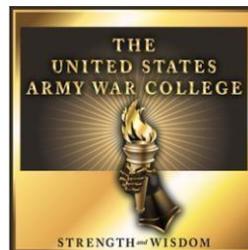


Decoding China's Arctic Interests

by

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United States Army War College
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Abstract

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Arctic ice is melting at an accelerating rate, giving way to not only the last great frontier that promises navigable waterways and natural resources, but international attention to emerging geopolitical and economic significance. China has not published an Arctic strategy, nor explicitly described its interests in the Arctic; however it has declared itself a “near-Arctic” state and become the most active observer in the region. This analysis examines China’s rhetoric, investment, and collaborative engagement with the Arctic states. The key findings are that China’s geostrategic interests are to advance its global legitimacy and economic development. As such, China is interested in establishing a diplomatic and economic presence in the Arctic to elevate its global status and ensure China’s access to sea lanes and resources. China’s growing engagement in the arctic could represent another significant driver to a power shift from the U.S. to China.

Decoding China's Arctic Interests

Arctic ice is melting at an accelerating rate, giving way to not only the last great frontier that promises navigable waterways and natural resources, but international attention to emerging geopolitical and economic significance. Regardless of the reason, the retreating Polar sea ice and thawing permafrost is expected to yield increasingly accessible regions abundant in fish, fossil fuels, minerals and rare earth elements, along with increased access to the three strategic sea lanes (see Figure 1): Northern Sea Route (NSR) north of Russia, Northwest Passage (NWP) above North America, and Central Arctic Shipping Route (ASR). According to geological estimates, the Arctic contains approximately 13 percent of the world's undiscovered oil (90 billion barrels) and 30 percent of the world's undiscovered natural gas (1,669 trillion cubic feet of natural gas and 44 billion barrels of liquid natural gas), the majority of which is contained offshore.¹ The NSR and NWP could soon cut thousands of miles off shipping distance between northern hemisphere trade partners.

Eight nations have littoral territory in the Arctic Circle. The United States (U.S.), Canada, Russia, Denmark (Greenland) and Norway have Arctic Ocean basin coastlines, while Iceland, Sweden and Finland do not. Together the eight nations constitute the permanent members of the Arctic Council which was established in 1996 as an intergovernmental forum to promote coordination, cooperation and interaction among the Arctic states and other observers.²



Figure 1. Arctic strategic sea lanes

All permanent members of the Arctic Council have published Arctic strategies and made sovereignty, security, economic development and environmental protection a priority. Twelve non-Arctic countries have been granted observer status to the council along with twenty other intergovernmental and non-governmental bodies.³ China, Japan, India, South Korea, Singapore and Italy are the latest observers granted status in May 2013.⁴ As observers, representatives can present positions and convene talks with regional decision makers in order to influence Arctic affairs, but final decisions are the exclusive right and responsibility of permanent members.⁵ Active observers must therefore rely on diplomatic and economic engagement with permanent members in order to advance their Arctic interests.

China has not published an Arctic strategy, nor explicitly described its interests in the Arctic; however it has declared itself a “near-Arctic” state and become the most active observer in the region. This analysis examines China’s rhetoric, investment, and collaborative engagement with the Arctic states. The key findings are that China’s geostrategic interests are to advance its global legitimacy and economic development.

As such, China is interested in establishing a forward diplomatic and economic presence in the Arctic that elevates its global status and provides China's access to sea lanes and resources.

Arctic Political and Policy Landscape

The Arctic was one of the main strategic theaters during the Cold War, where multilateral cooperation and coordination were essentially non-existing. The changing Arctic is now giving rise to increased human activity and new regional and global opportunities for competition. But increased presence, exploration and resource extraction are bringing significant challenges to the realm of governance, security, and environmental stewardship.

The most significant challenge is that unlike the Antarctic, the Arctic is governed primarily by cooperative declarations and agreements underpinned by the Arctic Council, but not by formal treaties, with only two exceptions, the 1920 Svalbard Treaty which recognizes Norway's sovereignty of Spitsbergen,⁶ and the 1978 Polar Bear Treaty that protects polar bears and other marine animals.⁷ The Ilulissat Declaration of 2008 declares that the five Arctic coastal states are stewards of the Arctic Ocean and that the 1982 United Nations Convention on the Law of the Sea (UNCLOS) provides the international legal regime for addressing sea-based disputes.⁸ There have been calls for a framework of more formal treaties drawing from the UNCLOS foundation as human and state activity increases, but to this date, there has not been much progress.

An increasing trend in the Arctic political landscape is the involvement of extra-Arctic states. The Arctic Council has encouraged and welcomed outside observers. Aside from economic and commercial interest, there is concern among the latest observers about sea level rise due to melting Arctic ice and the social and economic

impacts to coastlines.⁹ The Arctic is widely regarded as a barometer on what is going on with climate change and this is driving climate research from outsiders.

