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Putin’s “Eastern Pivot”: Divergent Ambitions between Russia and China? Evidence from the Arctic

Thomas E. Rotnem and Kristina V. Minkova

Abstract

Focusing upon the warming Sino-Russian relationship in general, this paper also examines in particular both countries interests in the Arctic region. The paper begins with a brief overview of the developing Sino-Russian relationship since the late 1980s. After discussing the blossoming of friendlier ties during the Putin-Xi era, it reviews some of the arguments and assumptions that scholars have held predicting either an ever closer relationship or an eventual rupture in those relations. The paper then analyzes both countries’ interests in the Arctic realm, using this case study as evidence supporting the view that the Sino-Russian relationship—despite its many difficulties—has been effectively managed in this arena for mutual benefit. As well, although it was not intended to be so, the sanctions regime imposed by America and her European allies has been a key driver in the closer Arctic relationship, in specific, and Sino-Russian relations, in general.

The Russo-Chinese Relationship in Recent History

Since the earliest interactions between Russians and Manchus in the 1650s to the summits between Russia’s post-communist leadership and China’s powerful communist brokers in the early years of the third millennium, borders, trade, and broader geopolitical strategic considerations have played a crucial part in the two great powers’ relationship. From the Treaty of Nerchinsk (1689) to the Treaty on Good Neighborliness, Friendship, and Cooperation (2001), the relationship between the two countries has either broken down or blossomed on these issues; at the same time, during each successive era, historical experiences have played an important role in shaping each party’s strategic behavior (Rotnem, 2014). In the early 1980s, with the U.S.S.R. mired in the deepening Afghan struggle and Deng Xiaoping’s domestic reforms having borne fruit, the senior leadership in Beijing signaled a willingness to improve Sino-Soviet relations. In 1982, Beijing asserted that a more independent foreign policy would henceforth be followed, perhaps because the new Reagan administration indicated a more pugnacious U.S. foreign policy was in the offing or possibly because the Chinese Communist Party (CCP) wished to re-balance their relationship vis-à-vis Washington by repairing relations

with Moscow. Whatever the rationale, the two former rivals began to consult regularly on a variety of items of mutual concern, including issues of scientific and technological exchanges, security, and trade. With Mikhail S. Gorbachev's assumption of power in early 1985, further stimulus was given to the improving relationship.

"Novye Myshlenie" or "new thinking" was the rhetorical, pragmatic cornerstone of Gorbachev's foreign policy. Requiring a breathing space from the Cold War confrontation between East and West, the new General Secretary of the Soviet Communist Party devoted his energies to the domestic front, in order to reshape, re-balance, and transform the ailing command administrative economy. While Gorbachev eventually made significant compromises with Reagan over arms control and Soviet conventional forces in Europe, the General Secretary also made important concessions to the Chinese, such as ending the conflict in Afghanistan, reducing Russian troop commitments in Mongolia, and putting pressure on its Vietnamese allies to end their occupation of Cambodia.

As a result, the first Sino-Russian summit in over 30 years was held. Gorbachev's meetings with Deng in early 1989 signaled the normalization of governmental relations, as well as the renewal of ties between the "brotherly" communist parties of both states. Though little else grew out of this meeting—in large measure due to the ongoing and incipient democracy protests in Beijing that spring—nevertheless, these meetings were an important first rung on the ladder toward a more pragmatic, stable relationship, one in which both parties begged off interfering in one another's domestic affairs and participating in ideological contestation, while also putting aside the potential for a renewed military alliance.

In 1990, both parties agreed to reduce their military deployments and armaments along their lengthy border. In addition, military contacts were re-established, as reciprocal missions visited one another's capital. Thereafter, Moscow began its first of many sales of military equipment to the People's Republic of China (PRC), with an agreement signed that fall to offer the Chinese transport helicopters. Indeed, by the end of the Gorbachev era, trade in non-military goods had also increased, from \$380 million in 1985 to over \$6 billion in 1991 (Menon, 2009, p. 11).

The warming trend continued under President Boris N. Yeltsin's leadership of the now democratic, post-communist Russia. Within months, Yeltsin made a state visit to China's capital city, laying the initial groundwork for the eventual announcement in September 1994 that a "constructive partnership" had been established between Russia and China. Economic trade continued to surpass the \$6 billion mark annually into the mid- and late-1990s, with raw materials and energy products heading the list of Russian exports to China, and consumer goods topping China's exports to Russia (Goldstein, 2001, p. 850). In addition, Yeltsin's visit to Beijing concluded with a partial resolution of ongoing border problems; a 1992 agreement signed between Jiang Zemin and Yeltsin delimited roughly 4,200 kilometers along the eastern Sino-Russian border. This agreement was followed by increased sales of arms to China, with over \$2 billion in deals struck yearly between

1992 and 1994 (Menon, 2009, pp. 10-12). Within several more years, Russia would become China's largest supplier of munitions and military equipment.

By 1996, both Russia and China began to realize their common interests in challenging the Ameri-centric, unipolar world order, with the potential expansion of NATO and the strengthened U.S.-Japanese relationship as partial motivating drivers. As a result, their "constructive partnership" soon blossomed into something more, i.e., the "strategic cooperative partnership." Announced at the third Sino-Russian summit meeting in April 1996, the new relationship heralded a series of agreements signed between the two powers. One of these effectively settled almost all remaining border issues, leaving a mere 400 kilometers still in dispute (Ferdinand, 2007, p. 850). Another critical result of the thawing trend was the Shanghai Agreement, a security-oriented arrangement that included not only China and Russia, but also the Central Asian states of Tajikistan, Kazakhstan, and Kyrgyzstan. The "Shanghai Five" met throughout the late 1990s to deal with various security items, including extremism, separatism, and terrorism, issues about which Moscow and Beijing surely held a shared interest (Tang, 2000, p. 371). Ultimately, this organization developed into the Shanghai Cooperation Organization, adding Uzbekistan to the original membership, while broadening the agenda to include economic cooperation. A major unstated goal of the organization was to frustrate U.S. foreign and defense policy in Central Asia.

Strengthened Ties during the Putin Era

Sino-Russian relations continued to improve under Vladimir V. Putin's tenure. The two powers increasingly saw eye-to-eye on border and trade issues, as well as a number of other strategic concerns, e.g., human rights, treatment of ethnic minorities, as well as, perhaps most importantly, the U.S.'s role in the world.

In July 2001, Putin and Jiang Zemin signed the "Treaty of Good Neighbourly, Cooperative and Friendly Relations." The treaty established a variety of cultural and scientific exchanges, as well as opportunities for greater economic cooperation. The new treaty also included articles on security issues, among which were growing military-to-military weapons transfers, including a billion dollar contract to supply China with attack aircraft and a 15-year Military Cooperation Plan (Rangsimaporn, 2006, pp. 478-479). Since then, the two powers' militaries have increasingly held more frequent joint land and/or naval exercises, most recently in the Joint Sea 2017 maneuvers in the Baltic Sea (Bhadrakumar, 2017).

Outstanding border problems between the two countries were resolved in the "2004 Complementary Agreement," with the remaining disputes regarding three islands in the Amur River dealt with amicably. Russia transferred the Tarabarov Island and portions of two others to China, and in return Beijing dropped remaining claims over other Russian-administered territories along their shared border. Both countries' parliaments ratified the treaty and the official ceremony on transfer was later held in October 2008.

In terms of trade, the relationship continued to bear fruit. Bilateral trade increased more than tenfold since the high-water mark of the late Yeltsin era,

reaching \$88.8 billion in 2013. To be sure, much of Russia's exports to China continue to be centered upon primary products, e.g., oil products, timber, ferrous and non-ferrous metallurgy, etc. At the same time, arms exports remain a sizeable portion of overall trade. The trade volume is set to rise much higher, though, in the aftermath of historic gas export agreements inked between Putin and Xi Jinping in Beijing in May and November 2014. The May agreement guaranteed Russian annual deliveries of at least 38 billion cubic meters of natural gas to China, via the "eastern route," beginning in 2018 ("Russia-China to Sign," 2014). In reality, with China's desire to replace aging, polluting coal-burning plants with cleaner-burning, gas-powered generation in the near term, the size of Russian gas deliveries will undoubtedly exceed the contract specifications. And, according to President Putin's statement on the May 2014 agreement, the level of bilateral trade was to exceed \$100 billion in the year, with a doubling of that figure within five years (MacFarquhar & Herszenhorn, 2014.). The November agreement, signed during the Asia-Pacific Economic Cooperation (APEC) summit meeting in Beijing and adding an additional 30 billion cubic meters of Russian gas to China's markets by 2019, virtually guarantees that (Panin, 2014b).

