

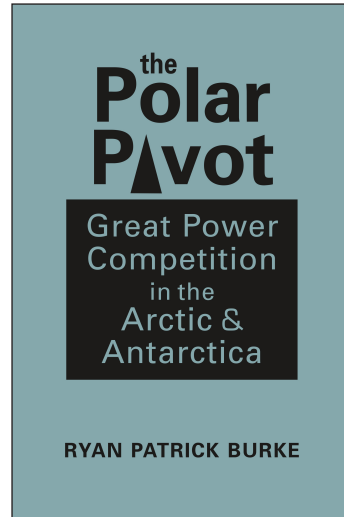
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The Polar Pivot: Great Power Competition in the Arctic and Antarctica

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Contents

<i>List of Tables and Figures</i>	vii
1 On Thin Ice: The Polar Melting Pot	1
2 Security, Sovereignty, and Influence in the Polar Regions	23
3 The Four Cs: Commons, Claims, Covenants, and Cosmos	45
4 Polar Peer Powers: China and Russia	75
5 US Polar Policy and Strategy	111
6 The Polar Trap: Conditions for Conflict	141
7 Toward a US Grand Strategy	171
8 Balancing on the Pivot: The Future of Polar Security	201
<i>Bibliography</i>	233
<i>Index</i>	247
<i>About the Book</i>	261

On Thin Ice: The Polar Melting Pot

SINCE 1945, THE INTERNATIONAL SECURITY COMMUNITY HAS dedicated itself to describing, explaining, and predicting nuclear warfare and deterrence. For all the analyzing and assessing, however, the phenomenon has occurred only twice in recorded history, and within a span of three days. When, where, and how nuclear warfare might occur again has been the subject of much debate. As of this writing, there are five nuclear weapons states (United States, United Kingdom, France, Russia, China) recognized by the 1970 Nuclear Nonproliferation Treaty (NPT).¹ Four other states (India, Israel, Pakistan, North Korea) possess nuclear weapons but are not part of the NPT.² Of the eight nuclear weapons–possessing states in addition to the United States, two are formal US allies (United Kingdom and France); two are strategic partners (Israel and India); and one is a nonaggressor (Pakistan). The remaining nuclear states (Russia, China, North Korea) are formidable adversaries, at least in terms of military power that could threaten Western interests. Russia and China, specifically, are considered “great power competitors”^{*} and among the most pressing twenty-first-century security challenges for the

^{*}In October 2021, the US Department of Defense directed that the phrase “great power competition” be replaced with “strategic competition” in official correspondence. I use both phrases interchangeably throughout the book, while recognizing this is not the Defense Department’s intent.

United States. So it should follow, then, that the international security community would and should pay attention to these great power competitors and those areas most likely to be the locations for resulting great power competition, confrontation, and potential conflict. The challenge is predicting where this might occur and why.

The polar regions of the Arctic and Antarctica are among the few areas with simultaneous Russian and Chinese presence in pursuit of national interests. The polar regions should occupy significant space in the current international security dialogue; but they do not, at least compared to the continued infatuation with analyzing every detail of nuclear warfare despite having a sample size of only two. And ignoring this observation of today will lead to the international security problems of tomorrow. In the twenty-first-century great power competition with Russia and China, the polar regions of the Arctic and Antarctica will be areas of both competition and military conflict if we do not attend to them today.

In the chapters that follow, I examine the evolving issue of polar militarization, defense, and security affairs in the context of twenty-first-century great power competition. I approach the discussion from a US perspective and with an eye toward Russia and China as great power rivals. As a central theme to the narrative, I argue that the United States has a strategic blind spot in the polar regions that others seek to exploit. I will present evidence throughout the book that the polar regions are on course to become contested regions that—absent reorientation of US priorities, posture, and presence—will eventually give way to military conflict. With this in mind, I contend that it is the polar regions, not Iraq, Afghanistan, Syria, or even the South China Sea, that should be the principal focus of future US military power projection efforts in the twenty-first century.

As the book progresses, I ask and attempt to answer the following questions: What is the historical significance of the polar regions in military affairs? Given this significance, who are the actors influencing the polar region security dynamic in the twenty-first century? What are their positions relative to each other—in other words, which states can most influence the future of the Arctic and Antarctica? For those with the greatest influence potential in polar region affairs, what are their polar region agendas? Given these competing agendas in an era of renewed great power competition, how will the polar regions influence and serve as backdrops for great power competition in the twenty-first century? After arguing that the polar regions are relevant to future great power competition, I then ask, and attempt to answer: What does the United

States need to do in order to shape and influence the polar regions in the context of future great power competition and US interests? In other words, how should the United States posture itself for a future fight?

Answering these questions requires a layered analysis of the polar regions' geography and geology; historical trends and punctuations in international security contexts; issues of sovereignty and influence; great power rival interests and orientation to the regions; US polar policies and postures; and military and diplomatic strategies. After examining the myriad factors shaping and influencing potential polar warfare and great power competition, I analyze comparable and historical context informing related critical theories for application to the polar regions in the evolving great power competition. Using existing theory as a basis for further analysis, I develop my own theoretical framework for a US approach to polar defense and security orientation and influence. From this new concept, I discuss what this strategy might look like in practice before concluding with a series of policy and strategy recommendations for future US polar orientation in twenty-first-century great power competition.

