to non-Arctic states.[201] Should China choose to demand a more equitable stake in Arctic affairs using this global commons argument, particularly in the ice-free areas of the Arctic Ocean, this would put Beijing and other non-Arctic states at odds with the Arctic Council and turn the cooperative nature of Arctic governance into a more competitive dynamic between Arctic and non-Arctic states. This more competitive behavior would not necessarily be inconsistent with the Arctic White Paper, as the document itself is vague enough on these points of Arctic governance and legal frameworks to be consistent with a future competitive Arctic policy. While China has followed the cooperative notes of the white paper thus far, different interpretations of territoriality and international waters could set up competition in the future.

---

[197] Lincoln Flake, "Russia and China in the Arctic: A Team of Rivals," Strategic Analysis, Vol. 37, No. 6 (December 2013): 4.

[198] Flake, 5.

[199] Byers, 93.

[200] State Council Information Office of the People's Republic of China, 2.

[201] State Council Information Office of the People's Republic of China, 2.

As with the different interpretations China could use on the legal frameworks of the Arctic, so too do scholars from the Cooperation and Conflict schools differ on their interpretations of China's policy towards Arctic governance. Cooperation school scholars, such as Su Ping and Marc Lanteigne, point out that a number of Arctic Council observer states "brand" themselves as being connected with the Arctic, such as the United Kingdom, which in its 2013 Arctic White Paper described itself as "the Arctic's nearest neighbor."[202] Thus, when China issues an Arctic White Paper calling itself a "near-Arctic State," it does not necessarily mean that China wishes to instigate a great power competition with Arctic powers or overturn the current Arctic governance any more than the United Kingdom does. Similarly, Nong Hong suggests that per Article 136 of UNCLOS, "the area beyond national jurisdiction and its resources are the common heritage of mankind," which is consistent with the legal argument noted by Beijing in the white paper that China will follow international law in the Arctic.[203] Thus, if China does advocate for the central portion of the Arctic Ocean to be "international waters" in an ice-free future, this would be in accordance with international law and not necessarily a power grab by Beijing. In each of these instances, the Cooperation school would argue that China is following international legal frameworks and has not challenged the territoriality of Arctic states, as that would be inconsistent with China's Arctic policy.

Conversely, scholars from the Conflict school would argue that China's language on Arctic governance and legal frameworks is intentionally vague. This gives Beijing flexibility in its Arctic policy over the longer term, so that it can potentially develop a more competitive Arctic policy and remain within the stated goals of the white paper should it choose to do so. Elizabeth Wishnick argues that "China is playing a long game in the Arctic," and that "in the long term, China may try to seek changes in existing governance to better accommodate its interests."[204] Beijing has indeed allocated so many commercial, scientific, and governmental resources towards the Arctic that it would naturally desire the ability to mold Arctic affairs as much as any other powerful non-Arctic state. Anne-Marie

[202] Ping and Lanteigne, 15.

[203] Hong, 11.

[204] Wishnick, 59.

Brady notes that in 2011, an article in the CCP's English-language mouthpiece the Beijing Review by Cheng Baozhi remarked that "current international law and regional institutions were inadequate for the changing situation in the Arctic region."[205] That this article was then republished on the website of the State Council Information Office—which published the 2018 Arctic White Paper—implies that Beijing has wanted to change current Arctic political and legal structures for some time, and while thus far following the rules of the Arctic Council, also seeks to change these rules over time.

E. CONCLUSIONS

Overall, China's behavior and official statements over the past decade with regard to Arctic governance and its legal framework is somewhat mixed between the cooperative respect for sovereignty and the more competitive global commons argument both included in the white paper. The language of the white paper in this area of China's Arctic policy more than in any other area lays a foundation for a longer-term competitive policy. Specifically, China has not directly challenged Arctic governance nor sovereignty rights, but leaves open the potential to interpret the legal framework of the Arctic as providing a global commons situation in the region that would provoke and possibly result in conflict with the Arctic states. As the white paper notes, "While pursuing its own interests, China will pay due regard to the interests of other countries and the broader international community."[206] However, just because China has left itself the strategic ambiguity to pursue a more competitive policy in the Arctic does not necessarily mean it will do so. Looking back on Beijing's Antarctic policy, China has continued to build research bases to increase its presence there, but has not challenged Antarctic governance. As the Deputy Director of China's State Oceanic Administration remarked in 2011, China's overall goal in polar affairs is to increase China's "status and influence" to better protect its "polar rights."[207] As long as China determines that its Arctic rights are being served, Beijing may choose to continue its cooperative Arctic policy.

---

[205] Brady, 197.

[206] State Council Information Office of the People's Republic of China, 4.

[207] Brady, 185.

V. FINDINGS AND OVERALL CONCLUSIONS

Over the past decade of rising temperatures and melting sea-ice, Chinese activities in the Arctic have significantly increased, based on economic opportunity and strategic interest. This led Beijing to publish the 2018 Arctic White Paper to lay out its Arctic policy to the world, and introduce the Polar Silk Road initiative. The white paper highlights China's primary goals in the Arctic as scientific research, shipping routes, resource utilization through infrastructure, mining, and energy investments, and greater participation in Arctic governance. China's new focus on the Arctic has been met with suspicion by some, including the United States which views Beijing's behavior in the region as competing with the interests of the Arctic states.[208] Scholars in the Conflict School of thought on China's Arctic policy likewise view Beijing's activities in the Arctic as a geostrategic plan to gain greater influence in the region in order to promote a revisionist policy that would challenge the sovereignty of Arctic states. Yet thus far, Chinese behavior in the Arctic has been mostly consistent with the stated status quo policy of the white paper. Scholars from the Cooperation School of thought on China's Arctic policy would argue that the Polar Silk Road is indeed more opportunistic towards economic and resource gains than it is threatening to Arctic states.