In addition to these political realities, there are several unresolved territorial disputes and disagreements among the five states with Arctic coastlines due to the complexity of shorelines and ocean ridges. The disputes include issues related to attribution of Arctic waters, outer continental shelf demarcation, and sea route jurisdiction.¹⁰ These disputes, however, are not prone to producing military conflict since the majority of oil and natural gas deposits are contained onshore or within undisputed 200 nautical mile economic exclusion zones (EEZs) of the five Arctic coastal states.¹¹

Additionally, Arctic neighbors have been collaborative and cooperative on a wide range of key environmental, economic and political issues. A good example is the 2010 agreement between Norway and Russia to establish a dividing line in part of the Barents Sea. That was a breakthrough in a long-standing dispute.¹²

However, a dispute over Lomonosov Ridge, which spans from Siberia and across the North Pole to Canada's Ellesmere Island, remains unresolved among claimants Canada, Russia and Denmark.

Similarly, Russia and the U.S. are involved in an unresolved maritime boundary dispute in the Bearing Sea.¹³ Other key territorial disputes include jurisdiction over the NWP, parts of Beaufort and Lincoln Sea, and Hans Island.¹⁴

The main body for territorial conflict resolution in the Arctic is the Commission on the Limits of the Continental Shelf (CLCS), a twenty-one nation body under UNCLOS that attempts to resolve territorial disputes by making scientifically based rulings.¹⁵ The U.N. International Court of Justice (IJC) is a broader body that can also rule on territory

disputes. These international mechanisms have offered the Arctic states opportunities to prevent their conflicts from turning into outright confrontation.

Chinese Engagement in the Arctic

The thawing Arctic is creating a new regional order for the application of statecraft among Arctic and “near-Arctic” states. As signaled by its desire for inclusion in the Arctic Council, China recognizes engagement in the development of this new order means having the opportunity to shape it to the advantage of its national interests and concerns, although not explicitly published. Tang Guoqiang, Chairman of China National Committee for Pacific Economic Cooperation, stated in 2013 China “wishes to strengthen mutually beneficial cooperation on Arctic-related issues with various parties.”¹⁶

China’s diplomatic engagement in the Arctic is expanding cooperation between China and each of the Arctic states, but more so with Iceland, Denmark (Greenland), Norway, Sweden and Finland which appear to welcome China’s engagement more warmly than the rest. Throughout increasing engagement, China has asserted that it will respect sovereign rights and jurisdictions according to international law.¹⁷ At the same time, the Ministry of Foreign Affairs takes the lead in coordinating China’s efforts to engage in the Arctic affairs. The Ministries of Land and Resources, Science and Technology, and Environmental Protection are key Chinese government units to deal with the substantive issues.¹⁸

Sino-Icelandic Relations

From China’s viewpoint, Iceland is a key geographic doorway to the Arctic in terms of shipping and resource development. Separated by thousands of miles of ocean and starkly dissimilar politically, culturally and geographically, China and Iceland are

unlikely partners. Yet, they have grown closer over the past several years on their joint ambition to develop Arctic resources, particularly oil. China National Offshore Oil Corporation (CNOOC) is currently exploring oil and gas deposits off Iceland.¹⁹ Today, China's embassy in Reykjavik has a staff of over 500, making it one of China's largest overseas missions.²⁰ In contrast, the U.S. embassy has a staff of 70.

In a move to promote trade with Iceland and aid in its recovery, China signed a currency swap agreement with Iceland in 2010.²¹ The agreement, worth \$500 million, allows Iceland to buy Chinese imports with its own currency.²² The deal, although not economically significant to the second largest economy in the world, was more symbolic than substantive. It is an agreement however that China can leverage in the future.²³ China extended the symbolic gesture further by signing a free trade agreement with Iceland in 2013, making Iceland the first European nation to sign a bilateral free trade agreement with China.²⁴ Iceland welcomes its relationship with China and is hopeful it will grow stronger.