As we begin this assessment of the polar regions in the context of great power competition, we must remind ourselves that polar militarization and warfare—inclusive of both the Arctic and Antarctica—are seldom-discussed topics in academic and practitioner communities for reasons we will address. Even with a rapidly evolving polar security dialogue emerging among scholars and practitioners, this subject still lacks comparable theoretical, conceptual, and analytical depth of the myriad topics in military affairs in the post–World War II era. From strategic deterrence in the Cold War to counterinsurgency operations in the global war on terror, hundreds of topics and subtopics permeate the ether within security studies, strategic studies, and international relations literature. Polar defense and security enjoys relative ambiguity in comparison to the more *en vogue* topics of the late twentieth and early twenty-first centuries. There is one paper on polar security for every fifty papers on counterinsurgency (or so it seems). Therefore, there is ample room for contribution and substantive analysis on a topic of comparative obscurity, and until the resurgence of renewed great power competition, of questionable relevance since the 1950s.

As the primary source documents for US national security and defense postures, the current (as of this writing) versions of the National Security Strategy, National Defense Strategy, and National Military Strategy each emphasize a pivot to great power competition or rivalry with China and Russia. “Great power competition”—or, more recently,

“strategic competition”—is the flagship phrase of modern defense policies and strategic guidance. Despite this, none of these primary source documents discuss the polar regions in any detail. Yet the polar regions are the only geographic locations at present in which the United States can potentially find itself in a competitive or even contested domain simultaneously with both Russia and China—and few are actually talking about it.

The conversation is changing, however. In today’s geopolitical environment, the polar regions matter. China and Russia seek, at the least, influence in the poles, as evidenced by evolving interest and orientation. Despite this, scholars and practitioners struggle to communicate, in a compelling enough manner to drive action, why the poles are important to future great power competition and US standing in international security.

This book aims to further the conversation and advance our understanding of the complexity and importance of the polar regions. It aims to make scholars and policymakers more aware of the polar regions’ significance for future great power competition and to advocate for more resources and attention to these increasingly critical regions in the international security discourse. Through these efforts to raise awareness and advocate for more attention, the book aims to compel US action to meet this evolving security concern. With that we should ask: What are the polar regions and how and why will these regions influence the future great power competition?

WHAT ARE THE POLAR REGIONS?

The polar regions are some of the least-studied and least-known areas on Earth. Known as the “frigid zones,” the regions surrounding the geographical North and South Poles are—relative to most of the Earth’s populated areas and other climatic regions—remote and desolate. These frigid zones within the northern and southern polar circles are dominated by cold as well as seasonal darkness or constant sunshine. In the northern polar region, the Arctic, floating sea ice covers most of the Arctic Ocean throughout the year. In the southern polar region, the Antarctic ice sheet blanket 98 percent of the continent of Antarctica with ice over a mile thick in some places.³ In general, the term *polar regions* refers to the regions within the polar circles of the Arctic Circle in the Northern Hemisphere and the Antarctic Circle in the Southern Hemisphere. Throughout the discussion, I will refer generally to the polar regions inclusive of the Arctic and Antarctica, but suffice to say

they are not mirror images of each other and are instead, quite literally, polar opposites. Each enjoys its own unique characteristics warranting distinction and consideration as we consider their futures relative to renewed great power competition.

THE ARCTIC

The conventional—and current due to dynamic drift—international definition of the Arctic stipulates the region as all area north of the Arctic Circle, or 66°33' north latitude, leading many to colloquially refer to the Arctic as the “High North.” Whereas 66°33' north specifies the Arctic Circle proper, the climatic zone above 60° north latitude includes most of Alaska, all of Greenland, Iceland, most of Scandinavia, and the northern half of Russia. This region is only slightly warmer than the area north of the Arctic Circle and is the lowest northern latitude to experience the midnight sun during the summer months, a natural phenomenon associated exclusively with the polar regions. As such, some consider the Arctic anywhere you can see the midnight sun, or north of 60° north. As if the Arctic Circle or the climatic zone north of 60° north latitude are not specific enough, others apply a more precise climate indicator to their definition of the Arctic. This third definition holds the Arctic to include any area north of the 10 degree Celsius (50 degree Fahrenheit) July isotherm, or a geographic contour line indicating constant temperature patterns (the solid line in Figure 1.1).

The 50 degree Fahrenheit isotherm includes the northernmost regions of Alaska and Russia, the Alaskan Aleutian Islands, and the Bering Sea. It notably excludes most of Scandinavia, and includes all of Greenland and a large section of northern Canada. The 50 degree Fahrenheit isotherm indicates that not all Arctics are equal, an important distinction we will come back to later. However, the 50 degree Fahrenheit isotherm, in that it excludes Scandinavia and most of northern Russia, is too limiting for our discussion. From a legal standpoint, US code stipulates the Arctic as territory north of the Arctic Circle, but further includes “United States territory north and west of the boundary formed by the Porcupine, Yukon, and Kuskokwim Rivers; all contiguous seas, including the Arctic Ocean and the Beaufort, Bering, and Chukchi Seas; and the Aleutian chain.”⁴ For our purposes as we consider current and future defense, security, and great power competition in the Arctic, we will adopt the US legal definition of the Arctic, inclusive of the Aleutian Island chain.