The primary question of this thesis has been whether China's actions related to the Arctic over the past decade have been consistent or inconsistent with the stated policy goals listed in the 2018 Arctic White Paper. This thesis has shown that China's actions in the Arctic have been mixed, neither challenging the Arctic states nor being as fully cooperative as the win-win goals stated in the white paper. In addition, while conflict in the region is certainly not inevitable from Beijing's behavior to date, China has laid a foundation in certain actions and especially in the language of the white paper to pursue a more competitive Arctic policy in the future. This concluding chapter summarizes the findings of this thesis towards China's activities in the Arctic in each of the four main issue areas, examining the implications of China's Arctic activities on the Arctic states themselves, in

[208] See Michael R. Pompeo, "Looking North: Sharpening America's Arctic Focus," U.S. Department of State (May 6, 2019).

particular great powers Russia and the United States. The thesis concludes with recommendations for the United States based on these findings, indicators to monitor that would signal a shift in Chinese Arctic policy, as well as a final review of the Cooperation and Conflict Schools and whether or not the Polar Silk Road is a threat to the Arctic states.

In each of the four main areas of Chinese Arctic behavior analyzed in this thesis—scientific research, shipping routes, resource utilization, and governance—Beijing has been mostly consistent with the cooperative, win-win policy of the white paper, with some exceptions. Table 3 summarizes the consistencies, inconsistencies, and mixed activities of China towards the eight Arctic states in the four issue areas. In the case of scientific research in the Arctic, China has aggressively bolstered funding, established research stations, sought out partnerships, conducted expeditions, and built new polar icebreakers. These activities on their own are consistent with the cooperative goals stated in the white paper. Yet, contributing to scientific research in the Arctic is stipulated by China's Arctic Council observer status. Also, Beijing's increased funding for Arctic science has been used as much to research shipping lanes and legal frameworks as it has to study polar scientific issues which could as easily be accomplished by the multiple Chinese research stations in Antarctica. Similarly, Chinese behavior towards newly accessible Arctic shipping routes has been consistent with white paper goals of respecting sovereignty and the access parameters set by Russia and Canada along the Northern Sea Route (NSR) and Northwest Passage, respectively. However, the building of additional icebreakers as well as ice-reinforced cargo ships and LNG tankers set up China for decreased need for Russian or Canadian icebreaker escort to sail through the NSR or Northwest Passage. Additionally, these reinforced vessels would be able to sail through Arctic Ocean waters that are still under territorial dispute should thawing sea-ice permit wider passage in the future.

As for the multifaceted white paper goal of resource utilization in the Arctic, Chinese private and state-owned firms have invested great sums in each of the Arctic states as part of the Polar Silk Road to build infrastructure and exploit the rich natural resources of the far north. These investments and partnerships have generally been welcomed by the Arctic states, and been mostly consistent with the cooperative, win-win policies stated in the white paper. Examples of inconsistent behavior have been the political payback towards

Norway in holding off the Arctic Corridor project, as well as potentially the takeovers of the Greenland mining venture and Canada's Nexen Energy. These deals along with China's aggressive level of investment in Greenland and Iceland spark concerns of resource or debt diplomacy associated with the BRI, but are not necessarily inconsistent with the white paper stated goals of resource exploration and exploitation. On the energy side, China's multi-billion-dollar partnership with Russia for gas pipelines and investments in the Yamal LNG project are beneficial for each party, but do not represent more than a practical partnership between the two great powers. The Chinese purchase of the Norwegian drilling company while not inconsistent behavior, gives Beijing the option of utilizing a "global commons" argument for the Arctic should they wish to drill for oil in disputed waters, which would be inconsistent with the respect for Arctic sovereignty aspects of the white paper.[209]

Table 3. Summary Results of Chinese Behavior Related to the Arctic For Each Arctic State.

Arctic State	Scientific Research	Shipping Lanes	Resource Investments	Governance
Russia	consistent	consistent	consistent	mixed
Canada	consistent	consistent	mixed	mixed
Norway	consistent	consistent	inconsistent	mixed
Sweden	consistent	consistent	consistent	mixed
Finland	consistent	consistent	consistent	mixed
Greenland (Denmark)	consistent	consistent	mixed	mixed
Iceland	consistent	consistent	consistent	mixed
United States	consistent	consistent	mixed	mixed

The main issue area of the white paper that lays a foundation for potential inconsistent behavior by China in the future is Arctic governance and legal frameworks. China's activities in the Arctic have thus far respected the sovereignty of Arctic states and

[209] See State Council Information Office of the People's Republic of China, "China's Arctic Policy," (January 26, 2018): 4, http://english.gov.cn/archive/white.paper/2018/01/26/content.

their adjoining coastal waters as well as the de facto governance of the Arctic Council forum. But the white paper language stating that "China will work with all other countries to build a community with a shared future for mankind in the Arctic region," is similar to the UNCLOS "common heritage of mankind" language for international waters.[210] China highlights the legal frameworks of UNCLOS and the Spitsbergen Treaty in the white paper, and could eventually pursue a global commons argument for non-Arctic states to have greater access to the Arctic Ocean and its resources. China's current official position on unresolved territorial areas of the Arctic Ocean is to view them as international waters, while Chinese scholars and government officials often refer to the polar regions as global commons.[211] This interpretation would be highly inconsistent with China's cooperative Arctic policy while at the same time being arguably consistent with the stated white paper language. These statements of Chinese scholars and government officials, to include President Xi Jinping when he refers to China as a "polar great power," are behaviors that suggest Beijing has at least considered this prospect should it someday be in their economic or strategic interests or should they perceive that they are being restricted from Arctic access to shipping routes or resources. The vague language of the white paper combined with Chinese statements of deserving a greater role in Arctic affairs lay the potential foundation for a more competitive Arctic policy in the future that would challenge the sovereignty of Arctic states.

A. IMPLICATIONS FOR THE ARCTIC STATES

As Michael Byers argues, "In today's Arctic, sovereignty matters because of climate change, which is more apparent there than anywhere else on earth."[212] Indeed, it is the melting sea-ice of the Arctic Ocean that has sparked global interest in the region and resulted also in efforts by the Arctic states to claim territorial rights along the continental shelves outside of their Exclusive Economic Zones (EEZs). China's behavior has thus far

---

[210] State Council Information Office of the People's Republic of China, 4.

[211] Anne Marie Brady, *China as a Polar Great Power*, (Cambridge: Cambridge University Press, 2017), 189–190.