A Confluence of Interests and a Marriage of Convenience ...

Besides improving prospects for trade and the resolution of border issues, what has spurred the very real warming as of late in the Sino-Russian relationship? To be sure, there are a variety of strategic reasons for the marked improvement, the Ukrainian crisis (and the sanctions regime) being only the most recent.

For one, both China and Russia are engaged in a battle with terrorist groups on their peripheries. Although Ramzan Kadyrov's oppressive dictatorship in Chechnya has kept Islamists in the tiny republic on their heels, the terrorist presence in the North Caucasus has by no means been extinguished, now and again creating opportunities for striking even within Russia proper. As well, China is confronted with its own Muslim separatist movement in Xinjiang, with numerous recent bloody incidents proving that the threat has not been managed very well by central authorities in Beijing. Indeed, one of the main rationales behind the formation of the Shanghai Cooperation Organization was to create a region-wide organization that could deal with international terrorism in the Eurasian region, writ large, in addition to Central Asia, as both countries also fear the influence of terrorist forces emanating from the five former Soviet republics in that realm.

The two countries have also been chafing at attempted (either alleged or perceived) U.S. "imperial" undertakings, particularly in the Middle East during the last decade. Russia sees its former client state regimes in Iraq, Libya, and Syria all having been affected adversely by U.S. foreign policy moves. Although Moscow was not wholly opposed to the U.S. invasion that overthrew Saddam Hussein in 2003, U.S. and European allies' actions in Libya (acting ostensibly under a UN humanitarian mandate) that ended in regime transformation caused the

Medvedev/Putin tandem to feel betrayed.¹ It can be argued that because of the Libyan action, the situation in Syria today is so bloody and a resolution so far removed. Similarly, “responsibility-to-protect-type” (R2P) proclamations from the U.S. administration worries China, which deems any U.S.-supported human rights actions as an unwelcome harbinger of potential outside interference in Beijing’s internal affairs.

Closer to home, both Moscow and Beijing fear U.S. actions undermine these regimes’ domestic stability, as well as generate a more threatening international security environment. Russia believes that various “color revolutions” in its “near abroad” over the last decade have been influenced, if not directly inspired, by successive U.S. administrations, including the latest provocation in Ukraine in November 2013-February 2014; their goal, according to the Kremlin, is to undermine Russia’s leverage over these former states of the Soviet Union, if not to challenge Putin’s right to rule in Russia, itself.² By the same token, attempts to expand NATO or the European Union eastward send similar alarm bells ringing in the towers of the Kremlin.

For its part, China views America’s “pivot to Asia”—along with concomitant pledges of security assistance to its East Asian allies and recent U.S. basing agreements with the governments of Australia and The Philippines—as measures that reduce China’s freedom of strategic maneuver and ultimately reduce its ability to become a regional hegemon. As well, China fears the ability of the U.S. Navy to cut off its avenues of consumer exports, but especially impair its ability to import fossil fuels, thereby threatening its all-important economic potential—a potential that keeps the Chinese government firmly ensconced in power. This fear has also encouraged a deepening in the Sino-Russian relationship, as China invests heavily in oil and gas imports from Russia, along with pipeline infrastructure that would not necessarily be imperiled by U.S. naval re-deployments in the region. Most recently, President Putin allowed China to join Vankor, a huge oil production field in Eastern Siberia (Chazan, 2014). It is for the same reason—access to new sources of fossil fuels—that China has signed deals with Russia to jointly explore for oil and gas deposits in the deep Arctic waters in Russia’s Kara Sea (Jakobson, 2013; Mitchell, 2013.).

As well, the two have recently entered into agreements to reduce U.S. (and Western) hegemony in the financial and trade arenas. At the sixth BRICS summit in July 2014, Russia and China, along with India, Brazil, and South Africa, signed agreements to create the BRICS Pool of Conventional Currency Reserves and the New Development Bank. Meant to counterbalance the International Monetary Fund (IMF) and the World Bank, the new financial structures will provide \$100 billion for initiating a joint response to financial challenges and provide \$50 billion in capital for priority long-term projects in the member countries, respectively

¹ Much the same could be said regarding Nato-led actions in Serbia that eventually created an independent Kosovo.

² For example, the Kremlin views the demonstrations following parliamentary elections in December 2011 as having been linked in some way to “foreign influences.”

(Alexandrova, 2014). Moreover, Xi and Putin announced the creation of a \$10 billion Russian-Chinese development fund at a recent meeting (“Russia and China,” 2017). In addition, China and Russia have set up ruble-yuan currency swaps on certain trade deals in an effort to bypass reliance on the U.S. dollar. (Indeed, China has inked numerous deals with other large trading partners, e.g., Brazil and India, which similarly push the greenback to the side.) Should China and Russia decide to drop dollar-denominated energy prices entirely in their relationship, this could undermine the U.S. dollar reserve currency status. The two are also attempting to slowly reduce the size of their U.S. denominated debt (Halligan, 2014). And, President Putin announced recently that Russia, alongside presumably China and other countries, is developing its own indigenous bank clearinghouse system, thereby replacing its reliance on the U.S.’s SWIFT clearinghouse system (“President Putin Pledges,” 2014). Besides these financial undertakings, Russia and China are also attempting to challenge U.S. control over transoceanic shipping and trade by constructing the Interoceanic Grand Canal through Nicaragua, creating an alternative to the U.S.-supported Panama Canal (Paniev, 2014.)

... Or, an Embryonic Alliance in the Making?

All of these events have caused some to wonder whether or not China and Russia are creating more than a mere “relationship of denial”—i.e., denying terrorists easy marks, denying challengers the opportunity to undermine authoritarianism in Eurasian states, and denying the United States its hegemonic position, worldwide. In other words, can the current marriage of convenience turn into an economic, military, and political alliance between Moscow and Beijing?

Those who would discount this possibility point to the existence of many fundamental differences that exist between the two great powers. Perhaps most disruptive to a closer Sino-Russian relationship are the many geo-strategic issues that confront it, from Central Asia to Northeast Asia, from relationships with regional rivals of China’s to a potential contest between the two over access to the Arctic, its resources, and perhaps its lucrative shipping lanes.

As for Central Asia, it looms large in both countries’ development plans. For historic reasons, of course, Russia has many political, economic, and security ties to the countries of Central Asia. Indeed, Kazakhstan, Kyrgyzstan, and Tadzhikistan are integral to President Putin’s plans to create a greater Eurasian Economic Union, an entity that can vie with the EU, NAFTA, or ASEAN in global trade, while preserving Russia’s influence in such circles, and anchoring the non-Russian states of the former Soviet Union to Moscow’s orbit.

However, immediately upon coming to power, Xi Jinping unveiled his “New Silk Road” (“One Road—One Belt”) policy—a strategy of massive Chinese investment in Central Asian countries’ transport and pipeline infrastructure, oil and gas field development, and consumer goods markets. To be sure, Xi’s move has much more to do with securing reliable supplies of fossil fuels—as currently much of China’s supply is vulnerable to the U.S. Navy—than it does replacing Russian influence in the region. China also wishes to stabilize its western borders and

develop its western regions in order to undermine support for domestic terrorism. Still, Xi's visits to the capitals of Central Asian states is said to have frustrated Moscow to no end, concerned as it is about a wholesale reorientation of this realm toward Beijing and East Asia.³

Northeast Asia is another theater of potential contest between the two Asian powers, in particular because the two share a lengthy border there. Although all outstanding border disputes had been officially settled in 2008, population dynamics along that border cause alarms to ring in some Kremlin quarters. Indeed, Russian lands east of Novosibirsk contain only 7 million citizens. However, over 100 million Chinese live within 100 miles of the Russian-Chinese border. And, the fact is that the regions of Eastern Siberia and the Far East are full of resources needed by the Chinese manufacturing sector, all at the same time some Chinese maps reportedly portray lands to the south of the Ussuri River as "unreclaimed" Chinese territory. Those who argue that this demographic issue acts as a check on an ever-improving relationship between China and Russia point to Prime Minister Medvedev's repeated calls to develop the Far East as a "national priority" as evidence of Russia's heightened apprehension ("Russian Government," 2017).