At approximately 6 million square miles, the Arctic Ocean is the smallest of the world's oceans.⁵ It is the least-known due to its mostly

Figure 1.1 The Arctic Region



Source: Central Intelligence Agency, *World Factbook*, <https://www.cia.gov/the-world-factbook>.

year-round sea ice above 75° north, seasonal darkness, and generally harsh conditions. It is also the least-accessed of the world's oceans. With an average depth of 3,000 feet, the Arctic Ocean is not a deep ocean compared to the Pacific and Atlantic, but does have some locations reaching depths of 18,000 feet or more. The many islands, archipelagoes, and peninsular extensions within the Arctic Ocean necessitate the designation of several marginal seas on its periphery, including the Norwegian, Greenland, Beaufort, Chukchi, East Siberian, Laptev,

Kara, Barents, and Bering Seas.⁶ Sea ice forms seasonally in the marginal seas, where most enjoy ice-free waters during the warmer months between 60° and 75° north. North of 75° latitude, the sea ice extent is, today, constant year-round save for the many leads (navigable fractures within ice expanses) and resulting pockets of open water stemming from them.

The continued melting of sea ice and opening of the Arctic Ocean creates economic opportunity for nations with both the interest and the capability to reach the Arctic's vast energy resources and vital commerce lanes. Per some estimates, there is upward of \$35 trillion worth of untapped oil and natural gas in the Arctic, as well as untold sums of precious minerals and biological resources in this transforming region.⁷ A US government estimate notes the Arctic region could have about 90 billion barrels of oil, 1,700 trillion cubic feet of natural gas, and 44 billion barrels of liquid natural gas.⁸ The massive economic proposition coupled with the annual decrease in sea ice in the Arctic Ocean enables greater maritime access and makes for a renewed sense of urgency for those with interests in shaping the Arctic's future and benefiting from its potential resource bounty. Arctic sea ice continues to decline by about 13 percent per decade and has done so since 1980.⁹ Such a steady decrease in sea ice and expanding navigable waters underscore the significance of the opportunity for ambitious states to stake their claim and influence the Arctic's future. And this is precisely where the situation in the Arctic becomes complicated.

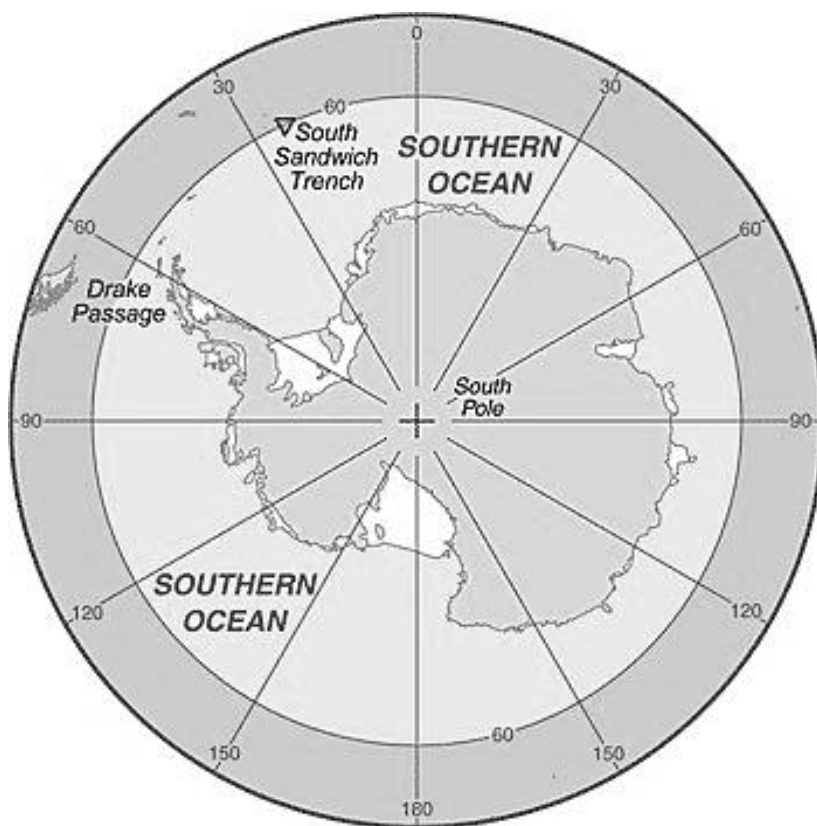
With a host of sovereign borders extending into the Arctic Circle and bordering the Arctic's marginal seas, this is a region teeming with interest due to both geography and the dynamic environmental changes leading to enhanced economic opportunity. Arctic governance, then, as an inherent multinational proposition, is challenging and ripe for competing interests and resulting tension.

In short, the Arctic is an area of evolving international interest furthered by its changing geography. What was once an inhospitable, impassable, and largely ignored region (relative to others) is now, in the twenty-first century, becoming more hospitable, passable, and emphasized in the international conversation. Absent a legitimate governing body—as we will discuss later—and with expanding international interests, the Arctic may become the Wild West of the Northern Hemisphere. And while the northern polar region commands the preponderance of the day's attention from scholars and practitioners interested or involved in international affairs and security, the southern polar region, too, has an evolving interest profile.