[212] Michael Byers, *Who Owns the Arctic? Understanding Sovereignty Disputes in the North* (Vancouver: Douglas and McIntyre, 2009): 8.

respected the sovereignty rights of the Arctic states consistent with the Arctic White Paper language. Its view of the Arctic Ocean's international waters is supported by Article 136 of the United Nations Convention on the Law of the Sea (UNCLOS) which rules that areas of Ocean beyond national jurisdiction are "the common heritage of mankind."[213] The implications of Chinese polar shipping for Arctic states could be affected by how the UN judges the various territorial claims of states such as Canada and Russia and whether those states will recognize Article 136 or the more restrictive interpretation of Article 234 as the predominant legal framework for a more open or closed Arctic to non-Arctic states. If China in the future perceives the Arctic as closed, the white paper has laid the foundation for Beijing to argue for a legal interpretation recognizing Arctic shipping routes as global commons areas. This policy would place China in direct competition with Canada and Russia, yet remain consistent with the language of the white paper.

Along with sovereignty issues are the investments being made by China in Arctic states as part of the PSR, which, like its BRI investments, could raise issues of Beijing's strategic influence in the region. Already, Chinese journals associated with the PLA refer to Greenland as the "strategic fulcrum" of the PSR, as Chinese investment increases in the Danish territory.[214] The Danish Defense Intelligence Service recently listed Greenland as a top security issue for Denmark stating that a "power game is unfolding" among global powers in the Arctic.[215] In 2016 Denmark blocked a Chinese mining company's attempt to purchase an abandoned naval base at Gronnedal due to security concerns.[216] While Chinese commercial interests have not encountered quite as much scrutiny in Iceland, a Center for Naval Analysis (CNA) study has indicated that Chinese investment levels there

[213] United Nations Treaty Collection, "United Nations Convention on the Law of the Sea," (10 December 1982): https://www.un.org/Depts/los/convention_agreements/texts/unclos/.

[214] Mark Rosen, "Will China Freeze America out of the Arctic?" *The National Interest* (August 14, 2019), https://nationalinterest.org/feature/will-china-freeze-america-out-arctic-73511.

[215] Lawrence Peter, "Danes see Greenland security risk amid Arctic tensions," *BBC News* (November 29, 2019), https://www.bbc.com/news/world-europe-50598898.

[216] Erik Matzen, Denmark spurned Chinese offer for Greenland base over security: sources," *Reuters* (April 6, 2017), https://www.reuters.com/article/us-denmark-china-greenland-base/denmark-spurned-chinese-offer-for-greenland-base-over-security-sources.

are second only to Greenland, and much higher than the other Arctic states.[217] Table 4 shows that Greenland and Iceland have received the bulk of Chinese Arctic investment as a percentage of GDP, even as Chinese investment in Russia and the U.S. is much higher in absolute terms. In fact, Chinese state-owned enterprises (SOEs) are poised to become the largest foreign investors in Greenland's natural resources.[218] The implications for Arctic states, such as Greenland and Iceland, of these large amounts of Chinese investment is potentially greater Chinese influence in these countries through economic statecraft, which, as in the case of Gronnedal, could include more strategic concerns.

Table 4. Chinese Investment in Arctic States, 2012–2017. Source: Auerswald (2019).

Arctic State	Chinese Investment as Percentage of GDP	Total Value of Chinese Investment ($Bil)	Average Size of Chinese Investment per Project ($Mil)
Greenland	11.6	2.0	33.4
Iceland	5.7	1.2	30.8
Russia	2.8	194.4	691.7
Canada	2.4	47.3	442.1
United States	1.2	189.7	340.6
Norway	0.9	2.5	147.9

Implications for Canada to China's Arctic activities are reflected in the long shoreline of the Northwest Passage, which besides the NSR along Russia's coast is the primary Arctic shipping route. Like Russia, Canada was hesitant to approve Chinese observer status on the Arctic Council and views the Northwest Passage, in a manner similar to the Russian NSR, as sovereign waters.[219] This was particularly evidenced in 2017 when China's polar research icebreaker *Xue Long* transited the Northwest Passage, which Canada considers territorial waters and China (and the United States) considers as

[217] See Mark Rosen and Cara Thuringer, "Unconstrained Foreign Direct Investment: An Emerging Challenge to Arctic Security," *CNA Occasional Paper Series* (November 2017): 54.

[218] Conley, https://www.csis.org/analysis/implications-us-policy-stagnation-toward-arctic-region

[219] Elizabeth Wishnick, *China's Interests and Goals in the Arctic: Implications for the United States*, (Carlisle, PA: U.S. Army War College Strategic Studies Institute, 2017): 51–52.

international waters.[220] Ottawa requires that permission be granted for states to use the Northwest Passage, and the *Xue Long* was approved for scientific research. But should China press Canada on the territoriality of the Northwest Passage in order to internationalize the waterway, the implications for Ottawa would be direct competition with Beijing. Adam Lajeunesse notes that Canada is preparing a greater capacity of hard-power assets in the Arctic with six new patrol ships and monitoring technology in advance of an expected increase in shipping due to climate change.[221] There can also be win-win implications for Canada should China agree to cooperate on shipping and infrastructure projects on Canada's terms, but this would require Beijing to avoid espousing international rights to waters that Ottawa considers under its jurisdiction.

The implications for Russia to China's increased activities in Arctic affairs are twofold. On the one hand, Moscow stands to gain from the significant investments from Beijing on energy resources and infrastructure projects along the NSR. For instance, in December 2019, Russian natural gas began flowing to China via the Power of Siberia pipeline, a $55 billion deal between Gazprom and CNPC that gives both nations increased diversification of energy resources and an agreement that Russian President Vladimir Putin heralded as taking "Russia-China strategic energy relations to a new quality level."[222] These new partnerships in the Arctic are seemingly bringing Russia and China closer together in the win-win spirit of the white paper, but this cooperative outlook could easily turn to competition based on long-standing Russian suspicions of greater Chinese influence in the region. Should Beijing's PSR investments in Russia be perceived as resource or debt diplomacy by Moscow, the growing partnership between the two countries would likely end.