Greenland and Sino-Danish Relations

Greenland is an autonomous, although not fully independent country within the Kingdom of Denmark. It is geographically close to North America, and home to the U.S. Air Force's northernmost base in Thule. There is no Chinese embassy or consulate in Greenland. A major facet of China's engagement in the Arctic centers on mining and mineral development in joint venture with Greenland. With Greenland's ice sheet melting rapidly, leaders anticipate a future mining boom; and Beijing has taken notice. Greenland's Deputy Foreign Minister Kai Holst Andersen considers Greenland the "mining nation of the future," and has made it clear that China's help is welcome in boosting Greenland's mining industry.²⁵ Newly accessible deposits of copper, gold, iron,

nickel, platinum, titanium and zinc, along with diamonds and rubies are becoming available for mining.²⁶ In anticipation of China's engagement in mining and to entice thousands of underpaid Chinese workers to make the journey, Greenland loosened up immigration restrictions in 2011 for mining operations with an initial investment exceeding 5 billion kroner (\$920 million).²⁷ China's largest copper miner is currently engaged in mineral prospecting on Greenland's east coast.²⁸

In addition to metals and minerals, the so called "rare earth elements," (REE) which are used to make electronic components for virtually all electronic devices, is rich in Greenland. Greenland Minerals and Energy claims its Kvanefjeld deposit could produce 20 percent of the global REE supply and large amounts of uranium with first production in 2016.²⁹ This is an extraordinary find since before their discovery in Greenland, geologists assumed nearly all of the world's REEs existed in China. China is in the dominant position as the producer of over 90 percent of the world's output of REEs as of 2008, up from 27 percent in 1990.³⁰ Partnering with Greenland on REE production, which it is incapable of developing alone, will be significant to continue China's dominant position. As a result, industrial countries that produce electronics, like Japan and the U.S. could continue to face tight supplies and high prices.

Sino-Norwegian Relations

While China has had engagement with all Arctic states, the relationship to Norway stands out as particularly difficult. China and Norway established diplomatic relations in 1954, and for 60 years the two have had dozens of contacts, agreements, and other cooperative exchanges. In 2004, China established the Yellow River Station, its first and only scientific research base abroad, in Svalbard Norway. China and Norway were working to complete a free trade agreement in September 2008; however

China suspended diplomatic relations in October 2010 when the Norwegian Nobel Committee awarded the Nobel Peace Prize to jailed Chinese political dissident Liu Xiaobo.³¹ Chinese leaders were upset with Liu Xiaobo's efforts to advocate political modernization in China and more specifically, his leading role in drafting the "Charter 2008" manifesto, which called for constitutional change in China. They arrested Liu in 2009 and subsequently convicted him of "inciting subversion of state power" and sentenced him to jail for 11 years.³² The Chinese government was furious with the Nobel Peace Prize award and expressed great displeasure toward the Norwegian government.

Norway expressed regret for the diplomatic freeze and tried to convince China that the Nobel Committee was a politically independent organization whose views and opinions did not represent those of the government. Despite this and seeing the positive aspects of China's engagement in the Arctic, Norway supported the Chinese bid for permanent observer status into the Arctic Council in 2013. In another gesture to end the diplomatic standoff, the Norwegian government made a controversial decision to refrain from officially receiving the visiting Dalai Lama in May 2014.³³ Bilateral diplomatic relations have warmed a bit for the two nations although most activity resides at lower level technical and exploratory endeavors.

Sino-Swedish Relations

China established diplomatic relations with Sweden in 1950, making it the oldest relationship with a western country, and the first country to partner with China for both trade and investment protection.³⁴ For the past two decades, Sweden has been an ambitious supporter of China's development and engagement in the Arctic. As chair of the Arctic Council in 2013, Iceland was key to the unanimous vote required to grant

China observer status. In contrast to China's focus on resource development with Iceland and Greenland, China's cooperation with Sweden is in the areas of research, innovation and the environment.

Along with motives to be regarded as a global player economically and politically, China endeavors to be considered a leader in innovation and emerging industries. To this end, China considers Sweden a key partner in transforming its image from a "Made in China" to a "Created in China" nation.³⁵ Considered by China as one of the most innovative nations in the world, Sweden is a desirable partner to realize this transformation. Sweden is among the leaders in the world for the number of patents and inventions, particularly in the areas of information technology, life science, and precision machinery.³⁶ The two countries at present have dozens of bilateral cooperation and mutual investment agreements in clean energy, renewable energy, advanced manufacturing, and information technology and are expected broaden cooperation into urbanization, and life sciences (i.e. microbiology and biochemistry).³⁷ To signify their growing partnership, China and Sweden signed an \$80 million joint contract for the Blaiken Wind Power Project in 2014.³⁸

China and Sweden are also embarking on a bilateral agricultural partnership. Sweden sees immense economic opportunity in China's 1.3 billion inhabitants, and hopes its high-quality agricultural products can gain Chinese market exposure.³⁹ In turn, China hopes to modernize its agricultural industry through scientific and technological methods and improved training for Chinese farmers.

Sino-Finnish Relations

Like Sweden, Finland was one of the first Western countries to recognize the People's Republic of China. China and Finland have enjoyed outstanding diplomatic

relations for over 60 years with essentially no unresolved issues. Top leaders from both nations meet frequently and focus on trade and economic issues. China also considers Finland an essential partner when issues of China's interest are discussed in the European Union (EU).