ANTARCTICA

The Antarctic is the southern polar region south of the Antarctic Circle containing the geographic South Pole and the continent of Antarctica. The conventional definition of the Antarctic encompasses the area of the Southern Ocean—all water and landmass below 60° south latitude, or the continent of Antarctica and the immediate surrounding water bodies (see Figure 1.2). As the southernmost and fifth largest continent on Earth, Antarctica has a landmass of 5.5 million square miles, over 98 percent of which is covered by ice that is over a mile thick in some places.¹⁰ A polar desert, it is the coldest, driest, and windiest place on

Figure 1.2 The Antarctic Region



Source: Central Intelligence Agency, *World Factbook*, <https://www.cia.gov/the-world-factbook>.

the planet, with fewer than 5,000 transient residents at any given time housed throughout the dozens of research stations spread across the continent. Depending on the season, the Antarctic ice sheets expand and contract, covering nearly 7 million square miles of ocean in the winter and about 1 million square miles in the summer.¹¹

Temperatures vary widely on Antarctica based on location, season, and elevation, with the average coastal temperatures (the warmest part of the continent) around 15 degrees Fahrenheit.¹² Antarctica registered Earth's coldest temperature on record, at -128 degrees Fahrenheit on July 21, 1983. The warmest temperature ever recorded in Antarctica, at the time of this writing, was 69 degrees Fahrenheit on February 9, 2020. The extraordinary difference in temperature variance between the higher and lower elevations of Antarctica drives most research station locations to the coasts, where the temperatures are more tolerable for sustained human activity. In the summer months on the Antarctic coasts, temperatures are comparable to late summer or early fall in Fairbanks, Alaska, with average temperatures reaching near 50 degrees Fahrenheit. Unlike Antarctica's coastal regions, which see a range of weather patterns and precipitation, the interior of the continent is a polar desert mostly isolated from influential weather patterns. As few weather fronts make their way to Antarctica's interior, this area remains cold and dry.

Despite the conditions, there is an abundance of wildlife as well as scores of natural and biological resources and scientific uniqueness on the continent, driving dozens of countries to maintain research stations throughout Antarctica. That dozens of countries operate some form of permanent infrastructure on the continent, used exclusively as a research domain, and all without a single government or indigenous population, is something of a global anomaly that begs discussion for context.¹³

Outside of year-round occupied research stations or bases, there is no permanent human habitation on Antarctica and no native population.¹⁴ Since the Russians claimed Antarctica's discovery in 1820, the southern continent has seen a steady increase in activity in the 200 years since.¹⁵ From Shackleton's famed Antarctic expeditions in the early 1900s to cruise ships today, Antarctica is a place of novelty and intrigue for many. Still, the bucket-list travelers and adventurers account for a small fraction of the annual visitors to Antarctica. Rather, most who make the southerly trek do so in the name of science. With this multi-national interest on an identity-less continent, it is no wonder there is a standing Antarctic Treaty stipulating the prohibited and permitted activities on Antarctica. In this way, the Antarctic Treaty System drives the

conversation and likewise serves as the starting point for discussion about Antarctica's place in the international security dialogue, to include the overlapping and competing territorial claims that we will examine later.

Until recently, discussing Antarctica and international security in the same context raised eyebrows. As we progress into renewed twenty-first-century great power competition, the two are no longer mutually exclusive. Antarctica is creeping back into relevance in the international security landscape, and with good reason. To this end, we turn our attention to great power competition, what it is, why it is occurring, where it will likely go in the future, and the significance of the polar regions in this context.

Outside of scholarly discourse on the matter, there has been much interest in the polar regions, both military and otherwise, throughout the past eight decades, such that expecting great power competition to arrive in the poles at some point in the twenty-first century should be assumed. With that, we must consider the changing geopolitical landscapes in an increasingly globalized world in the early twenty-first century. Increasing globalization also brings increased knowledge and experience. As the world learns more of the changes in the polar regions, we also learn more about their potential yet unrealized economic value. Melting ice and improved technology enable greater polar region access. As access broadens, resources present themselves. And as resources present themselves, especially in the global commons, competition ensues as countries seek to exploit some of the last untouched regions on Earth. In the era of sustained US and allied focus on the global war on terror throughout the Middle East, Asia, and North Africa, great power competition has returned to other regions of the world. As the war on terror dwindles into the history books, US defense postures and policies have continued their shift toward renewed great power competition.

GREAT POWER COMPETITION RENEWED

What is great power competition? The buzz phrase of Washington during the Trump administration, "great power competition," describes the international security environment with rising state powers threatening the US-led world order. The Biden administration's Interim National Security Strategic Guidance, published in March 2021, refers to this phenomenon as "rivalry" rather than competition.¹⁶ Regardless of word choice, the United States is increasingly wary of authoritarian state

power positions in the twenty-first century. Since the end of World War II, the United States has enjoyed status as the global superpower—the lone hegemon standing atop the world stage absent a suitable foe, be it military, economic, or otherwise. In simple terms, great power competition is—in a way—analogue to the childhood game King of the Hill, the objective of which is to be on top of the hill. Others charge the hill in the quest for summit dominance and status among peers. Typically, the strongest kid remained at the top in constant defense of the summit from the charges of weaker kids. In this way, since World War II the United States has been king of the hill—perched upon the international security summit looking down at weaker states, most of which are too afraid to attempt a challenge. As king of the hill, the United States has defined the world order according to its terms since 1945, despite challenges during the Cold War.