Each power is also paired with regional rivals of the other in South and Southeast Asia, thereby further frustrating growing ties between the two, it is suggested. To be sure, Russia's warm ties with Vietnam rankles the Chinese, particularly in view of the growing energy and defense agreements that have been signed between Moscow and Hanoi. In November 2013, Moscow agreed to a host of new energy and weapons projects, including those on manufacturing military technology within Vietnam and developing alongside Hanoi several gas fields in the disputed South China Sea ("Russia Strengthens," 2013). As well, although India and China are engaged in ongoing talks to repair their fraught relations, border conflicts between the two and Chinese naval deployments in the Indian Ocean will continue to constrain real progress in the relationship, whereas India's relationship with Russia is both enduring and multifaceted (Agrawal, 2014). To be sure, Moscow recently delivered to New Delhi its first aircraft carrier, with joint air force exercises completed in 2014. As well, Russia is negotiating with India for the purchase of Russian liquefied natural gas (LNG) exports.

Moreover, some argue that Russia's elites—who are well aware of the country's current and future global position and trajectory vis-à-vis China—do not wish to be considered as a junior partner or raw materials appendage of China's, even after the sanctions imposed by the West over Ukraine have resulted in a more circumscribed Russian future. Indeed, just as much as Mao disliked the notion of deferring to the wishes of Stalin (or indeed Khrushchev), Putin and his entourage, it is argued, wish to avoid the same vis-à-vis Xi Jinping. As well, having felt a definite "second class" status at the hands of the West since 1991, the Russian leadership would certainly not wish to replace the West with China in such an unequal relationship.

³ One outgrowth of Moscow's frustration has been its lobbying to gain India's entry into the Shanghai Cooperation Organization, which would act as a counter-weight to China's growing influence in Central Asia.

Among the many scholars who take a dim view of the prospects for genuine Sino-Russian rapprochement are those who argue that such economic tensions, great power pressures, and even an emerging status/power differential will keep the two regional players from developing a closer relationship. Darden (2016) believes that a closer relationship between the two is unlikely unless China eschews a deeper integration with the world economy, and creates a much closer economic relationship with Russia. Indeed, Duben (2015) concurs with this view, stating that, despite statements to the contrary, little progress has been made on a host of bilateral economic, financial, and infrastructural projects between Russia and China, while arguing that the warming relationship is overstated and problem-laden. Ostrovsky (2015) and Kortunov maintain, too, that the vaunted economic link is problematic, but place the reasons for this in either lack of interest by the Chinese or in the mutual lack of contacts and business ties between the two countries' business elites (Hille, 2016).

Others point to non-economic concerns as major reasons for the absence of a closer connection between Beijing and Moscow. Putz (2016) argues that China's economic, political, and military involvement in "Russia's backyard," i.e., Central Asia, will continue to frustrate closer political ties between the two. Similarly, Hartwell echoes this concern—both with respect to Central Asia (and elsewhere)—and claims that China's hubris vis-à-vis Russian influence in the region is a significant impediment to further comity (Hartwell, 2015).⁴ Gabuev concurs that a stronger relationship between the two countries is difficult to conceive of, with Russia having to concede to China in both the economic and political realms. In other words, the status/power differential grates on both the Russian elites and masses, as they realize that "Russia needs China more than China needs Russia. Russia has nowhere else to go" (Hille, 2016).

On the other hand, other scholars disagree, arguing as Nadege Rolland does, that the Russia-China partnership is genuine, developing, and—that as it strengthens—has the potential to manage both long-standing and emerging problems that both would concede do in fact exist (Putz, 2016). To be sure, Farchy (2015) maintains that it is not at all apparent that Russia's elite fears overt Chinese economic dominance in Central Asia and has ultimately accommodated itself to this eventuality, while reserving for Moscow definitive responsibility for Central Asia's military and security policy realms.⁵ Some go further, arguing that China's leaders willingly cede to Moscow's pre-eminence in this domain, while encouraging closer cooperation between Beijing and the members of the Collective Security Treaty Organization (CSTO) (Strokan & Mikheev, 2015; Vorobyov, 2017).

Others would argue the economic tensions that exist are subordinated to economic drivers that are beneficial to both sides. For example, Lukyanov (2015)

⁴ Hartwell states that "China may see itself having a partnership with Russia in the region, but it believes it—and not Russia—is the leader" (Hartwell, 2015).

⁵ Farchy argues that another limiting factor to Chinese economic dominance in Central Asia are fears of that very eventuality that are held by citizens in the five Muslim states of this region (Farchy, 2015).

believes the Kremlin views China's investments in the Silk Road projects of Central Asia and beyond ultimately serve Russia's long-term interests for economic self-development. Trenin, too, views China and Russia's shared interests and goals—both economic and geo-political—as mutually beneficial and supportive of a continued closer association. As well, Trenin discounts both the “hubris” and the “power/status differential” as impediments to the relationship, as he views the Moscow-Beijing partnership as “coordination without a central command” (Trenin, 2015).

Our own view lies closer to these optimists' assessments of a continuing, closer affiliation between the two powers. Indeed, as it relates to the Arctic interests of the two states—i.e., a major focus of this paper and a subject to which we shall now turn—it is apparent that the two powers' interests largely coincide. It is also our contention that besides the economic drivers behind the Sino-Russian collaboration in the Far North, U.S. and Western policy towards Russia since 2014 has unfortunately contributed to this developing Arctic collaboration.

Climate Change, the Arctic, and Russia's Far North

The United Nations' Intergovernmental Panel on Climate Change (IPCC) recently released its Fifth Assessment Report, entitled *Climate Change 2013: The Physical Science Basis*. Among the many findings outlined in the voluminous document, the IPCC establishes that climate warming is “unequivocal” and that the warming of ocean currents there accounts for “... more than 90% of the energy accumulated between 1971 and 2010” (*Working Group I*, 2013, p. SPM-4). The report also finds that Arctic Sea ice and snow cover in Northern Hemisphere areas continue to decrease in extent. More specifically, the report establishes that during the period of 1979-2012, the average loss of Arctic Sea ice very likely reached somewhere between 3.5% to 4.1% per decade (*Working Group I*, 2013, p. SPM-6). As well, the report concludes that the Arctic's sea ice may vanish within 30-40 years (Clark, 2013b).

A more recent estimate by Peter Wadhams, an applied mathematics and theoretical physics professor at the University of Cambridge, indicates that by 2020 the Arctic will essentially be free of ice in the high summer months, certainly enough to allow safe passage of container ships (Medred, 2014). Of course, should this occur, a host of environmental and economic problems will ensue, from dramatic increases in world ocean levels to the release of vast stores of methane deposits—a particularly virulent greenhouse gas—to loss of habitat for polar bears and other Arctic species. By one estimate, the total cost of a complete Arctic meltdown approaches \$60 trillion (Clark, 2013a).

To be sure, Russian Arctic waters—from the Barents Sea in the northwest to the Chukchi Sea in the northeast—have experienced considerable warming. Indeed, whole sections of Russia's coastal Northern regions are ice-free for significant periods of time throughout the year, whereas all of it has become virtually ice-free during the early summer-through-October period (Crooks & Chazan, 2012).

Moreover, climate change is also causing Russia's permafrost region—which totals some 69% of their territory overall—to melt, "... converting a large part of Russia into a swamp" (Vorontsova, 2013). According to the head of the Russian Emergency Situations Ministry Center for Predictions and Monitoring, by 2050 the Russian permafrost region will decline by over a third (Goble, 2013). Such an outcome will not only lead to the release of significant amounts of methane - perhaps 500 times as much methane gas is trapped beneath the Arctic Ocean as exists currently in the atmosphere (Medred, 2014) - but also create a transportation and infrastructure nightmare in Russia's permafrost areas, as over 5,000 kilometers of railroad track and perhaps as much as 40% of infrastructure are at severe risk of collapse (Goble, 2013). Such developments will put enormous stress upon an already cash-strapped and fossil fuel-dependent federal budget.

The Climate Change Windfall?

A major discovery in late 2013 by the Austrian oil company OMV in a largely unexplored section of the Barents Sea demonstrates the massive potential for the five littoral states to the Arctic Sea; OMV claims to have found as much as 160 million barrels of recoverable oil (and 10-40 billion cubic feet of natural gas) approximately 200 miles off the coast of northern Norway (Shotter, 2013). This find was followed by a joint ExxonMobil/Rosneft discovery in September 2014—this time in the Kara Sea—that holds upwards of 750 million barrels of oil (Kramer, 2014).

Indeed, according to the 2008 United States Geological Survey (USGS) study, the Arctic region could hold as much as 30% of the world's undiscovered natural gas and 13% of the world's undiscovered oil. Of these figures, approximately 240 billion barrels of oil and oil equivalents (e.g., natural gas and methane, mainly) have already been found, a figure that constitutes nearly as much as the total proven reserves of Saudi Arabia. Beyond this, it is estimated that another 400 billion barrels of oil lay "undiscovered" still in the Arctic region (Emmerson, 2010). For its part, Russia's federal geological agency claims the total figure of recoverable reserves—both discovered and undiscovered—is far higher than the USGS estimate. One estimate puts the overall energy reserves in the Arctic regions of Russia at more than 1.6 trillion tons (Zamyatina, 2014). Of course, at today's extremely low prices for oil and gas, a significant portion of these Arctic reserves are unrecoverable.