Finland was a strong advocate for China's permanent observer status in the Arctic Council. Finland and China are enthusiastic about strengthening communication and cooperation over Arctic affairs and working together to maintain peace and stability in the Arctic region.⁴⁰ To assist China and their toe-hold in the Arctic, Finnish company Aker Arctic is assisting China in building a new polar icebreaker research vessel.⁴¹ The new vessel will join China's *Xuelong* (Snow Dragon) already conducting Arctic research expeditions.

Chinese domestic challenges resulting from its rapid growth have presented opportunities for partnership with Finland across several fronts. China's population is struggling with income inequality and 15 percent living below the poverty line.⁴² In addition, environmental and health problems persist in China along with human rights issues. China senses its problems result from a technology research and development industry that has not kept pace with population growth. China values Finland's expertise in high technology and innovation and sees opportunity to learn from Finland to potentially address its domestic challenges.⁴³ Currently, several Sino-Finnish scientific research projects are under way, involving projects in the environment, energy, information, communications and nanotechnology sectors.⁴⁴ By Chinese research organizations continuing to collaborate with Finnish research institutes, China aims to increase its research and development capacity to that on par with the U.S. and EU.

China Relations with U.S. and Canada

The majority of China's diplomatic activity in the Arctic has been with the Nordic Countries in the realms of Arctic shipping, research, resource development, and science and technology development. Engagement with the U.S. and Canada on Arctic issues has been relatively uneventful to date which stands to reason since the NSR presents greater opportunities for China than the NWP. Some Chinese analysts reportedly are encouraging their government to challenge Canada's claim of sovereignty over the NWP however.⁴⁵ It took a bit longer than the Nordic Countries for Canada and the U.S. to be convinced China's permanent observer status was beneficial for the Arctic. Some analysts suggest that until 2013, Canada in particular was not convinced China should be admitted, although decisions to grant observer status to applicants was deferred between 2009 and 2013 in part to allow the council to cope with expansion of observership and what roles those observers should play as the organization matured.

U.S. and Canadian Arctic strategies both assume China's interests in the Arctic to be primarily shorter sea routes and resource extraction, and have positioned themselves to protect national interests accordingly. Both nations' national strategies (not Arctic) do however advocate increased engagement with China overall.⁴⁶

Chinese Investment in the Arctic

China's twelfth Five-Year Plan for 2011-2015 includes a commitment to increased polar and maritime activities in support of research and economic development.⁴⁷ China has invested in Arctic exploration, environmental research and commercial development unilaterally and under cooperative agreements with Nordic countries in particular. The Arctic may hold measurable economic potential for China, but its rewards will unlikely impact China in the short term as much as the geopolitical

value gained for engagement in the region. In October 2013, Jia Guide, deputy director-general with the Department of Treaty and Law under China's Foreign Ministry expressed in an interview that resource development in the Arctic is a possibility, but not a priority for China.⁴⁸ With interest still growing for China, its Arctic investments have been relatively minor as compared to engagement in other developed parts of the world. However, Malte Humpert, founder and executive director of the Arctic Institute in Washington D.C. sees minor investments for China now delivering big rewards in the future.⁴⁹

China's economic development is dependent on the Strait of Malacca and its secure and assured access. Roughly 80 percent of China's imported energy transits through this strategic waterway and the prospect that increasing piracy and transnational crime will disrupt unfettered flow has in part driven China to consider the NSR as a future alternate. However, navigation in the harsh maritime environment of the Arctic is virtually impossible without reliable icebreaker ships to forge the way through dense ice. In 1993, China purchased *Xuelong*, its first icebreaker from Ukraine.⁵⁰ In 2012, *Xuelong* became the first Chinese vessel to navigate the NSR into the Barents Sea going from Iceland to the Bering Strait via the North Pole.⁵¹ The NSR offers Beijing a shortcut of nearly 4,000 miles, and shorter transit time by 15 days on a China-to-Europe voyage.⁵² When the NSR is fully viable, one Chinese scholar approximates that it could yield \$60 billion to \$120 billion in savings each year for Chinese shipping firms.⁵³ China's new icebreaker, slightly smaller but more capable than *Xuelong*, is expected to be completed in 2016.⁵⁴

China also sees the disastrous outcome an oil spill in the Arctic would have on the global environment and is spending around \$60 million annually on polar research, with plans to increase Arctic research staff at the Polar Research Institute of China (PRIC) from 200 to 1,000.⁵⁵ China's polar research capacity is key to its expedition and economic development activity.