Scholars and policymakers long considered the Soviet Union a competing power on the global stage during the Cold War. Though their strength, and thus their true threat, was widely debated, the Soviets possessed enough military strength and a strong nationalist identity to gain US attention and influence activities across the diplomatic, informational, military, and economic spectra. Whether the Soviet Union was ever a legitimate threat to the United States during the Cold War is the subject of continued academic debate. Regardless of position, the consensus is that the United States and the Soviets were in a competition for global influence. This was as much a competition about conflicting ideology as it was a competition about whose missile was bigger. To some, the Soviet Union was, along with the United States, a great power such that the Cold War was very much a twentieth-century great power competition. Even still, the consensus among academics and policymakers holds that the United States was never at risk of losing its status as the global hegemon to the Soviet Union. The same cannot be said for the renewed twenty-first-century great power competition of today.

Following the Soviet Union's collapse in the early 1990s, the United States, fresh off a decisive military victory in the Gulf War, distanced itself from the rest of the international pack. Save for smaller military skirmishes in Africa and the Balkans, the United States enjoyed relative peace and autonomy in the 1990s. After the terrorist attacks of September 11, 2001, the United States thrust itself into a global war on terror, first in Afghanistan and then in Iraq. The war on terror is the longest sustained military conflict in US history, costing trillions of dollars and thousands of American lives. Beyond

the financial toll and loss of life, the war continues to serve as a distraction while rising powers advance their position on the metaphorical hill. As the United States continued meddling in the Middle East, Asia, and Africa in the war on terror during the 2000s, Russia and China rose to more prominent positions on the world stage. Growing economies fueled the expanding militaries that enabled greater power projection and influence. Budding economies and emerging militaries also encouraged brazen action and rhetoric. Today there is an ideological struggle between Western democracies and autocracies.¹⁷ Central to this struggle are the United States, as the global superpower and champion of Western ideology, and emerging autocratic, anti-Western, revisionist competitors China and Russia.

As the war on terror fades, the US defense and national security establishment has shifted its focus away from countering terrorism and toward great power competition with Russia and China. Foundational national security documents codify this shift in focus as a rebalancing effort, redirecting diplomatic, military, and economic resources to the Asia Pacific region. In the context of this rebalance, the Trump administration's 2017 National Security Strategy adopted the term "great power competition" as a "dismissed . . . phenomenon of an earlier century."¹⁸ Though the 2017 strategy did not define great power competition, it squarely seated China and Russia at the center of the discussion, labeling both as "revisionist powers" and unambiguously stating their intent to "change the international order in their favor."¹⁹ The strategy claimed that Russia and China sought regional and global influence through expanding "military capabilities designed to deny America access in times of crisis and to contest our ability to operate freely in critical commercial zones during peacetime."²⁰ Along this thread, the 2018 National Defense Strategy identified "reemergence of long-term, strategic competition" with these revisionist powers as the "central challenge to U.S. prosperity and security." The defense strategy doubled down on the security strategy's assertion of Chinese and Russian ambition, claiming that both sought "to shape a world consistent with their authoritarian model" and influence the economic, security, and diplomatic decisions of other nations.²¹ Finally, the unclassified 2018 description of the National Military Strategy sowed the thread by listing the "reemergence of great power competition" with Russia and China as the top in the list of relevant security trends in the National Defense Strategy.²² Today, the Biden administration is actively developing its national security and defense policies. Until then, the national security and defense establishment left over from the Trump administration, via

its foundational documents, has established great power competition with Russia and China as the principal national and international security threat in the twenty-first century. But competition implies spoils. What are they?

WHAT ARE WE COMPETING FOR?

The continued rise of Russia and China in the twenty-first century now threatens the era of unipolarity, or hegemony, the United States enjoyed since World War II. If we are to accept the notion that these revisionist great powers pose a legitimate threat to the US-led world order, then we must consider the reality of a multipolar world with more than one influential power. As we usher in a new era of strategic competition and potential conflict, the question we must ask is: What are we competing for? And why? Answering this question should, in theory, inform future US posturing and security approaches. Should the United States seek to maintain a unipolar world in which it remains atop the hill as the global hegemon? If so, does this necessitate the continued liberal hegemonic ambition of preponderance and interventionism? If not, what are the changes the United States can and perhaps should make to reflect the evolution of renewed—and perhaps unwinnable—great power competition?

The superficial board game answer to the “What are we competing for?” question is world domination. But a game of Risk is not reality. The more complex and less hyperbolic answer trends toward the desire for global influence and the ability to set and enforce the rules in one’s favor. Russia and China see the world order as one reflecting US and Western values and antithetical to their regimes and philosophies. As the global hegemon, the United States has reigned supreme over the world order due to its unmatched military and economic clout. As such, the United States has—for seventy-five years—been the biggest influencer on the world stage, able to mold and shape international relations and security to suit its own agenda while promoting global prosperity and security greater than that of a world in which the United States did not set the global agenda.