Similarly, the military activities of Russia and China in the Arctic region could also generate more competitive relations between the two great powers, and heighten Russian

---

[220] See Adam Lajeunesse, "Finding "Win-Win": China's Arctic Policy and What It Means for Canada," *Canadian Global Affairs Institute,* University of Calgary School of Public Policy Briefing Paper, Vol.11, No.33 (December 2018): 1–10.

[221] Lajeunesse, 7.

[222] Nastassia Astransheuskaya, "Russia Launches Gas Pipeline to China," *Financial Times* (December 2, 2019): 1.

security concerns over its Arctic sovereignty. Since 2013 Putin has called for an increased Russian military presence in the Arctic, and Moscow has spent billions building or upgrading seven military bases along the NSR.[223] Tom Roseth notes that, "Although military deterrence is aimed mainly at the U.S. and its allies, it implies a message to China that Russia has a priority in securing its national interests and asserting its sovereignty."[224] However, Russia has also sought military cooperation with likeminded nations, such as in 2017 when Russia held joint maneuvers with the PLA Navy in the Berents Sea.[225] Yet Marc Lanteigne notes that China is wary of Russia's military buildup in the Arctic, as it may harm China's economic interests.[226] But what of Xi Xinping's claim in 2014 for China to become a polar great power?[227] With both Russia and China making claims to be polar powers, it is too soon to tell whether the two side's military interests will collide in the Arctic. In the near-term, Chinese economic activities tied to the PSR seem to outweigh any military activities in challenging Russian superiority in the far north. As Lincoln Flake notes, "China is sufficiently aware of it dependence on Russia to accept the role of junior partner, at the same time, Russia's sufficiently confident of its position to lay aside mistrust for the sake of commercial interests."[228] While in the near-term, Arctic economic partnerships tied to China's PSR initiative may bring Russia and China closer together, over time the great power competition between nationalistic Russia and rising China will likely preclude a more strategic partnership between them.

---

[223] Nastassia Astransheuskaya and Henry Foy, "Polar Powers: Russia's Bid for Supremacy in the Arctic Ocean," *Financial Times* (April 27, 2019): 2.

[224] Tom Roseth, "Russia's China Policy in the Arctic," *Strategic Analysis,* Vol.38, No.6 (November 2014): 10.

[225] Marc Lanteigne, "Northern Crossroads: Sino-Russian Cooperation in the Arctic," *The National Bureau of Asian Research,* (March 2018): 6.

[226] Lanteigne, 7.

[227] Anne-Marie Brady, *China as a Polar Great Power*, (Cambridge: Cambridge University Press, 2017): 3.

[228] Lincoln Flake, "Russia and China in the Arctic: A Team of Rivals," *Strategic Analysis,* Vol. 37, No. 6 (December 2013): 11.

B. IMPLICATIONS AND RECOMMENDATIONS FOR THE UNITED STATES

> DOD's desired end-state for the Arctic is a secure and stable region where U.S. national interests are safeguarded, the U.S. homeland is defended, and nations work cooperatively to address shared challenges…DOD cooperation with Arctic partners strengthens our shared approach to regional security and helps deter strategic competitors from seeking to unilaterally change the existing rules-based order.[229]

As with the other Arctic nations, the implications for the United States of China's Arctic activities vary depending on the viewpoint of the observer, as well as whether Beijing's policy remains cooperative or turns competitive. On the one hand, an aggressive China seeking to rearrange Arctic governance for the benefit of non-Arctic states would pose a challenge to the U.S. as noted in the DOD language above. On the other hand, a China that abides by respect for sovereign rights and cooperation has the potential to add valuable investment funding and scientific research to the polar region in partnership with the United States. In either case, the United States would benefit from taking a more active role in Arctic affairs. Scholars argue that U.S. policy toward the Arctic has been "largely stagnant" over the past decade, and that U.S. Coast Guard resources in the region have not been prioritized.[230] The U.S. would be well-served to publish an updated National Strategy for the Arctic and filling the role of U.S. special representative to the Arctic, which has been vacant since 2017.[231]

The previous National Strategy for the Arctic Region was published in 2013, with a stated focus on U.S. security, stewardship, and international cooperation.[232] The most recent USG document on the Arctic is the 2019 Department of Defense Arctic Strategy, which notes "strategic competition" as a factor up front and highlights the Joint Force's

---

[229] U.S. Department of Defense, "Department of Defense Arctic Strategy," Office of the Under Secretary of Defense for Policy (June 2019): 2.

[230] Heather Conley, "The Implications of U.S. Policy Stagnation Toward the Arctic Region," *Center for Strategic and International Studies* (May 3, 2019), https://www.csis.org/analysis/implications-us-policy-stagnation-toward-arctic-region.

[231] Congressional Research Service, "Changes in the Arctic: Background and Issues for Congress," (23 January 2020): https://crsreports.congress.gov.

[232] The White House, "National Strategy for the Arctic Region," (May 13, 2013): https://obamawhitehouse.archives.gov/sites/default/files/docs/nat_arctic_strategy.pdf.

"eroding competitive edge against China and Russia," as well as the Joint Force's need "to deter, and if necessary, defeat great power aggressors."[233] While the 2019 paper is a DOD document vice national strategy guidance, there is a marked difference between the 2013 and 2019 policy papers in how the Arctic is viewed in Washington. Specifically, the viewpoint has changed from Arctic cooperation to Arctic competition. As for the eroding competitive edge of the United States, according to the U.S. Coast Guard, as of 2017 the U.S. had only five icebreakers capable of Arctic ocean transit, while Canada had seven, and Russia forty-six.[234] Meanwhile, China has just put its second icebreaker into service with a third planned, actions meant to bolster its Arctic access as a non-Arctic country. While this in and of itself does not suggest a more competitive Arctic policy from China, the U.S. already views Beijing as a strategic competitor in the region, and this perception of China as an aggressor in the Arctic currently holds more weight than China's actual activities in the region. Yet, as Elizabeth Wishnick notes, one implication of China's Arctic activities for the U.S. is the need to devote similar long-term investment to the Arctic as China and Russia: in icebreakers and in infrastructure projects, such as deepwater ports.[235]

There are also security implications for the United States regarding Chinese Arctic activities in both the military sense and via Chinese investments. On the military side, in 2015 PLA Navy warships sailed into U.S. territorial waters in the Bering Sea as an exercise of their innocent passage rights under UNCLOS.[236] President Obama was in Alaska at the time and the Chinese ships had just participated in joint naval exercises with Russia.[237] While this behavior of sending military vessels into Arctic waters has been rare, it does make the point that Beijing could do this more frequently to make political statements to Arctic states on freedom of navigation in the region. Separately, Chinese investments in

[233] U.S. Department of Defense, 2.