A cursory perusal of the USGS study's data on the likely areas for potential recoverable assets demonstrate that two of these areas lie immediately north of Russia, in the Barents Sea basin and the West Siberian basin (i.e., the Kara and Laptev Sea regions) of the Arctic Ocean (See Table 1 and Figure 1). By USGS and Russian estimates, therefore, the Arctic basins to the north of Russia constitute a huge potential for hydrocarbon extraction (Sale & Potapov, 2010).

Although Russia has exploited natural gas and oil reserves in its Arctic regions since the early 1970s, offshore areas that the aforementioned USGS study argues hold promising hydrocarbon reserves have historically gained little attention for a variety of reasons, owing mainly to the extreme environment. Due to warming

climates, however, this is changing, with Putin’s administration turning its focus resolutely toward exploring and developing these offshore Arctic reserves. Indeed, President Putin recently stated at the International Arctic Forum in Salekhard, Russia (capital city of the Yamal-Nenets Autonomous Region, Russia’s main gas producing region), that “... the time for an industrial breakthrough has come in the Arctic” (Kravtsova, 2013).

Table 1: Arctic Basins with High Probability of Significant Fossil Fuel Deposits

Petroleum Basin	Natural Gas (trillion cubic ft)	Natural Gas Liquids ⁶ (billion barrels)	Crude Oil (billion barrels)	Total (oil equivalent in billions of barrels)
Yenisey-Khatang basin	99.96	2.68	5.58	24.92
West Siberian basin	651.50	20.33	3.66	132.57
East Barents basin	317.56	1.42	7.41	61.76
East Greenland Rift basin	86.18	8.12	8.90	31.39
West Greenland-East Canada basin	51.82	1.15	7.27	17.06
Amerasia basin	56.89	0.54	9.72	19.75
Arctic Alaska basin	221.40	5.90	29.96	72.77

Source: Circum-Arctic Resource Appraisal: Estimates of Undiscovered Oil and Gas North of the Arctic Circle. Kenneth J. Bird, et al., United States Geological Survey, Fact Sheet 2008/3049, July 2008.

Oil + Gas = National Security

To be sure, the leadership of today’s Russia continues to view oil and gas exports as critical for the country’s future. Putin’s doctoral thesis of 1999 foreshadowed his attempt as president in 2000-2008 to gain control of privatized oil companies for the benefit of the Russian state, and its budget. As a result, a host of private oil companies—from Roman Abramovich’s Sibneft to Mikhail Khodorkovsky’s YUKOS—were bought or otherwise obtained by the Russian government during this period. It appears that Putin’s entourage has decided recently to accumulate even more private oil for state coffers; in September 2014 a Moscow court seized billionaire Vladimir Yevtushenkov’s shares in Bashneft’, a large Russian oil

⁶ Natural gas liquids include fuels and chemicals that are separated out from either natural gas or crude oil and include ethane, butane, propane, isobutene, and natural gasoline. They may also be used as feedstocks to make a variety of chemicals and plastics (Friedman & Puko, 2014).

company active in Bashkortostan (Weaver, 2014). By the end of 2008, fully 40-50% of Russia's budget was accounted for through either taxation of fossil fuels production or from oil and natural gas exports.

Although attempts were made under Dmitrii Medvedev's presidency to diversify Russia's economy, it appears that Putin—now in his third term as president—jettisoned serious consideration of diversification and has returned to a fuller appreciation of the role of oil and gas production for Russia's future. And, with declining oil and gas production in many of the country's aging fields, Russia is naturally looking to the offshore regions of the Arctic to avoid a production crisis, even in the current era of extremely low oil/gas prices.



Figure 1. Arctic Oil and Natural Gas Basin Map. Source: Geology.com and MapResources.

Such a production crisis would seriously undermine the country's budget, the Russian economy, the country's national security, and, ultimately, its leaders' grip on power. As such, the Russian government has placed the Arctic near the center of its national security priorities to 2020. In addition, Russia is pressing its claims for undersea resources that lie beyond its 200-mile exclusive economic zone, and are allegedly extensions of its continental shelf. As well, the government had been

attempting for some years to lure Western oil majors' interest in developing offshore oil and gas fields.

And, Western oil majors—ExxonMobil, BP, Royal Dutch Shell, Italy's Eni, France's Total, and Norway's Statoil—were taking notice, as “state-directed resource nationalism” has reduced their range of investment and exploration opportunities in Venezuela, Brazil, and many states in the Middle East. For example, Shell returned to Russia in full force, after having been outmaneuvered by Russia in 2006, when it lost control over its Sakhalin-2 oil and gas development project in Russia's Far East. Despite that loss in shareholder value, in April 2013 Shell's Chairman inked a joint exploration and development deal with Russia's Gazprom that would allow Shell a 33.3% stake in the development of the Severo-Vrangelievsky (North Wrangel) field in the Chukchi Sea and the Severo-Zapadny (North-West) field in the Pechora Sea (ITAR-TASS, 2013). Additionally, ExxonMobil signed an earlier deal with Russia's largest oil company, Rosneft, to explore 150 million acres in offshore regions of the Kara Sea (Koranyi, 2013b; Crooks & Chazan, 2012). And, in early 2013, even China's National Petroleum Corporation (CNPC) got into the act, partnering with Rosneft to explore three offshore Arctic areas (in the Pechora and Barents Seas); this signaled the first Arctic offshore oil/gas deal that Russia has signed with an Asian company (Katakey & Kennedy, 2013). And, although offshore natural gas development projects have gained less interest recently by both the Russian government and Western oil companies, drilling for oil in the offshore Arctic continued to be of high interest to all parties, at least until the United States and the European Union imposed targeted sanctions against Russia's energy sector in summer 2014.

As stated previously, many Western oil majors view the offshore Arctic as a potential boon in terms of future bookable reserves, despite the formidable development barriers that exist. Moreover, unlike development of natural gas wells in the Arctic offshore, there are reportedly plenty of oil projects in that region that will breakeven even if oil prices continue to remain well under \$80 per barrel (Crooks & Chazan, 2012). Additionally, Western oil companies with an interest in other, perhaps more lucrative *onshore* projects in Russia also felt pressure to invest in what the Russian government perceives as a prestige project—opening up the Far North to greater exploration and resource exploitation—in exchange for these same Western oil companies having the chance to gain a stake in less challenging oil and gas projects within Russia's onshore regions, for example, on the Yamal peninsula or in the Bazhenov fields.

For its part, Russia needs Western oil majors, both for their capital resources and their technology and expertise. Although President Putin has cited plans to spend as much as \$500 billion on Arctic exploration over the next 30 years, Western oil companies ponied up tens of billions of dollars in recent times to jointly explore for oil alongside Rosneft in the Kara, Laptev, and Chukchi Seas (Amos, 2014; Emmerson, 2012; Kramer, 2014). Joint exploration with Western oil majors also made it easier for Russia to obtain loans from international banks. And, since exploring and drilling in the Arctic is particularly expensive, additional non-Russian financing of such activities is always welcome. As well, the Russian government—

prior to the sanctions regime—lured Western oil companies with tax concessions and other incentives in order to gain expertise in working in Arctic and offshore environments and for Western oil companies advanced technologies for finding and accessing such resources (Hamilton, 2012; Panin, 2014). Now, due to the sanctions regime, much of these technologies and hardware is off limits to Russian energy companies.

It is important to note, however, that even if sanctions are removed and such joint development projects proceed in the near future, Russian capital and Western technology and expertise will still meet significant constraints in developing these offshore oil reserves. For one, with a time horizon of 20-30 years, it's difficult to gauge the profitability of capital projects, as well as the price of oil upon which they must be based, that far out. Additionally, open sea conditions in the Arctic at this point will allow for only a short summer installation (July-October) season that frustrates attempts to make progress on such projects very quickly. Moreover, iceberg activity in the regions under exploration mandate that companies build extremely strong oil drilling platforms, each able to withstand in excess of six million tons of impact; as well, pipelines need to be buried very deep to avoid subterranean contact from the largest of these icebergs. Furthermore, at \$120 million per ship, available icebreaking vessels are in short supply; as well, the daily cost to operate a vessel today is more than \$50,000. Lastly, of the four prime areas in the Arctic—that together allegedly hold 75% of the oil reserves there—these areas are also the most challenging because of ubiquitous ice floes (Hamilton, 2012).