In metaphorical terms, the renewed twenty-first-century great power competition is a game of chess—a global environment of strategic posturing and advancing toward one’s objective of checkmate or, in the case of today’s security environment, hegemony. As opposed to chess’s two-player format, this twenty-first-century game of strategic chess is a three-way competition with two players—Russia and China—decidedly against and seeking to supplant the third—the United States.

In the stakes of twenty-first-century chess, the spoils are hegemonic power status and the ability to influence economic, security, and diplomatic matters to suit the winner's agenda. To be a global hegemon in the twenty-first century requires a combination of policy, posture, presence, and power in every corner of the world stage, including the polar regions. The poles today host a range of diplomatic, military, and economic interests and propositions compelling competition among great powers and even subordinate states seeking to move up a step or two on the global power ladder.

In the Arctic and Antarctica, trillions of dollars' worth of undiscovered natural and biological resources can reshape global trade and the economic positions of those with access and control. But these resources exist within the global commons—shared and ungoverned spaces of the world for all to access. There is a competition to access and benefit from the resources within the commons, and there are few institutions strong enough to effectively deter malign actor intent. Absent recognized territorial claims, competition within the resource-rich international polar commons is left checked only by international covenants—institutional agreements maintaining the superficial luster of legitimacy but in truth and reality lacking any actual binding deterrent for self-motivated states deviating from such agreements and intent on securing rights to untapped commodities. Beyond polar commodities, the international community is in competition over influence for access to the cosmos, or outer space. As the last truly ungoverned but also strategically relevant locations, especially for projecting power in space, the polar regions are equally rooted in competition over claims and territoriality. Influence requires presence and capabilities. The states with the most presence and capabilities will generate the most influence and thus the most control—presumably—over the strategic value, be it realized or anticipated, of the polar commons. Greater influence translates to more power—and the most powerful state in the game of international chess enjoys status as global hegemon and the one who most molds the world order in its own favor.

In the context of expanding influence via the commons and territory, we can look into the depths of the history books for examples of how each has compelled conflict sufficient to extend the same logic to the current situation in the polar regions. That said, while we can look to historical antecedents, we need only look back to Vladimir Putin's rise to power in Russia or Xi Jinping's rise in China for modern examples of the same as informative frames by which to consider the future of the polar regions given today's international dynamics.

RUSSIA AND CHINA AS GREAT POWER COMPETITORS

In 2007 under President Vladimir Putin's direction to restore Russian great power status, Russia began resurrecting Soviet-era Arctic bases. That same year, the country planted a Russian Federation flag on the North Pole seabed in an international declaration of Arctic ownership and propaganda.²³ In 2008, Russia invaded Georgia and conducted a combined air, naval, and land military campaign that resulted in Russia's continued occupation of two Georgian territories to this day.²⁴ Russia continued its expansionist aggression with the 2014 invasion of Ukraine and subsequent annexation of the Crimean Peninsula, now administered as a Russian federal subject, or controlled political territory.²⁵ Later that year, Russia established its Northern Fleet Joint Strategic Command, whose priority focus is the Arctic. Since then, Russia has continued its Arctic military infrastructure and capabilities development to include regular aerial reconnaissance missions throughout the Arctic and near Alaskan airspace. Russia requires foreign vessels traversing the Northern Sea Route to allow a Russian captain to board and navigate the route, against international maritime law but on the basis of disputed Russian claims about territorial waters relative to the continental shelf.²⁶ Russia has also deployed nuclear-capable hypersonic weapons systems to the Arctic and continue aggressive rhetoric toward the United States and its allies.²⁷ There is no evidence of passivity or isolationism, and with the reelection of Putin through 2036, Russian political and military trajectories are likely to continue along this path well into the future. Finally, in a 2019 speech, Putin addressed growing speculation of expanding Russian-Chinese relations, referring to such as "an allied relationship in the full sense of a multifaceted strategic partnership."²⁸

As if to complement Russian aggression and great power restoration efforts, China has also asserted its status as a global power player in the twenty-first century. With a rapidly growing economy, the Chinese have invested billions of dollars into military modernization efforts. Moreover, China's long-standing practice of debt-trap diplomacy continues advancing the Chinese Communist Party's global presence through expanded infrastructure projects and economic relationships with the preponderance of the world's countries. The hallmark of this effort, China's 2013 Belt and Road Initiative, seeks to develop Chinese presence in more than 70 countries and has established partnerships with 142 and counting.²⁹ Under President Xi Jinping since 2013, the People's Republic of China has become a global force of economic and military influence. Its most controversial effort to date, though, is its extension of territorial claims into the South China Sea international waterway since 2012.

The international community casts China's continued creation of artificial islands for military and economic purpose as a breach of international law and disruption to the regional and global economy by extension. This ongoing and expanding territorial assertion adds greater tension to the international discourse and continues to bring China and the United States closer to each other in their respective naval exercises in the region. Finally, China's polar region interests are similarly evolving with their development of nuclear icebreakers—its self-proclaimed status as a “near-Arctic state” and its increasing presence in Antarctica, sometimes for questionable or unknown reasons.³⁰ The evidence of Chinese and Russian aggression is undeniable, and their intent equally so. We will discuss these and other matters in subsequent chapters. For now, the prevailing position in the international security discourse holds China and Russia as twenty-first-century great power competitors to the United States. The degree of threat and competition continues to be debated, but that China and Russia seek greater global influence in the twenty-first century is a largely agreed-upon fact. What the community cannot and does not agree on, it seems, is whether the polar regions of the Arctic and Antarctica should be part of the conversation.