[234] U.S. Coast Guard, "Major Icebreakers of the World," USCG Office of Waterways and Ocean Policy (May 2017): https://www.dco.uscg.mil/Portals/9/DCO%20Documents/.

[235] Wishnick, 69.

[236] Wishnick, 55.

[237] Wishnick, 55.

Greenland have included efforts to establish a satellite receiving station.[238] This has potential security implications for the United States as well, given the strategic importance of the U.S. air base and radar station at Thule, and would likely place Denmark in a situation of having to make a security decision about this activity, as it did with the naval base at Gronnedal.[239] Each of these cases represents potential security concerns for the United States, and the Arctic Council itself has no forum to address security issues. Wishnick notes that one implication of greater non-Arctic activity in the region could be the development of a security mechanism in the Arctic along the lines of the OSCE or ASEAN Regional Forum.[240] This could give the U.S. and other Arctic states a better opportunity to utilize a multilateral forum for Arctic security issues between themselves and with non-Arctic states such as China. Overall, there are a variety of potential challenges for the United States when it comes to China's Arctic activities, but competition in the region is not inevitable.

C. THREATENING OR OPPORTUNISTIC?

Linda Jakobson and Jingchao Peng point out that in 2009 Chinese scholar and Arctic advocate Guo Peiqing urged the Chinese government to protect its legitimate rights in the Arctic, arguing that it was not in China's interest to remain neutral and stay out of Arctic affairs.[241] This viewpoint fits with China's Arctic Policy over the past decade in that Beijing desires a role in the region that the Arctic White Paper and Chinese behavior suggest is cooperative and status quo but which has the potential to take on a competitive, revisionist aspect should China not receive the access, voice, and respect as a great power that it wants from the Arctic states. This is where the Cooperation and Conflict schools of thought converge, as Kathrin Keil notes when she states that both the neoliberal

---

[238] Camilla T.N. Sorensen, "China as an Arctic Great Power," *Royal Danish Defence College Policy Brief*, (February 2018): 5.

[239] Alexandre Cornet, "From the "Polar Silk Road" to the Arctic Rimland: A Case Study of the Belt and Road Challenges for the European Union," *The French Institute for International and Strategic Affairs,* Asia Focus #90, (October 2018): 16.

[240] Wishnick, 68–69.

[241] Linda Jakobson and Jingchao Peng, "China's Arctic Aspirations," *Sipri Policy Paper 34* (November 2012): 15.

institutionalist analyses of the Cooperation school and the neorealist analyses of the Conflict school share the assumption that the stakes are now higher in the thawing Arctic region.[242] But the reality falls more in line with the constructivist analysis that Su Ping and Marc Lanteigne utilize in arguing about the diverging views between Chinese and Western perceptions.[243] As Frederic Lassere, Linyan Huang, and Olga Alexeeva assert, China's conduct in the Arctic "is neither threatening nor different from that of any other international player."[244] Yet, no other non-Arctic nation is striving to be a polar great power, and this is what makes Chinese activities in the region unique, and raises both the perceptions and real potential of a great power competition in the Arctic.

Overall, China's Arctic White Paper and Polar Silk Road behavior will likely only remain cooperative as long as the Arctic states reciprocate the respect for rights of non-Arctic states that is highlighted in the white paper.[245] Should Beijing interpret that its Arctic rights are in jeopardy, then the foundations for a more competitive policy that lie in the white paper's ambiguous language will likely threaten the status quo of Arctic governance and lead to Chinese actions that take on a revisionist nature, such as advocating a global commons agenda for open access to Arctic sea lanes and natural resources. Beijing may thus interpret any additional access restrictions or resource restrictions as crossing this line, which is most likely to occur from Russian and Canadian Arctic territorial claims to keep the region closed. As Ping and Lanteigne assert, Western actors should separate Arctic myths and realities in their perceptions of China and seek greater dialogue so as to prevent misperceptions from either side.[246] But it is incumbent upon China as well to seek to avoid misperceptions concerning the behavior of the Arctic states, and while Beijing participates in forums such as the Arctic Council and Arctic Circle, it is unclear whether China is also open to seeking greater dialogue or providing greater transparency on its Arctic activities.

---

[242] Kathrin Keil, "The Arctic: A New Region of Conflict? The Case of Oil and Gas," *Cooperation and Conflict* Vol.49, No.2 (June 2014): 165.

[243] Su Ping and Marc Lanteigne, "China's Developing Arctic Policies: Myths and Misconceptions," *Journal of China and international Relations*, Vol 3 No. 1 (December 2015): 1 and 18.

[244] Frederic Lasserre, Linyan Huang, and Olga Alexeeva, "China's Strategy in the Arctic: Threatening or Opportunistic?" *Polar Record 53,* (2017): 39.

[245] See State Council Information Office of the People's Republic of China, 4.

[246] Ping and Lanteigne, 37.

Thus, the Polar Silk Road is currently an opportunistic policy, but has the potential of becoming threatening to the Arctic states over time.

D. ADDITIONAL INDICATORS TO MONITOR

While China's behavior remains cooperative, there are actions to monitor that would indicate that Beijing has changed its Arctic policy. One behavioral indicator that Chinese policy has moved from a cooperative stance to a more competitive one would be for China to openly advocate for international waters in the Arctic Ocean claimed as sovereign under Russian and Canadian interpretations of the UNCLOS Article 234. This "Arctic exception" restricts access to the NSR and Northwest Passage based on environmental concerns, but is used by Russia and Canada to control these primary polar sea routes out to 200 nautical miles.[247] Sending an icebreaker into these waters without permission or escort would signal a shift in Chinese policy. Another indicator would be Beijing's active promotion of a Spitsbergen-like global commons area in the central Arctic Ocean that would be open to international shipping and resource extraction in an ice-free future, irrespective of the many claims of expanded continental shelf EEZs from the Arctic states. This action would also be inconsistent with China's current status quo behavior in the Arctic and potentially cause conflict with the Arctic states, Russia and Canada in particular. Lincoln Flake asserts that, "Russia prefers a closed-sea Arctic in which non-Arctic entities enter only with permission, while China prefers an open-sea policy and views the Arctic as a 'common heritage for all mankind.'"[248] However, there are also potentially positive implications for the Arctic great powers, as Clara Ma attests when she argues that China and the United States could find common ground in an open seas Arctic, as both view the NSR and Northwest Passage as international waters.[249] Yet, this Arctic common ground could fall apart as the two countries view international waters much differently in the South China Sea. Nevertheless, when it comes to these questions of Arctic

[247] Byers, 47.