The Suez Alternative?

“I want to stress the importance of the Northern Sea Route as an international transport artery that will rival traditional trade lanes in service fees, security, and quality.” – Vladimir Putin (Byers, 2013)

Climate change in the globe's northernmost latitudes may also produce another favorable consequence for the Russian Federation: an ice-free shipping route that holds significant potential for transoceanic shipping, rivaling other major routes and perhaps gaining Russia considerable transport revenues. Thus, the possibility of ice-free cargo shipping for a considerable portion of the year across the Northern Sea Route (NSR)⁷ may provide competition to shipping alternatives, be they rounding the Cape of Good Hope or transit through the Suez Canal.

⁷ According to a July 2012 law passed by the Russian lower house, the NSR is defined as “The aquatic space adjacent to the northern coast of the Russian Federation, covering internal waters, territorial sea, the contiguous zone and the exclusive economic zone of the Russian Federation and bound by division lines across maritime areas with the United States and the parallel Cape Dezhnev in the Bering Strait, west meridian of the Cape of Desire to the Novaya Zemlya archipelago, eastern coastline of the Novaya Zemlya archipelago, and the western boundaries of the Matochkin, Kara, and Yugorsky Straits” (Bennett, 2013).

Arctic sea ice achieved its lowest record ever in 2012, allowing travel that year along the NSR for more than half of the year. Indeed, the U.S. National Snow and Ice Data Center reported that Arctic ice covers only approximately 2,200 square kilometers, about half of the total area covered by ice in 1979 (Bering Strait, 2013). And, it is predicted that within a decade the ice-free season could extend for a full eight months annually (Koranyi, 2013a).

The year 2009 marked the first commercial crossing of the fabled Northeast Passage, an earlier and alternate name for the NSR. In 2012, almost four dozen ships sailed from Norway to the Bering Strait. In 2013, 71 ships, including the first ice-class tanker, carried 1.35 million tons of cargo through the NSR; to be sure, the *Stena Polaris*, owned by a Swedish transportation company, traversed the NSR with 40,000 tons of naphtha months ago and successfully delivered its cargo to a South Korean terminal (Dawson, 2014; Ice-class Tanker, 2013; Kramer, 2013). In another first, the *Yong Sheng*, a Chinese container ship, traveled from the Bering Strait to its destination in the Netherlands in September 2013 (Bering Strait, 2013). According to one study, trans-NSR shipping is set to grow by more than 30 times to 2020 (Koranyi, 2013a).⁸ Another, attributed to the South Korean Maritime Institute, estimates that the NSR may account for more than a quarter of Asia-Europe transport by 2030 (Milne, 2013b).

Why might shippers prefer the NSR, despite the need for Russian icebreakers to accompany vessels during even some of the warmer months? For one, the route between East Asia and Europe is much shorter than traversing the Suez Canal, by as much as 40%; delivering cargo from East Asia to Europe via the Suez Canal can take as long as 40 days, whereas the NSR is 7,000 kilometers shorter and requires only 25 days (Ice-class Tanker, 2013). Thus, a shorter distance saves a considerable amount of time that theoretically lowers shipping costs. Additionally, ships utilizing the NSR avoid pirate-infested waters in the Red Sea, the Indian Ocean, and the Straits of Malacca.⁹ Moreover, using the route circumvents the unpredictable impulses of an unstable Egyptian government, as well as the volatile Middle Eastern region, in general. As a result, both European and Asian states are beginning to note their interest in the route; among the most interested of these states are China, South Korea, and Singapore. Even tiny Iceland is getting into the act, having decided to build an Arctic port at the extreme northeast of the country, in Finna Fjord (Milne, 2013).

In response, the Russian government stepped up plans to invest in port infrastructure, railway construction, and its aging nuclear icebreaker fleet. Indeed, the Russian government and legislature passed appropriations bills worth billions of dollars to repair existing and/or build new deep water ports along the NSR, as

⁸ This is projected, despite recent stiff declines in trans-NSR shipments in 2014 and 2015. Reportedly, the uncertain opening of the NSR in 2014 was in part responsible for fewer inter-continental transits; as well, the slowing Chinese economy is another reason.

⁹ China reportedly relies on the Strait of Malacca for delivery of upwards of 80% of its oil needs; the NSR is considered so important for the future of China's development that it is referred to as the "Arctic Golden Waterway" in China (Byers, 2013).

well as plan for an impressive Arctic railway—the Belkomur Railway—which will run between Arkhangelsk to Perm (Bennett, 2013). Presently, Russia’s icebreaker fleet counts among it six nuclear-powered vessels, but most of these are obsolete and will have to be replaced in a few years. Long lead times for launching new nuclear-powered icebreaking vessels—as much as six to seven years—means that the world’s largest icebreaker fleet will be constrained for some time thereafter in terms of maintaining open seas above Russia’s northern regions in colder months (Goble, 2013). Still, the government is investing in bringing new icebreaking vessels on line in the shortest possible timeframe; a next generation icebreaker is set to be built by the end of 2017 (Alexeev, 2013).

Still, there are significant problems connected with the NSR. As noted previously, a larger icebreaker fleet is required if a substantial upturn in cargo traffic is to ply the NSR. Beyond the other infrastructure constraints mentioned above, there is also a definite lack of search and rescue facilities in the region that can support needed rescue attempts for ships in trouble. And, since warming seas means more icebergs the need for such facilities is not theoretical. Indeed, the head of Denmark’s shipping conglomerate, AP Moller-Maersk, claims that the continuing need for icebreakers, as well as the significant number of icebergs along the route, make traversing the NSR an expensive option, an option that will only become commercially viable in 20 years or more (Milne, 2013).¹⁰

Moreover, the lack of reliable year-round scheduling of transit through the NSR also acts to reduce the route’s importance by international shipping companies, especially those carrying goods from China westward to Europe. Since the vast majority of Chinese products destined for Europe are of a containerized nature, the seasonality of the NSR and, therefore, its unreliability and unpredictability as a shipping route, will limit its use as an East-West conduit for Chinese consumer products. Furthermore, due to their extremely high time-charter costs per day, certain vessels—for example, seismic and LNG ships—would find prohibitively expensive any delay in transit through the NSR (Keil & Raspotnik, 2013).

At the same time, however, the ruling Russian elite considers the NSR to be of significant economic value in the near- to medium-term, as evidenced by the quote from President Putin at the beginning of this section. The Putin administration has recently demonstrated its view that the NSR is a strategic asset as well, having made plans recently to inaugurate regular naval patrols along the northern route; in late 2013 the Minister of Defense revealed the policy shift after sending the Russian Northern Fleet’s flagship vessel, the “Pyotr Velikiy” (“Peter the Great”), through much of the NSR. The stated reasons for the patrols include helping to stop the flow of unwanted drugs and migrants into the northernmost reaches of Russia, while also extending Russia’s sovereign claims to sparsely traveled coastal waters in its far

¹⁰ Additional expenses that must be factored in include extremely high insurance rates for shipping, as well as the environmental cost associated with an oil tanker being holed by an iceberg. According to Michael Frodl, an advisor to insurers from the consultancy, C-Level Maritime Risks, “It’s still simply too risky a proposition for standard commercial insurers And the risks haven’t been figured out enough to price insurance correctly” (Saul, 2013).

north; it will also allow the country to exert sovereign claim to seabed resources in areas adjacent to its continental shelf.¹¹ Thus, the result is an increasing militarization of the Arctic region.

Russia's Arctic Strategy to 2020

Before discussing China's Arctic interests, this article will briefly analyze Russia's Arctic strategy. In support of Russia's claims on Arctic resources and transport corridors the Putin administration published the second iteration of an acknowledged Arctic strategy. Entitled "The Strategy for the Development of the Arctic Zone of the Russian Federation and National Security up to 2020," the document mainly sets forth a conceptual foundation for the development of the Arctic Zone of the Russian Federation (AZRF). As such, the document mostly discusses purely domestic concerns, e.g., investment in critical infrastructure in the region, protection of indigenous communities and their cultures in the AZRF, sustainable development in pristine Arctic environments, etc. (The Development Strategy, 2013). The strategy also discusses in detail possibilities for greater foreign scientific and geological cooperation in the region. Increased international cooperation in the areas of search and rescue, resource extraction, and environmental protection are all discussed.