For the most part, China's investment in the Arctic has proceeded unimpeded by the Arctic states since it has been able to frame its economic involvement as 'win-win' among Arctic stakeholders. China's failed attempt in 2011 to buy land in Iceland is a notable exception. In 2011, Chinese businessman and former Communist Party official Huang Nubo attempted to purchase 300 square kilometers in northeastern Iceland. China's bid was blocked by Reykjavik.⁵⁶

Chinese Arctic Research and Academic Activity

In order to be considered a leader and expert in the Arctic, China has dedicated national resources to research and academic study in the High North. When combining the number of Chinese scientists, environmentalists and researchers with its multitude of research institutes and research stations, China has the world's strongest polar research capabilities.⁵⁷ Its research efforts have received a charge from government agencies and officials as well. Moreover, China has published more periodicals on the Arctic than any other permanent council observer, exceeding those of India, Japan and Korea combined.⁵⁸

In 2013, Zhao Jun, Chinese ambassador to Norway, stated in a speech delivered at the Arctic Frontiers conference in January 2013 that "China is hoping to continue enhancing its cooperation on Arctic scientific research with the Arctic countries, and to share the findings of the scientific research, so as to contribute to peace, stability and

sustainable development of the Arctic region.”⁵⁹ But China’s engagement in scientific research predates the ambassador’s statement by more than three decades. Between 1985 and 2014, Beijing conducted 6 Arctic expeditions. Moreover, Chinese scientists have astutely taken advantage of just about every scientific organization on the Arctic since the 1990s.

In 1996, China joined the International Arctic Science Committee (IASC), a non-governmental organization that encourages and facilitates cooperation in all aspects of Arctic research.⁶⁰ Since joining, China has used IASC as a springboard to connect and network with the international science community on Arctic research. Additionally, Chinese representatives take part in Arctic Science Summit Week, Ny-Ålesund Science Managers Committee, and the International Polar Year project.⁶¹ In 2005, China hosted the Arctic Science Summit Week.⁶²

China's major research institutes working on Arctic issues include PRIC, the China Institute for Marine Affairs under the State Oceanic Administration (SOA), and the Institute of Oceanology under the Chinese Academy of Science.⁶³ PRIC runs a Northern Lights research station in Reykjadalur, northeastern Iceland.⁶⁴

In Dec 2013, the China-Nordic Arctic Research Centre was officially opened in Shanghai.⁶⁵ It brings together ten Nordic and Chinese research institutes to cooperate on Arctic research. Research at the China-Nordic Arctic Research Centre focuses on climate change, natural resources, shipping, economic cooperation and policy issues in the Arctic.⁶⁶ China also operates Polar research institutes at Shanghai Jiao Tong University, Fudan University and Wuhan University.⁶⁷

Each of China's organizations reinforces its Arctic presence and advances its political influence, potentially adding to rival nations' fears that it is embedding itself in Arctic territories.

Sino-Russian Counterbalance in the Arctic

Russia's Arctic coastline spans greater distance across more time zones than any other Arctic state. Given this feature, the Arctic is of vital interest to Russia with respect to its transportation sector, fuel-energy complex, information and military infrastructure development.⁶⁸ In fact, Russia has referred to the Arctic region as its "foremost strategic base for natural resources" for the future.⁶⁹ Thus, Russia leads the Arctic Council in Arctic infrastructure and resource development, and holds the largest fleet of icebreakers in the world. The Arctic is one of the few areas in which Russia holds a sizeable advantage over China; and in which Russia is reluctant to treat China as an equal. However, Moscow is sensitive to how the Arctic ties in to China's emerging globalization.

Russia had reservations about granting China observer status in the Arctic Council.⁷⁰ After China was granted status, Russian Prime Minister Dmitry Medvedev promptly reminded China that "Arctic states lay down the rules here."⁷¹

As co-members of the Arctic Council, Russia and China could not be farther apart on their views of the future of the Arctic and on use of the NSR in particular. China's assertion that the region is a global commons for the good of all mankind diametrically opposes Russia's view of the Arctic as a regional resource, not a global resource. Russia favors a 'closed-sea' regime and wants outsiders like China to ask permission to use the Arctic.⁷² Recognizing Russia's gatekeeper position, Beijing is likely aware that too bold a contrary posture will elicit backlash from the Kremlin.⁷³

In the short to medium term, China's dominant interest in the Arctic concerns use of the NSR for shipping. Russia wants to be amenable to China's use of the NSR but while preserving its relative advantage. Russia classifies key straits along the NSR as internal waters and therefore exempt from innocent passage rules of UNCLOS,⁷⁴ as a result Moscow refers to the provisions of UNCLOS Article 234 to apply excessive requirements like advance notice, pilotage and escort fees, and vessel specifications in the name of environmental protection.