[248] Lincoln Flake, "Russia and China in the Arctic: A Team of Rivals," *Strategic Analysis,* Vol. 37, No. 6 (December 2013): 5.

[249] Clara Ma, "The United States and China in the Arctic" (Senior Essay in International Relations, Yale University, 2019), 51.

legal frameworks, the Arctic White Paper sets up China for both cooperative and competitive policies moving forward.

E. CONCLUSION

In conclusion, one can read many different things into China's Arctic policy and Polar Silk Road Initiative beyond what is laid out in the 2018 Arctic White Paper, which are the overriding principles of respect, cooperation, and win-win result that China has described as its policy since 2015. This thesis has sought to examine these policy goals on the basis of specific Chinese behavior in the areas of scientific research, shipping routes, infrastructure and resource investments, and governance of the Arctic. In each of these cases, Chinese policy has tended to be practical and consistent over the past decade. There is certainly a geostrategic aspect of this policy to gain greater influence in the Arctic, and not focusing on that aspect in the white paper is, as Gisela Grieger notes, "thus partly preserving China's previous strategic ambiguity."[250] Yet the only stated goal that China currently seems to want to shape is "making the Arctic's governance from regional to global," thus enabling China to have greater influence as a non-Arctic state.[251]

The remainder of China's Arctic policy rests on the advantageous economic potential of the Polar Silk Road or, as noted in the white paper, "opportunities for parties concerned to jointly build a 'Polar Silk Road', and facilitate connectivity and sustainable economic and social development of the Arctic."[252] Thus, much like the larger BRI, which is the model for this policy, Chinese Arctic policy consists of an opportunistic economic initiative that will also gain China increased influence in the Arctic region over time. Overall, the Polar Silk Road should be viewed as another practical piece of BRI, neither threatening nor benign. Su Ping and Marc Lanteigne bemoan the "clash of identities" between Chinese and Western perceptions caused by China's Arctic policy, and the divergent viewpoints from either side.[253] This is why this thesis has examined China's

---

[250] Gisela Grieger, "China's Arctic Policy: How China Aligns Rights and Interests," European Parliamentary Research Service, PE 620.231, May 2018, 2.

[251] Grieger, 4.

[252] State Council Information Office of the People's Republic of China, 3.

[253] Ping and Lanteigne, 1.

actions and stated policies to form its conclusions, and also why it recommends that the U.S. devote additional diplomatic resources to cover the region. Time will certainly tell whether China's Arctic policy transitions from a status quo to a revisionist strategy, but thus far Beijing's behavior has been mostly consistent with the cooperative language of the white paper. However, there are enough inconsistencies in Chinese Arctic activities and ambiguous language included in the white paper to justify skepticism from the Arctic states that the win-win policy of the Polar Silk Road will continue indefinitely.

THIS PAGE INTENTIONALLY LEFT BLANK

LIST OF REFERENCES

Arctic Circle China Forum. "China and the Arctic" (Shanghai: 10–11 May 2019) arcticcircle.org/Media/arctic-circle-china-forum-program.

Arctic Council. "The Arctic Council: A Backgrounder," 20 May 2015, https://arctic-council.org/index.php/en/about-us.

Arctic Portal. "Arctic Council Member States," April 2016, https://arcticportal.org/maps-arctic-council.

———. "Svalbard Treaty," February 2016, https://library.arctic.portal.org/1909.

Asia Times Staff. "Arctic Ice Route is China's New Martime Silk Road to Europe," *Asia Times* (September 3, 2018): https://www.asiatimes.com/2018/09/article/arctic-ice-route-is-chinas-new-maritime-silk-road-to-europe/.

Astransheuskaya, Nastassia. "Russia Launches Gas Pipeline to China," *Financial Times* (December 2, 2019):1-2.

Astransheuskaya, Nastassia and Henry Foy. "Polar Powers: Russia's Bid for Supremacy in the Arctic Ocean," *Financial Times* (April 27, 2019):1-5.

Auerswald, David. "China's Multifaceted Arctic Strategy," *War on the Rocks* (May 24, 2019), https://warontherocks.com/2019/05/chinas-multifaceted-arctic-strategy/.

Bertelsen, Rasmus Gjedsso and Vincent Gallucci. "The Return of China, Post-Cold War Russia and the Arctic: Changes on Land and at Sea," *Marine Policy,* vol. 72 (April 2016): 240–245.

Birdwell, Ian. "Rival Claims to a Changing Arctic," *The Maritime Executive,* August 15, 2016, https://www.maritime-executive.com/article/rival-claims-to-the-changing-arctic/.

Brady, Anne-Marie. "China's Undeclared Arctic Foreign Policy," *Polar Initiative Policy Brief Series Arctic 2014* (Washington, DC: Wilson Center Polar Initiative, September 2014): 1–4.

———. *China as a Polar Great Power,* Cambridge: Cambridge University Press, 2017.

Breslin, Shaun. "Global Reordering and China's Rise: Adoption, Adaptation, and Reform," *The International Spectator*, vol.53, no.1 (2018): 57.

Byers, Michael. *Who Owns the Arctic? Understanding Sovereignty Disputes in the North,*Vancouver: Douglas and McIntyre, 2009.

Cai, Peter. “Understanding China’s Belt and Road Intiative,” *Lowy Institute for International Policy* (March 22, 2017): 1–29.

Campbell, Caitlin. *China and the Arctic: Objectives and Obstacles* (Washington, DC: U.S.-China Economic and Security Commission Staff Research Report, April 2012), 1–11.