At the same time, however, portions of the new strategy raise certain questions or concerns. For example, Russia's stated desire to develop numerous floating nuclear power stations is underscored in the document, apparently without regard to neighboring countries growing apprehension concerning nuclear power generation. Included as well are statements regarding Russia's intent to legally define Moscow's claims in the region, while making somewhat veiled attempts to support these claims with the "... provision of military security, protection, and protection of the state border of the Russian Federation in the Arctic" (The Development Strategy, 2013).

Within a week of the adoption of the new Arctic strategy, President Putin addressed a gathering of Defense Ministry officials. His remarks there included "the militarization of the Arctic" as a new Russian security concern of the same order as perennial Russian concerns like a further eastward expansion of NATO or the continued deployment of a global missile defense system (Rasshirennoe, 2013).¹² To be sure, Russia's ruling elite deplores further NATO activities in the old northern

¹¹ For example, these may include the Mendeleev and Lomonosov ridges, two seabed formations that, if recognized as part of the Russian shelf, would extend Russia's claims to fossil fuel, additional non-hydrocarbon resources, and perhaps transport routes well into the Arctic Ocean.

¹² Putin's exact words at the Defense Ministry Collegium were the following: "Одновременно предпринимаются методичные попытки тем или иным образом расшатать стратегический баланс. Фактически запущен второй этап создания глобальной системы ПРО Соединённых Штатов Америки, зондируются возможности для дальнейшего расширения НАТО на Восток, существует и опасность милитаризации Арктики" (Rasshirennoe, 2013).

flank of the Cold War, as well as a new arms race in the globe's extreme north; however, according to one Russian defense analyst, it is the Russians who have made significant attempts to modernize their military facilities in the Arctic Circle region (Baev, 2013).

Of course, Russia's neighbors have long been worried about decaying nuclear-powered submarines in the High North, as well as aging nuclear warheads in the Kola Peninsula. However, recent moves by Russia's leaders are perhaps raising eyebrows among the Arctic Eight powers, as well as other states with an emerging Arctic presence of their own. For example, in September 2013 Russia reopened a military base in the New Siberian Islands that had been shuttered at the beginning of the 1990s. Commenting upon the re-christening of the Cold War-era base, President Putin declared that the facility was being re-opened as these islands have become an "... important point in the Arctic Ocean, a new stage in the development of the Northern Sea Route" (Russia Reopens..., 2013). Upon its re-opening Russia also conducted major naval exercises around the archipelago, while Defense Minister Sergei Shoigu proclaimed, "We arrived there, or, more accurately, we have returned there forever" (Russia Reopens, 2013).¹³

Moreover, Russia's Northern Fleet, tasked with protecting its Northern territories, will receive an additional 40 ships and logistics vessels by 2020, which include a destroyer, large landing vessels, and six multi-purpose nuclear and conventional submarines, among other vessels (Padrtova, 2014). Russia is also beefing up its coast guard along its northern frontier, and has taken a decision to form two Arctic motorized infantry brigades—totaling nearly 10,000 troops—to protect its sovereign claims in the Arctic (Pugliese, 2012). Furthermore, the Russian military deployed air defense forces and MiG-31 high altitude interceptors on the Novaya Zemlya archipelago, the main island of which served previously as a testing site for Soviet nuclear explosive devices (Russia Building, 2013).

An additional airbase in the Franz Josef Land archipelago is also being rebuilt. Airfields at Naryan-Mar, Alykel, Vorkuta, Tiksi, Anadyr, and Rogachevo are all scheduled for renovation and modernization. According to Lt. General Mikhail Mizintsev, head of the new National Defense Control Center, Russia's near-term Arctic plans involve "... the building of 13 airfields, one land test range for the Air Forces, 10 radar sites and direction centers" (Russian Army, 2014).

To be sure, such developments have served to put some Western military analysts on edge, particularly when they are accompanied by alarming statements from high-ranking Russian government officials. As Deputy Prime Minister Dmitry Rogozin stated in mid-2013, "Active development of the Arctic shelf will unavoidably lead to a conflict of interest between states aspiring for resources. It is possible this conflict will exceed the diplomatic limits" (Rogozin: Active Development..., 2013). Even more precarious, the former Russian representative to NATO uttered, "It is also quite possible that Russian oil and gas production

¹³ In late 2012, Deputy Prime Minister Dmitry Rogozin stated that Russia risked its sovereign claims to the Arctic—its resources, transport corridors, etc.—by the mid-21st century, unless it asserted its national interests there (Russia Reopens, 2013).

facilities may become targets of secret acts of sabotage by rival countries” (Rogozin: Active Development, 2013).

Still, perhaps many Russian government elites, specialists, and political pundits would rather aver that recent Western actions in the Arctic are the cause of Russian rearmament program in the region. As Tatiana Zamyatina (2014), a scholar at the noted Institute of U.S. and Canada Studies, recently remarked,

As for the security of Russia’s Arctic shelf is concerned, the region has been largely unprotected in military terms: there were no tracking systems, radars, ground troops or naval forces. In the meantime, pretty close to it is the U.S. bastion in Alaska, with its intelligence means, missile defense systems and naval forces. Apart from that, the Scandinavian countries have created their own military bloc inside NATO to protect their interests in the near-Arctic zone. Anti-Russian exercises have been held regularly there. Therefore the measures being taken to enhance the security of Russia’s Arctic shelf are Russia’s proportionate response to Western challenges (n.p.).

Sanctions and Russia’s Arctic Ambitions

As a result of Russia’s annexation of Crimea and support for separatists in eastern Ukraine, a series of sanctions were placed on Russian energy companies and banks by Western governments during the summer and fall of 2014. The sanctions’ intent was to punish Russia by robbing its fossil fuel-dependent treasury of revenues from future oil exports; by making it harder for government-controlled oil companies—chiefly among these being Rosneft—to gain access to both Western bond markets and to advanced technologies and expertise associated with oilfield exploration, development, and recovery, particularly in hard-to-reach offshore deposits, the European Union, United States, Canada, and Norway hoped to discourage Russia from continued support of eastern Ukrainian separatism and efforts to undermine the fledgling, pro-Western government in Kiev.

In response, Russia isn’t sitting idly by. For one, it is attempting to “Russify” offshore oil production—that is, developing an import substitution approach—to cultivate a domestic alternative to Western specialization in this area. For example, the government has established a “hierarchy of procurement placing domestic and Asian companies first, U.S. companies last,” according to Alexis Rodzianko, the head of the American Chamber of Commerce in Russia (Kramer, 2014). Secondly, Russian companies have purchased stakes in Western oil exploration and servicing companies, in order to gain the technology and expertise from the inside.

Importantly to this analysis, the Russian government entered negotiations with the Chinese to sail drilling rigs from the South China Sea to Russia’s offshore basins (Kramer, 2014). China may also provide Russia advanced technologies that Beijing “refines” as a result of its own ties with Western oil companies. And, it is certain that China’s state-owned banks will provide loans to Russia’s cash-strapped oil producers. Indeed, Rosneft itself, as well as the Russian banks VTB, VEB, and the

Russian Agriculture Bank all signed agreements recently with China ExIm bank to open lines of credit (Soldatkin, 2014).

Thus, the sanctions regime has had several unintended effects, while not succeeding in deterring Russia in supporting the rebels in eastern Ukraine. To be sure, Russia's activities in the Arctic have been more limited recently than expected, but this is surely more a result of lower hydrocarbon prices and a slowing Chinese economy than the sanctions effectiveness. Perhaps the main effect of sanctions has been to push Russia further into the arms of the Chinese—particularly in the Arctic arena as the next section will detail—thereby ultimately undermining both Western oil/gas majors' positions in the Far North and U.S. foreign policy aims, more generally.

China's Arctic Interests: Origins

Not being an Arctic littoral state, China's involvement in the Arctic region is more recent than Russia's or that of other Arctic states. China's first polar interest appeared in 1984, the year it launched research expeditions to Antarctica, later founding three research stations on the icy continent. Its first scientific sojourn to the Arctic came more than a decade later, in 1995; the next year, China began an affiliation with the International Scientific Committee on North Pole Research, an organization that includes as members all five Arctic littoral states and three additional Arctic states (The Development of China's, 2007). Three years later, the first state-led Chinese effort to scientifically explore the Arctic took place aboard the Ukrainian-built icebreaker, later renamed "Xue Long" ("Snow Dragon") (Manthorpe, 2011); the three-month expedition included 124 members of China's scientific community, traveling over 14,000 nautical miles through Arctic seas (Backgrounder: Chronology, 2008).