COMPETITION IN THE POLAR REGIONS

Those contending that the polar regions are irrelevant to renewed great power competition are not paying attention. Instead, they cling to the notion that the polar regions are of little value to the world order and the great powers vying to shape it. More to the point, this camp contends that even if the polar regions did present some known value to the future international security landscape, thus compelling military presence in some form, the regions themselves are distant, austere environments sufficient to deter sustained military activities. Between seasonal darkness, navigation challenges, unforgiving temperatures, and unpredictable icepack, the polar regions, according to some, are too harsh for even the most committed militaries. In some ways this has proven true. The polar regions are among the least-populated regions on Earth and, with the exception of the period immediately following World War II, have seen equally little military attention through the years. As the polar regions become more accessible, their obscurity and irrelevance is shifting toward fame and relevance.

The February 9, 2020, temperature reading of 64.9 degrees Fahrenheit at Esperanza Base weather station in Hope Bay was an Antarctic milestone.³¹ One day of high temperatures alone is insignificant. What is significant is the frequency of higher-than-average temperatures recorded

on Antarctica over time. As ocean temperatures rise, so do Antarctic surface temperatures. And as Antarctic surface temperatures increase, so does the rate of perceived melt or, at the very least, perceived accessibility. The Arctic is trending toward a similar future. According to the National Oceanic and Atmospheric Administration, 2019–2020 was the warmest summer on record and nearly 3 degrees Fahrenheit hotter than average.³² The largest remaining Arctic ice shelf is breaking apart, and the continuing observation of sea ice decline at 12–13 percent since the 1980s had led the scientific community to generally agree that—assuming continuation of this trend—the Arctic will see ice-free summers for the first time in recorded history by 2050.³³

Regardless of reason, be it human-driven warming or natural climatic variations that have occurred throughout Earth's history, scientists agree: the climate is changing; the oceans are getting warmer and rising; and the ice—in both polar regions—is melting. Climate change skeptics' predictions based on trend analysis and extrapolation are flawed. Scientists predicted in the 1970s that the world would soon run out of oil, yet in 2020 we continue to discover new oil reservoirs and resource-rich environments. Maybe the ice will not continue to melt, but maybe it will. Either way, the United States cannot afford to dismiss the observable realities of today and the predictions of the changing polar environments of tomorrow, while simultaneously enabling great power rivals China and Russia to assert themselves at the poles in the absence of substantial US presence and interest.

Great power competitors are paying attention to what the United States does or does not do in its global engagements. These actions or inactions have shaped and will shape future Russian and Chinese perceptions of US strength and resolve. When the Obama administration failed to enforce the 2012 “red line” in Syria with promised military action if the Assad regime used chemical weapons, the world noticed.³⁴ In the years following, the Chinese rebuked international law and US finger-wagging and built artificial islands in the South China Sea; Russia invaded and annexed another country's sovereign territory. As both great powers move on the polar regions, the United States continues to watch. Training with North Atlantic Treaty Organization allies in Norway, sending fighter squadrons to Alaska, and sending navy surface action groups into the Barents Sea have all been part of the “steady northward creep” of the United States to Arctic security posturing.³⁵ For the United States to retain its hegemony, this is not enough. But should the United States seek hegemonic maintenance in the twenty-first-century world order? We will address these and other questions

throughout the rest of the book. Either way, the polar regions matter in the future geopolitical and geostrategic equation.

The polar regions will be—and already are to an extent—a competitive domain in the twenty-first-century great power competition. Competition will continue to drive confrontation. Increasing confrontation may lead to contestation. To prevent the polar regions from becoming contested environments, and eventually succumbing to conflict that will affect the US homeland and the global economy, the United States must follow a more aggressive course of both policy and strategy to safeguard its interests and promote favorable power balances in and around the polar regions. The recommended policies and strategic concepts for polar region employment must be informed by relevant context and the lessons of history influential to strategic theory that inform the application of the national instruments of power.

STRUCTURE OF THE BOOK

Over the course the remaining chapters I will discuss polar region dynamics in the international security context of current and future great power competition with an eye toward military, defense, and security policies, postures, and practices.

Chapter 2 opens with a discussion of the polar regions through the lens of international security relevance and punctuations since World War II. I discuss significant shaping events in polar region dynamics through the years, emphasizing only what I consider the most influential matters contributing to the evolving polar region security discussion today. This overview hints at and outlines the nature of the conversation and how the polar regions have arrived at the point they are today: at the nexus of international peace and security.

In Chapter 3, I transition to discussing the four categories I argue to be most influential to the current and future polar region security sphere, or what I call the polar Cs: commons, claims, covenants, cosmos. I discuss each of the four polar Cs in context of their influence on today's and tomorrow's polar region landscape. I address such topics as historical claims to both regions, competing claims and the basis for each, international polar institutions like the Arctic Council and Antarctic Treaty, as well as current and future space operations and interests enabled via the polar regions and their critically important geography. I detail why each of the polar Cs, as broad categorical descriptors, have and will continue to encourage and incentivize great power competition between Russia, China, and the United States.