Russia also wants their icebreakers to escort ships using the NSR, at a hefty fee. China must deal with Russia's position carefully as reports suggest by 2020, China will be shipping 15 percent of its exports through the NSR as an East-West transit and trade corridor between Europe and Asia.⁷⁵ If China demands to use Chinese rather than Russian icebreakers, it will reduce Russia's alleged advantage in the Arctic. Head of Rosneft, Russia's largest petroleum company, referring to China building a fleet of icebreakers and increasing research, echoes its government's concern that China will become a competitor for Russia in the Arctic.⁷⁶

Western economic sanctions against Russia for its aggression towards Ukraine are impacting the Sino-Russian competition in the Arctic in favor of China. Western firms such as Exxon, Eni and Statoil have pulled out of operations in northern Russia, leaving Russian firms in need of financial and technological partners for Arctic resource ventures.⁷⁷ By severely limiting potential Arctic partners for Russia, China has become one of the few places to turn. For example, Exxon and Rosneft jointly discovered huge reserves of oil and natural gas in Russia's Kara Sea. Exxon was forced to pull out before extracting the oil and gas and Rosneft needs a new non-Western partner for the

expensive extraction.⁷⁸ China is in an excellent position to fill the void. As Russia continues to be isolated, China will certainly gain additional influence in the Arctic through tighter partnership with Russia.

China's "Peaceful Development" and Arctic Interests

China's Motivations for Arctic Involvement

China's importance in the world is growing, along with its need for greater influence in global and regional governance. Having grown to the second largest economy, it is beginning to develop global strategies and to seek its own foreign policy identity based on the two most important pillars of the regime: political stability and economic modernization.⁷⁹ China's most prominent role in global governance is its position in the UN Security Council, where it has exercised its veto right five times since 2007, up sharply from previous decades.⁸⁰ Regionally, China has also exerted its presence in the Shanghai Cooperation Organization and the ASEAN-plus-three.⁸¹ China's drive for an active role in Arctic development, along with technical and scientific expertise, is indication that its interests have indeed gone global. This fits the growing perception in Beijing that China should act as a global 'responsible great power' and use its status to actively promote peace and stability as well as the rule of law in regions beyond the Asia-Pacific.⁸² China's involvement in the Arctic is driven by several distinct but interrelated factors.

First, the Arctic is a key piece in China's strategy to develop into a global great power. It feeds China's expanding diplomacy strategy, maritime development, and social status. China's strategy for its surrounding areas, as opposed to its "great power diplomacy," is widely debated but supported throughout China. Chinese analyst Yan Xuetong argues that China should modify its foreign policy focus from overly U.S.-

centered to a more balanced one with U.S. as one of the key focuses, and upgrading the importance of China's relations with its neighbors. Yan has gone so far to say that China must pursue the policy of "good neighborliness" and develop alliances as the U.S. has done.⁸³

Chinese scholar Feng Liang asserts "international waters are mainly being used or even misused by the developed maritime powers of the West."⁸⁴ He further asserts that existing laws should be revised to better conform to claims of late-developing countries like China.⁸⁵ Similarly, others have urged China's main threat comes from the sea, and therefore China must develop maritime superiority to allow expansion of interests overseas.⁸⁶

China is developing Arctic maritime capabilities ahead of most competitors and will soon publish its own guidebook on Arctic shipping. Arctic involvement will also boost China's social status as it builds scientific and navigation expertise in the region. With greater scientific expertise in the Arctic comes a boost to social status which is a concept that matters for states seeking to maximize their influence and standing in world governance.⁸⁷

Second, the Arctic has the potential to provide substantial economic benefit to China in terms of resources, raw materials and shipping routes. As the world's most populous country and one of the fastest growing economies, China's high demand for resources and materials is driven by its rapid industrialization and urbanization, and compels diversification of development and extraction.

Although the majority of China's energy consumption is supplied by coal, oil is second, accounting for 18 percent of energy consumption.⁸⁸ As a result, China is also

the world's second-largest consumer of oil, and will soon surpass the U.S. as the top consumer.⁸⁹ According to the U.S. Energy Information Administration (EIA), most of China's largest oil fields are already mature, and production has peaked,⁹⁰ driving companies to seek discovery and production offshore in the Asia-Pacific and elsewhere.

In addition to hydrocarbons, China's consumption of raw materials like copper, iron ore and coal is climbing at a rate commensurate with economic growth. In 2009, the five countries with the highest absolute material consumption were China, USA, India, Brazil and Russia.⁹¹ China's share in global consumption has increased from about 5 percent in the early 1980s to over 30 percent.⁹²

Arctic raw materials and energy resources are not the only untapped gems in the Arctic. Melting ice is expected to produce previously inaccessible fishing waters both inside and outside of EEZs. With continued investment in the Arctic, China's fishing industry stands to gain from these new sources. As the world's largest seafood producer and consumer,⁹³ the fishing industry in China is as vital to economic development as access to raw materials and hydrocarbons. Each in combination with the potential for new sea lines of communication creates promising opportunities.