In 2003, Beijing sponsored a second scientific expedition to the Arctic; a year later, China established its first (and only) scientific research station—the Yellow River ("Huanghe") station—on the Spitsbergen archipelago.¹⁴ China concluded three additional Arctic expeditions in the ensuing years, in 2008, 2010, and 2012; during all of these expeditions, primary scientific emphasis focused on marine biology, climate change, and hydrographic and hydrologic research, with increasing involvement of foreign researchers.

Since then, Beijing has quietly, but steadily, developed a growing interest in the region, particularly since scientific reports began predicting a greater likelihood of a substantially ice-free Arctic by the end of the current decade. In June 2013, for example, China announced the establishment of the China-Nordic Arctic Research Center (CNARC) in Shanghai; its purpose is to support scholarly exchanges between China and other littoral states, climate change research, and cooperation

¹⁴ Though sovereign control over Spitsbergen lies with the Kingdom of Norway, as a signatory to the Svalbaard (Spitsbergen) Treaty since 1925, China is allowed unfettered access to those islands lying north of the Arctic Circle.

for sustainable development of the Arctic region (Zhenghua, 2013).¹⁵ This development came shortly after China's bid to become a permanent observer of the Arctic Council (AC), an intergovernmental body that seeks a common understanding on economic, environmental, and social issues affecting the area, was accepted by the eight members of the organization in May.¹⁶

In July 2014, 128 scientists took part in China's sixth Arctic expedition, one that placed eight short-term research stations on the Arctic ice (Wang, 2014). The next year, China revealed plans to build an observatory in Canada's Northwest Territories; the Canadian High Arctic Research Station (CHARS), will support polar science and related technologies (Wang Ru, 2014). 2015 also saw Beijing send three separate research expeditions to the Arctic and near-Arctic regions (China's Participation, 2015). More recently, China's State Oceanic Administration announced plans for its seventh Arctic research expedition; this time their Arctic scientific sojourn was jointly planned and conducted with significant Russian participation (Pettersen, 2016b).

China's Arctic Interests: Cooperation with Nordic States

By joining the AC in 2013, China demonstrated its desire for a much closer Arctic relationship with its Nordic partners in Europe. To be sure, China's interests in the Arctic are not only limited to scientific research, climate change, and sustainability issues, but also include interests in resource development and new shipping routes through the NSR. Recently, China has negotiated a number of agreements with its Nordic partners and some of these will be examined before turning attention to China's growing relationship with Russia in the Arctic region.

Denmark was perhaps the earliest Nordic state to support China's bid to join the AC. As early as 2011, the Danish ambassador to China suggested that Beijing has "... natural and legitimate economic and scientific interests in the Arctic," including especially China's interests in mining, fishing, and sea route development near or on Greenland (Denmark Welcomes, 2011). For its part, Greenland's parliament facilitated foreign investment in uranium and rare earth minerals mining easier by lifting bans on these activities (Greenlandic Minister, 2013). In 2014, Erik

¹⁵ Based at Shanghai's Polar Research Institute, the CNARC opened in December 2013 and coordinates its research activities with 10 research institutes from China, Iceland, Denmark, Norway, Finland, and Sweden. Besides research on sustainability and climate change, the CNARC explores issues related to Arctic shipping, resource exploitation, economic cooperation, and policy/legislative issues (China-Nordic Arctic Research, 2013).

¹⁶ Besides China, India, South Korea, Japan, Italy, and Singapore also became permanent observers at the AC. Although not a full voting member of the body, becoming a permanent observer allows China to speak and offer testimony at AC meetings, as well as to take part in agenda-setting activities (Xinhua Insight, 2013). As Tang Guoqiang, former Chinese ambassador to Norway, stated the granting of permanent observer status allows China to "...strengthen its cooperation with countries surrounding the Arctic in scientific research, the opening of new shipping routes, and resource exploration," all important areas of Chinese interest (Xinhua Insight, 2013).

Lorenzen, the Danish Arctic ambassador also re-iterated Denmark's welcoming attitude toward greater Chinese investment in such endeavors (Bigger Chinese, 2014). Within a year of Lorenzen's statement, China's General Nice Group negotiated a \$2 billion plan to take over a large iron ore mine in Greenland, the first project of its kind by an Asian country in the Arctic (Du, 2015).

Another first had come two years earlier, when Iceland became the first European country to sign a free trade deal with China in April 2013 (Xinhua Insight, 2013). Within months of the landmark treaty, the Icelandic prime minister stated that Iceland "... seeks opportunities to work closer with China when it comes to doing research and even doing business in the Arctic" (Interview: Iceland, 2014). Iceland followed up by allowing China's China National Offshore Oil Company (CNOOC) to operate oil and gas exploration projects off its northeast coast, the first time Chinese exploration in the Arctic was undertaken (Du, 2015); as a result of the deal CNOOC Iceland, a subsidiary of CNOOC, will hold a 60% share in the offshore projects. Though Norwegian-Chinese relations had been cool since Norway awarded the 2010 Nobel Peace Prize to the Chinese dissident, Liu Xiaobo, China apparently warmed to involving Norway's Statoil in plans to exploit the Icelandic lease (Fouche, 2013).¹⁷

Although China's involvement in the Nordic Arctic is still in its early stages, it seeks opportunities to play a constructive role in this region, according to Jia Guide, Deputy Director General of the Department of Treaty and Law in the Chinese Foreign Ministry. Cooperation at the Arctic Council with its Nordic partners has expanded beyond scientific research and cultural arenas to include resource development and shipping (China Seeks, 2014). Indeed, speaking to the third Arctic Circle Assembly in late 2015, China's Vice Foreign Minister Zhang Ming exclaimed Beijing's intent to be a "major stakeholder in the Arctic" (China's Participation, 2015).

China's Arctic Interests: Cooperation with Russia

Due to the sanctions imposed upon Russia by Western governments, Moscow in recent years has hurriedly negotiated a host of offshore extraction agreements and infrastructure projects with companies from China, a country that now declares itself a "near Arctic state" (Higgins, 2014). Yet, these agreements were not the first demonstrating a higher level of association between Russia and China in the Arctic.

Back in late 2009 Moscow and Beijing struck a joint investment agreement for the construction of a huge shipyard in the Russian Far East to produce offshore oil and gas rigs for the Yamal and Shtokman (now shuttered) gasfields (New Mega-

¹⁷ For its part, China views the Free Trade Agreement (FTA) signed with Iceland as a model for future opportunities between China and other European countries. In the meantime, the Iceland FTA allows the tariff-free export of Chinese products to other EU countries. It also encourages additional Chinese investments for developing production facilities in Iceland, as well as for those in upgrading Iceland's transport infrastructure, as China views Iceland as a key Arctic trans-shipment hub (FTA Offers, 2014).

Shipyard, 2009). China reportedly also joined Russia in 2010 in constructing a satellite project (“Arktika”) to monitor developments in the Arctic region. Several months later the two inked a long-term arrangement concerning the transit of oil and gas through the Arctic (Manthorpe, 2011).

For their part, Chinese oil companies have little experience operating in harsh, Arctic-like climates, but their excellent financial position—and the absence of sanctions against Western investment—provides them a unique ability to team up with Western oil majors that do have such knowledge, and thereafter invest in key technologies needed for offshore oil/gas exploration under Arctic conditions.

Thus, on his first trip abroad as President, Xi Jinping visited Moscow, signing a number of agreements, including one that created a cooperative association between Rosneft and CNPC, the first Arctic oil or gas deal signed with an Asian country (Zhou, 2013). As part of the deal, Rosneft and CNPC will explore three fields in the Barents and Pechora Seas. Later the same year, PetroChina gained a 20% stake in the giant \$27 billion Yamal LNG project.¹⁸

Two developments, however, spurred heightened Chinese interest in the Arctic in 2014. The first has been mentioned before, i.e., Western sanctions against the Russian oil and gas industry. The second was the 2014 annual strategic assessment issued by the Chinese military in which it was noted that “the Arctic region has rich oil and gas resources and quick and convenient shipping conditions, which has important meaning for ensuring the sustained development of China’s economy” (Chinese Army, 2014).

Within months, China’s CNOOC signed a major exploration and development deal with Russia’s Rosneft to explore waters deep into Russia’s Kara Sea. As well, CNOOC signed another agreement, this time to build equipment for the liquefaction process on Novatek’s Yamal LNG project (China Signs, 2014). PetroChina, whose parent company is CNPC, also stated their interest in further oil/gas extraction projects with other oil/gas companies in the Arctic (China’s Energy Giant, 2015). It’s believed that the company is interested in oil exploration in the Dolginsky field in the Pechora Sea; the tract is licensed to Gazprom Neft’, whose general director, Aleksandr Dyukov, noted, “We continue to look for a partner. We need a financing partner, who will share the risk with us. More than likely, this will be an Asian company that will partner with us” (Gazprom Neft’ Opredeletitsia, 2014). Furthermore, Russia also declared their interest in China’s participation in LNG projects in the Gydan peninsula; Novatek’s Arctic LNG-1, Arctic LNG-2, and Arctic LNG-3 projects were announced in late 2014, with an estimated construction start date of 2018 (The Arctic Dimension, 2014).