Congressional Research Service, “Changes in the Arctic: Background and Issues for Congress,” (January 23, 2020): 1–108, https://crsreports.congress.gov/.

Conley, Heather. “The Implications of U.S. Policy Stagnation Toward the Arctic Region,” *Center for Strategic and International Studies* (May 3, 2019), https://www.csis.org/analysis/implications-us-policy-stagnation-toward-arctic-region/.

Cornet, Alexandre, “From the ‘Polar Silk Road’ to the Arctic Rimland: A Case Study of the Belt and Road Challenges for the European Union,” *Asia Focus #90* (October 2018): 1–20.

Descamps, Maud. “The Ice Silk Road: Is China a “Near-Arctic” State?” The Institute for Security and Development Policy, *Focus Asia* (February 2019), 1–5.

Dolata, Petra. “A Global Arctic? Chinese Aspirations in the North,” *Canadian Global Affairs Institute,* Policy Perspective (October 2018): 1–6.

Economist Staff, “Briefing: China’s Belt and Road Initiative,” *The Economist* (July 28, 2018): 13–16.

Eiterjord, Trym Alexander. “The Growing Institutionalization of China’s Polar Silk Road,” *The Diplomat* (October 7, 2018): 1–3.

Flake, Lincoln. “Russia and China in the Arctic: A Team of Rivals,” *Strategic Analysis,* vol. 37, no. 6 (December 2013): 681–687.

Fytatzi, Katerina and Sarah Fowler. “Polar Silk Road Will Reshape Trade and Geopolitics,” *Oxford Analytica Daily Brief* (September 18, 2018): 1–5, https://dailybrief.oxan.com/Analysis/DB238508.

Grady, John. “Panel: China Investing in Infrastructure near the Arctic,” *USNI News* (April 7, 2018): 1, https://news.usni.org/2018/04/27/panel-china-investing-infrastructure-near-arctic.

Grieger, Gisela. “China’s Arctic Policy: How China Aligns Rights and Interests,” European Parliamentary Research Service, PE 620.231 (May 2018): 1–8.

Hong, Nong. *China’s Interests in the Arctic: Opportunities and Challenges* (Washington, DC: Institute for China-America Studies, March 2018): 1–26.

Hsiung, Christopher Weidacher. "China and Arctic Energy: Drivers and Limitations," *The Polar Journal,* vol. 6, no. 2 (2016): 243–258.

Humpert, Malte. "COSCO Continues to Step Up Its Operations in the Arctic," *High North News* (June 13, 2019): 1–2.

Hurley, John, Scott Morris, and Gailyn Portelance. "Examining the Debt Implications of the Belt and Road Initiative from a Policy Perspective," *Center for Global Development,* CDG Policy Paper 121 (March 2018): 1–37.

Jakobson, Linda and Jingchao Peng. "China's Arctic Aspirations," *SIPRI Policy Paper* 34 (November 2012): 1–32.

Keil, Kathrin. "The Arctic: A New Region of Conflict? The Case of Oil and Gas," *Cooperation and Conflict* vol.49, no.2 (June 2014): 162–190.

Kliman, Daniel, Rush Doshi, Kristine Lee, and Zack Cooper. "Grading China's Belt and Road," *Center for A New American Security* (April 2019): 1–35.

Knecht, Sebastian. "New Observers Queuing Up: Why the Arctic Council Should Expand – and Expel," *The Arctic Institute* (April 20, 2015), https://www.thearcticinstitute.org/new-observers-queuing-up/.

Laruelle, Marlene. *Russia's Arctic Strategies and the Future of the Far North,* London: Routledge, 2014.

Lackenbauer, P. Whitney. "Canada and the Asian Observers to the Arctic Council: Anxiety and Opportunity," *Asia Policy* 18, no.1 (2014): 22–29.

Lackenbauer, P. Whitney, Adam Lajeunesse, James Manicom, and Frederic Lassere, eds. *China's Arctic Ambitions and What They Mean for Canada,* Calgary: Calgary University Press, 2018.

Lanteigne, Marc. "Northern Crossroads: Sino-Russian Cooperation in the Arctic," *The National Bureau of Asian Research* (March 2018): 1–6.

Lassere, Frederic, Linyan Huang, and Olga Alexeeva. "China's Strategy in the Arctic: Threatening or Opportunistic?" *Polar Record,* vol. 53 (October 2015): 31–42.

Lasserre, Frederic. "China and the Arctic: Threat or Cooperation Potential for Canada" *Canadian International Council,* China Papers No. 11 (June 2010): 1–14.

Lejeunesse, Adam. "Finding 'Win-Win': China's Arctic Policy and What It Means for Canada," *Canadian Global Affairs Institute,* University of Calgary School of Public Policy Briefing Paper, vol.11, no.33 (December 2018): 1–14.

Lim, Kong Soon. “China’s Arctic Policy and the Polar Silk Road Vision,” Northern Research Forum, *Arctic Yearbook 2018* (2018): 1–17.

Liu, Nengye, and Kamrul Hossain. “China and the Development of International Law on Arctic Shipping: Challenges and Opportunities,” The University of Adelaide, Research Paper no. 38 (2017): 233–252.

Lo, Bobo. *Russia and the New World Disorder,* Washington, DC: Brookings Institution Press, 2015.

Ma, Clara. “The United States and China in the Arctic” Yale University Department of Political Science, Senior Essay in International Relations (April 2019), 1–81.

Matzen, Eric. “Denmark Spurned Chinese Offer for Greenland Base Over Security: Sources,” *Reuters* (April 6, 2017), https://www.reuters.com/article/us-denmark-china-greenland-baseover-security-sources/.

McDonald, Caroline. “The Rising Tide of Maritime Shipping Risks,” *Risk Management* (March 1, 2018), https://www.rmmagazine.com/2018/03/01/the-rising-tide-of-martime-shipping-risks.

Noi, Goh Sui. “China’s Polar Ambitions Cause Anxiety,” *Straits Times* (20 February 2018), https://www.straitstimes.com/asia/east-asia/chinas-polar-ambitions-cause-anxiety.