Third, China is motivated by desire to participate in the study of global warming. The Arctic is considered an accurate barometer of global climate change, and Chinese scientists have joined the international community of researchers and observers. Chinese officials say that China, as a major emitter of greenhouse gases, is important in the global fight against warming.⁹⁴ China has been particularly sensitive to climate change due to recent patterns of extreme weather.⁹⁵ The impact rising sea level due to global warming may have on coastal populations and economic well-being is also

concerning. Demonstrating expertise in weather and climate issues will contribute to enhancing China's social standing as previously described.

China's Arctic Strategy

China's strategy in the Arctic is a multipronged approach using economic, information and diplomatic instruments of statecraft. It is building relationships, promoting rights and responsibilities, building capability and conducting research, all in support of its peaceful development.

China is establishing bilateral and multilateral partnerships with the Arctic states, primarily the Nordic countries. Since establishing diplomatic relations with several of the Nordic countries in the 1950s, China has intensified its engagement along social, political and economic lines of effort. It has done so not just on an intergovernmental level, but on a people-to-people level as well. People-to-people relations is the foundation of an effective peripheral strategy, and will back China's rise.⁹⁶ Joint development projects in energy and green technology, mining and resource development, and trade and financial agreements have led to great relations between China and the Nordic states and its citizens. As an economic powerhouse, China offers immense funding and manpower potential for development projects (like ports and other multiuse infrastructure) that would otherwise be difficult to initiate. In January 2015, China completed its first semi-submerged drilling platform for Arctic drilling on behalf of a Norwegian enterprise.⁹⁷ With Russia, there is also continued opportunity for Arctic cooperation especially in light of Russia's rift with the west.

Throughout engagement, China has also promoted prudent development of the Arctic and respect for sovereign rights of the Arctic Council. In Oct 2013, Jia Guide reinforced this notion by stating in an interview "when we talk about commercial

development, first and foremost is the respect for local regulations of relevant countries [controlling the Arctic]. Then comes the concern for environmental protection."⁹⁸ While other comments out of Beijing have suggested otherwise at times, China's rhetoric and activity for the most part has backed this philosophy since well before 2013. China's track record of activity and rhetoric while an ad-hoc observer to the Arctic Council eventually led to China gaining permanent observer status.

Since China joined the Arctic International Scientific Committee in 1996, it has been building capability and expertise at an enthusiastic rate. China continues to gain experience in navigating the tricky corridors of the Arctic while building improved icebreaker capabilities. Its *Xuelong* icebreaker, which completed its sixth Arctic expedition in 2014, will soon be joined by a new icebreaker. Its first research station planted in 2004 in Svalbard Norway signaled it was seeking greater scientific expertise and improved social status. At this station, Chinese researchers are conducting space-earth measurements, research on meteorology, glaciology, marine ecosystems and the Arctic environment.⁹⁹ Collaborative exploration and research, with China likely deeply embedded, will produce greater understanding of the Arctic's potential for future sea routes and resources, and secure China's position as an expert and leader in development. This model fits the "status quo" theory that China will rise to global power status not by using coercion to overturn the international order, but by following rules and participating.¹⁰⁰

Challenges to China's Arctic Involvement

Although China has made much headway to the Arctic affairs, it nevertheless does not have a well-articulated policy toward this area. This lack of unified policy in the Arctic leaves Chinese interests ill-defined and ripe for interpretation. With the lack of an

Arctic policy, Chinese scholars feel that the Arctic stakeholders view China as challenging Arctic countries for initiatives, suspect China's intent, and are concerned with potential Chinese military assertion in the Arctic.¹⁰¹ China's placement as a permanent observer in the Arctic Council in 2013 has added some legitimacy and clarity to China's intentions, but it took 6 years for China's request to be granted. An indication of some of the hesitancy before 2013 is shown in a study in 2010 that 7 out of the 8 Arctic states listed China as the least desirable partner to work with in the Arctic.¹⁰² China's active engagement with the Nordic states has since satisfied interests of stakeholders to the point that such a survey today would likely show better results. However, China must articulate its Arctic strategy at the national level.