In Chapter 4, I offer a frame for analyzing polar actors and their relative capabilities and intent for future polar region influence. I turn my attention to those with actual influence in the regions as measured by policy, posture, presence, and power. I argue that, if left on the same trajectory absent change, the polar regions will devolve into contested militarized domains in the twenty-first century, spurred by particular polar region actors with the necessary combination of capability and intent to influence polar affairs, or their relative threat.

To differentiate among the polar actors relative to their perceived threat, I present a polar typology: a four-by-four frame for both Arctic and Antarctic actors categorizing and plotting each according to my assessment of their polar capabilities and intent. I further describe these four polar actors within the typology as polar peripherals, polar perceivers, polar players, and polar powers. The discussion extends from the polar powers designation and emphasizes Russian and Chinese polar policies informing the national narrative and their respective polar orientations. These policies inform much of what the revisionist great powers are actively pursuing in the polar regions, including the arguably malign actions each is undertaking in their quest for polar region influence. This chapter provides a comparison for the proceeding chapter's discussion on current US polar policies and informed postures relative to what China and Russia have developed.

In Chapter 5, I provide a policy analysis of the current polar posture of the United States, or lack thereof, since Richard Nixon. I then examine trends in the National Security Strategy, National Defense Strategy, and National Military Strategy and their collective emphasis on great power competition. I discuss the military significance of the polar regions to US hegemony and how they are unique in that they span multiple geographic combatant command areas of responsibility, and yet, save for US Northern Command, none of these commands' current posture statements address security challenges or concerns in the polar regions.

From there, I summarize the latest Department of Defense Arctic Strategy as well as the other services' Arctic strategies relative to the objectives stated in the National Security, Defense, and Military Strategies. I further compare the Arctic strategies to existing treaties and international governance and discuss what can and cannot be done considering the established limits. I present missed opportunities in each for polar policy inclusion and discuss briefly that continued omission of polar policies or the adoption of toothless policies lacking budgeted intent will lead to a United States that is strategically outpaced and disadvantaged in the polar regions by the rise of great power competitors such as China and Russia.

Finally, I present three potential scenarios and outcomes for the future of the poles based on the analysis of current US policy. In that context, I argue that the polar regions are quickly becoming the priority power-grab regions for rising great power competitors. Whereas the United States stands as the current global hegemon, the rise of China and Russia in the polar regions—coupled with the lack of orientation of the United States—is creating conditions ripe for realization of the Thucydides Trap, or what I refer to as the polar trap.

In Chapter 6, I outline the leading scholarly narratives informing the polar strategic blind spot and the conditions necessary to realize the polar trap. I detail the predictive implications of these circumstances should they actually occur and the problem scenarios created as a result. I spend the remaining discussion of the chapter focused on the future implications of the polar trap for the United States and what the risks are to succumbing to this historically predictable fate.

In Chapter 7, I extend the logic of the polar trap as the basis for presenting an alternative strategy for influence, or what I refer to as trans-actional balancing globally and polar balancing within the polar regions. I review seminal concepts in current US grand strategy and focus attention on the debate between liberal hegemony (strategy of engagement and global military presence) and offshore balancing (generally a strategy of restraint save for specifically identified areas of geopolitical and strategic significance). Using this decades-old debate (i.e., Should we engage or should we restrain?), I build the case for an alternative strategy of polar influence that satisfies both restraint and the platforms of engagement advocates given the significance of the polar regions to future great power competition. Building from this argument, I present the framework and conditions for polar balancing as a proposed alternative approach for polar influence in the twenty-first-century great power competition. The proposed strategy describes, explains, and predicts what the future great power competition will look like should the United States adopt this polar orientation. In doing so, the chapter addresses the issues identified in Chapter 2 relative to enhanced polar infrastructure and capabilities; attends to the realities of the polar spheres of influence noted in Chapter 3; addresses the rising polar posture and influence from competing great powers discussed in Chapter 4; fills in some of the policy gaps noted in Chapter 5; and perhaps most important might put the United States on course to avoid becoming victim to the polar trap identified in Chapter 6.

Chapter 8 concludes the book by first detailing a series of recommendations for executing polar balancing in twenty-first-century

great power competition. Here I label the proposed approach the polar pivot. Essentially, if the United States adopts the recommended polar balancing approach in Chapter 7, Chapter 8 is the blueprint to execution. As part of the pivot, I outline a strategic framework inclusive of polar region goals and recommended lines of effort toward these goals. I recommend changes to the US military combatant command structure; recommend US military service-specific orientations to the polar regions; and encourage numerous revisions to polar military operational capabilities and readiness. Finally, I revisit the pressing security and presence situation in the poles; the polar Cs shaping the polar security scape; the polar typology describing the power balance and imbalance in the regions; the lack of US policy orientation toward these regions compared to the substance of competitors' policies to the same; the real risks of the polar trap resulting from the lack of US orientation; and the adoption of polar balancing via a twenty-first-century US polar pivot. I detail the lasting implications of an unrealized polar conflict situation should the United States refuse to reorient to the poles and further attempt to bring attention to this seldom-discussed issue critical to US national security and global interests. While this may not be an issue of today, it certainly will be one of tomorrow.

NOTES

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