O’Sullivan, Meghan L. *Windfall: How the New Energy Abundance Upends Global Politics and Strengthens America’s Power*, New York: Simon and Schuster, 2017.

Peleschuk, Dan “Scandinavia, Baltics Set to Become China’s Newest Playground,” *OZY The Daily Dose* (21 April 2019), https://www.ozy.com/fast-forward/scandinavia-baltics-set-to-become-chinas-newest-playground/93653/.

Peng, Jingchao, and Njord Wegge. “China’s Bilateral Diplomacy in the Arctic,” *Polar Geography,* vol. 38, no. 3 (2015): 1–17.

Peter, Lawrence. “Danes See Greenland Security Risk Amid Arctic Tensions,” *BBC News* (November 29, 2019), https://www.bbc.com/news/world-europe-50598898.

Ping, Su, and Marc Lanteigne. “China’s Developing Arctic Policies: Myths and Misconceptions,” *Journal of China and International Relations,* vol. 3, no. 1 (December 2015): 1–25.

Pompeo, Michael R. “Looking North: Sharpening America’s Arctic Focus,” (Washington, DC: U.S. Department of State, May 6, 2019), www.state.gov/looking-north-sharpening-americas-arctic-focus.

Rosen, Mark. “Will China Freeze America out of the Arctic?” *The National Interest* (August 14, 2019), https:/nationalinterest.org/feature/will-china-freeze-america-out-of-the-arctic-73511/.

Rosen, Mark, and Cara Thuringer. “Unconstrained Foreign Direct Investment: An Emerging Challenge to Arctic Security,” *CNA Occasional Paper Series* (November 2017): 1–93.

Roseth, Tom. “Russia’s China Policy in the Arctic,” *Strategic Analysis,* vol. 38, no. 6 (November 2014): 841–859.

Rotnem, Thomas. “Putin’s Arctic Strategy: Collaboration or Conflict After Ukraine?” *Problems of Post-Communism,* vol. 65, no. 1 (2018): 1–17.

Schach, Michael, and Reinhard Madlener. “Impacts of an Ice-Free Northeast Passage on LNG Markets and Geopolitics,” *Energy Policy,* vol. 122 (2018): 438–447.

Schrader, Matt. “Is China Changing the Game in Trans-Polar Shipping?” *Jamestown Foundation China Brief,* vol. 18, issue 7 (April 2018): 1–4.

Schreiber, Melody. “Russia and Canada May Lose Their Legal Claim to Arctic Seaways as Ice Melts, Experts Say,” *Arctic Today* (April 4, 2019), https://www.arctictoday.com/russia-and-canada-may-lose-their-legal-claim-to-arctic-seaways-as-ice-melts-experts-say/.

Sharma, Yojana. “New China-Nordic Centre to Boost Arctic Research,” *University World News* (7 June 2013), 1–3, https://www.universityworldnews.com/post.php?story=20130607104457114.

Sorensen, Camilla T.N. “China as an Arctic Great Power,” (Policy Brief, Royal Danish Defence College Institute for Strategy, 2018): 1–6.

Spohr, Kristina. “The Scramble for the Arctic,” *New Statesman* (March 2018): 23–27.

Staalesen, Atie. “As Arctic Talks Move to China, Leaders Downplay Divides,” *The Independent Barents Observer* (May 13, 2019), https://www.arctictoday.com/as-arctic-talks-move-to-china-leaders-downplay-divides/.

State Council Information Office of the People’s Republic of China, “China’s Arctic Policy,” (Beijing: January 26, 2018): 1–10, http://english.gov.cn/archive/white.paper/2018/01/26/content.

Sun, Yun. “The Intricacy of China’s Arctic Policy,” (Washington, DC: Stimson Center, Aug 28, 2018): 1–15, www.stimson.org/content/intricacy-chinas-arctic-policy.

Tillman, Henry, Yang Jian, and Egill Thor Nielsson. “The Polar Silk Road: China’s New Frontier of International Cooperation,” *China Quarterly of International Strategic Studies,* vol. 4, no. 3 (2018): 345–362.

United Nations Treaty Collection, “United Nations Convention on the Law of the Sea,” (10 December 1982): https://www.un.org/Depts/los/convention-agreements/texts/unclos/.

U.S. Coast Guard. “Major Icebreakers of the World,” USCG Office of Waterways and Ocean Policy (May 2017): https://www.dco.uscg.mil/Portals/9/DCO%20Documents/.

U.S. Department of Defense. “Report to Congress: Department of Defense Arctic Strategy,” Office of the Under Secretary of Defense for Policy (June 2019): 1–18.

Vanderklippe, Nathan. “Agreeing on the Arctic: Amid Dispute, Canada Sides with China Over the U.S. on How to Manage the North,” *The Globe and Mail* (May 10, 2019), https://www.theglobeandmail.com/world/article-agreeing-on-the-arctic-why-canada-sides-with-china-over-the-us-on/.

The White House. “National Strategy for the Arctic Region,” (May 13, 2013)” 1–13, https://obamawhitehouse.archives.gov/sites/default/files/docs/nat_arctic_strategy.pdf.

Wishnick, Elizabeth. *China’s Interests and Goals in the Arctic: Implications for the United States,* (Carlisle, PA: U.S. Army War College Strategic Studies Institute, 2017): 1–96.

Wright, David Curtis. *The Dragon Eyes the Top of the World: Arctic Policy Debate and Discussion in China*, (Newport, RI: U.S. Naval War College China Maritime Studies Institute, 2011): 1–43.

Wuthnow, Joel. “Chinese Perspectives on the Belt and Road Intiative: Strategic Rationales, Risks, and Implications,” *Center for the Study of Chinese Military Affairs, Institute for National Strategic Studies, China Strategic Perspectives 12* (National Defense University, October 2017): 1–45.

Xiaoci, Deng. “Icebreaker *Xue Long 2* Joins Service on China National Maritime Day,” *Global Times* (11 July 2019), https://www.pressreader.com/usa/global-times-us edition/20190711/281582357199673.

INITIAL DISTRIBUTION LIST

1. Defense Technical Information Center
   Ft. Belvoir, Virginia

2. Dudley Knox Library
   Naval Postgraduate School
   Monterey, California