Another challenge is the low prices of oil and commodities driven in part by the recent success of shale oil and gas development in the United States. With lower prices, several ventures are turning out to not be as profitable as anticipated.¹⁰³ For example, Chinese firm General Nice Group is reconsidering its risky investment to take over Greenland's iron ore mine in the Isua region since high costs, labor shortages and environmental mitigation will combine to make it difficult to overcome the low market prices for iron ore.¹⁰⁴ The Arctic Business Forum projects a delay of 10 to 20 years on many investment projects for oil and gas development.¹⁰⁵

Finally, China's great distance and limited Arctic research experience to date prevent it from playing a leading role in the Arctic at the moment.¹⁰⁶ As a self-proclaimed "near-Arctic" state, China northernmost sea port is still thousands of miles away from the nearest Arctic sea lanes. Moreover, its 6 Arctic expeditions are dwarfed by the hundreds of expeditions completed by the 8 Arctic states. Indications are that China will

press on through all the challenges with patience and persistence in order to achieve its Arctic objectives.

Implications for United States Interests

China is recognizing the growing geostrategic and economic importance of the Arctic, and for the foreseeable future, will continue to shape Arctic development through ongoing investment, diplomacy, and maritime projection. China will also continue to accrue global credibility from its Arctic activity, and U.S. interests may be impacted, or even threatened in the future. The U.S. National Strategy for the Arctic Region defines U.S. interests in the Arctic, which include providing for the security of the U.S.; protecting the free flow of resources and commerce; protecting the environment; addressing the needs of indigenous communities; and enabling scientific research.¹⁰⁷ As Arctic stakeholders with separate and distinct interests, China and the U.S. have an opportunity for greater transparency and openness, but may also be prone to conflict.

The most serious implication for U.S. interests is foreign militarization of the Arctic, especially in the international waters off North America. A big U.S. concern is that China may eventually deploy surface warships to the Arctic to protect its commerce and to assert maritime power globally. There is also concern that China's growing and increasingly active submarine force could also soon be patrolling the High North.

With increased commerce and human activity in the Arctic, U.S. Arctic affairs are clearly shifting from domestic to international in nature with the specter of unlawful commerce, rivalry or territorial dispute looming in the future. Fortunately, UNCLOS places almost all of the Arctic resources under national jurisdiction so the scope of potential disputes is limited. However, there is potential for impact to the U.S. interest to protect the free flow of resources and commerce in accordance with international rules

and norms. The U.S. has not yet ratified UNCLOS but has been abiding by it. China has ratified UNCLOS, but its interpretation of land features that determine the limits of territorial waters, as well as accepted EEZ activities, have been at odds with U.S. and allies in the ECS and SCS.

Since 1998, the Arctic Council has remained committed to its original principles centered on non-militarization of the Arctic, with focus on cooperation, environmental stewardship, marine conservation and the like. These are noble principles that must endure however they were established when the level of human activity was far lower than today. Arctic security does not appear in any of the Council's biennial declarations. In fact, the first mention of the expectation for peaceful development under the rule of international law appeared in the 2009 Tromsø Declaration. With the growing number of observers since 1998, including an increasingly active China, future militarization and security of the Arctic is highly germane to Council matters. It is time to make agreements and decisions on military security in the Arctic.

Recommendations

The U.S. is not doing enough in the Arctic to balance China's ascendancy. Going forward, budget constraints will continue to hamper the U.S. in making rapid headway to close key infrastructure and capability gaps, however, a short list of strategic considerations would include the following:

The U.S. should expand the Asia-Pacific rebalance northward to include the Bering Sea and NWP. To support this, investment in icebreaker ships, deep water ports, roads, and air fields along coastal Alaska should command a higher national priority. All investment should be underpinned by rigorous multiagency feasibility studies. Alaska's western and northern coastline (Arctic) spans 3,000 miles, or one and a half times the

distance between northern Maine and the tip of south Florida, yet its shallow features and underdeveloped marine infrastructure¹⁰⁸ create a critical vulnerability in U.S. security. A strategic rebalance northward should also include expansion of the U.S. Coast Guard annual Arctic Shield exercise to include Navy and U.S. Northern Command (NORTHCOM) joint forces. Moreover, USNORTHCOM should request allocation of Navy assets to adequately patrol Arctic waters, sharpen Arctic navigation and expand presence.

The U.S. is assuming the 2 year chairmanship of the Arctic Council in April 2015, and will not hold the position again until 2031.¹⁰⁹ At present, it is appropriate to reassess the Council's position on Arctic security and peaceful militarization in the region. The U.S. can drive a renewed agenda in concert with realizing vital national interests.

Finally, the U.S. should join the rest of the Arctic Council and ratify UNCLOS to more firmly lead in the maturation of international rules and norms. UNCLOS clearly serves U.S. national security and economic interests. The Arctic has so far been an outstanding model for peaceful development under UNCLOS, and U.S. ratification will further implant the expectation that all stakeholders commit to full transparency of activities and intentions in the region.

China's substantial engagement in the arctic could represent another significant driver to a power shift from the U.S. to China. Today, the U.S. stands at a crossroads where it can either tip into complacency or act decisively to secure Arctic interests, and extend global superiority.

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