Then, in early 2015, Arkadiy Dvorkovich, Vice-Chairman of the Russian government, announced that the government would allow Chinese investors to hold a majority stake in strategic oil and gas fields. Existing restrictions require foreign

¹⁸ The French oil company, Total, also has a 20% stake in the LNG project, with the remaining 50.1% share held by Novatek, Russia’s largest privately held gas company. (The Chinese Development Bank obtained an additional 9.9% share in the Yamal project in 2015; this gives China ownership of almost one-third of the total project.)

investors to hold minority shares in oilfields that might produce more than seventy million tons of oil or in gasfields that may yield more than fifty billion cubic meters of gas. However, Dvorkovich stated then that "... if there is a request for control, we will consider it" from our Chinese partners (Russia May Accept, 2015).¹⁹

Moreover, China reportedly has made significant investment stakes in two additional Arctic endeavors, the Belkomur railway, linking the Urals to the White Sea via the hydrocarbon-rich, northern Komi Republic, and Arkhangelsk port facilities, which would serve as the final transit stop along the Belkomur (Thompson & Ohanyan, 2017).

In other developments, Sovcomflot, Russia's largest shipping company, maintained that only one of its LNG carriers will serve the Yamal LNG project; the rest of the project's LNG carriers will be owned and operated by Chinese concerns (Staalesen, 2015b).²⁰ Another area in which China was given a key role in the development of the Arctic shelf was a late 2015 agreement in which China would produce much of the technology needed for offshore oil and gas development projects in Russia. Since Western sanctions have affected Russia's ability to acquire more than 65% of the equipment needed for offshore oil/gas production, Russia is now looking to China to replace this technology. The only caveat, according to Deputy Prime Minister Arkadiy Dvorkovich is that such technologies must be produced in Russia proper (Made in China, 2015). These significant developments come on the heels of an agreement for CNPC to increase its share in the Yamal LNG project by 9.9%, for a combined 29.9% total share.

China's Shipping Interests

With approximately 90% of its traded goods shipped by sea, the Chinese government stands to save billions of dollars in costs, if reliable transit through the NSR (or the Central Arctic Shipping Route [CASR]) becomes a possibility.²¹ An Arctic transit route would save shipping companies \$7 to 12 billion in insurance premiums (Zhou, 2013). Thus, China is very keen on helping Russia to develop the NSR infrastructure.

China first mentioned in 2010 its intention to significantly "boost" its Arctic presence for use as a potential shipping route. As we have seen with regard to Arctic resource exploitation, the Chinese government early on was much more skeptical

¹⁹ Western oil partners were specifically excluded from this same consideration. Indeed, Western oil majors haven't been given majority (or equal) control of Russian oil/gasfields since the demise of TNK-BP in 2013.

²⁰ China's SinoTrans Shipping and Merchants Energy Shipping struck a joint venture agreement with Greek Dynagas in 2015 to build five Arctic LNG vessels to ship gas from the Yamal LNG project to China; the year prior, China LNG and Teekay LNG Partners signed an agreement to build six LNG carriers for the route (China Shipping Firms, 2015).

²¹ For example, Beijing projects their trade to grow to almost \$8 trillion by 2020; according to these estimates, if 10% of that figure is shipped via the Arctic, transportation cost savings would equal tens of billions of dollars per year (Zhou, 2013).

about the role of Russia as a partner in its Arctic shipping exploits. For example, a Chinese government researcher commented in 2010 that, “China is geographically disconnected to the Arctic, which is a large disadvantage compared with littoral countries. China would not like to see it (the shipping route) controlled by a country or a certain group” (Yu, 2010).

For its part, Russian naval forces warily accompanied the “Snow Dragon” in September 2012, as the Chinese research vessel transited the entire length of the NSR for the first time (Chinese Icebreaker, 2012). When the Chinese cargo ship, “Yongsheng” completed a similar journey in August 2013, Russian press releases displayed a certain degree of skepticism regarding the transit.

Since the imposition of sanctions by the West in 2014, however, and Russia’s resulting “pivot to the East,” the two governments have slowly begun to see more eye-to-eye on the importance of mutual development of the NSR and related infrastructure projects. For example, in May 2015 Chinese authorities noted keen interest in buying the Arkhangelsk Sea Port, as well as the Yenisey River Shipping Company from Norilsk Nickel (Staalesen, 2015a).²² In addition, the Jilin provincial government foresees teaming with both Russia and North Korea to ship products from its manufacturing centers to Europe, via the NSR. Russia and China also signed an agreement more recently that grants the Chinese company, Poly Technologies, a concession to build 712 miles of the Belkomur railway (Pettersen, 2015).

All of these developments were followed in the winter of 2015 by two other important developments. After the Yongsheng cargo ship completed a record-setting 20,000 mile round-trip journey from Rotterdam to Tianjin, the China Ocean Shipping Group Company (COSCO) manager Cai Meijiang stated that the company is “... considering increasing the number of ships sailing via the new path” (China Mulls Routine Navigation..., 2015). This was followed in December by a statement from Dmitriy Rogozin, the Vice-Chairman of the Russian Government (and Chairman of Russia’s Arctic Commission), in which he explained that a new “cold Silk Road” was under development and desired further Chinese investment in order to bring it to fruition (Rogozin: Severnyi, 2015; Staalesen, 2015c).²³

²² These sales of important Russian infrastructure assets mirror similar Chinese interests elsewhere; Beijing is interested in port facilities at Kirkenes, Norway, as well as a rail line from Kirkenes to Rovaniemi, Finland (Staalesen, 2015b).

²³ These events were important, despite the fact that NSR transits witnessed a sharp downturn in the 2014 and 2015 shipping seasons.

Conclusion: Russia and China in the Arctic, Cooperation or Competition?

With regard to the Arctic, China and Russia have in the past viewed each other's activities in the Arctic with some degree of suspicion. In particular, differing perspectives on commerce and shipping in the region, as well as seabed resource extraction, have earlier caused the two countries' overall warming relationship to undergo some significant strains.

For one, Beijing was initially rather wary of Moscow's attempts to extend its claims to the Arctic shelf under the UN Convention on the Law of the Sea (UNCLOS) in 2007. Apparently, Beijing was concerned when Russia began an attempt to extend its shelf, perhaps as far as the North Pole in some areas. Some Chinese scientists saw these claims as a Russian overstep in sovereignty extension, viewing these claims to the Arctic shelf as a "challenge" to Beijing (Terekhov, 2010).

For its part, Russia was concerned with China's perceived intent to assert control over the 12% of Arctic hydrocarbon reserves not claimable by littoral states. As one Russian expert mentioned in 2010, "They (China and other non-littoral states) want their slice of the pie, i.e., in the open part of the Arctic basin" (Terekhov, 2010, p. 2). More recently, Igor' Sechin, Chairman of Rosneft and close ally of President Putin, uneasy about China's Arctic ambitions, remarked in 2013 that Russia faced "plenty of competition," not only from littoral states, but also from "... countries which seem to be far from the Arctic The struggle for resources is getting tougher" (Glava Rosnefti, 2014).

As a major exporter, China was also engaged in the debate early on regarding access to potentially lucrative Arctic shipping lanes. China proclaimed its commercial interests in the north Pacific and Arctic Oceans, worried as it was (as Wu Zhenfu, a professor from the Dalian Maritime University, stated concerning China's interests), that "(W)hoever has control over the Arctic route will control the new passage of world economics and international strategies" (Manthorpe, 2011, p. A6). Apparently, China's leaders worried that, should the NSR become a normal route for trans-oceanic shipping, Russia's control over the region might make traversing the NSR prohibitively expensive; therefore, Beijing forcefully proclaimed its interests in keeping transit costs reasonable and shipping lanes open (Jakobson, 2013; Mitchell, 2013).

However, although the two countries have not seen eye-to-eye in the past in the Arctic, since mid-2014 a significantly closer relationship has indeed developed between China and Russia there. Since that time—a time that obviously coincides with the imposition of sanctions against Russia's energy industry and Russia's "pivot to the East"—no longer does one often read in the official Russian press of fears of Chinese economic or military intentions in the region (or beyond). Instead, Chinese investment and involvement in infrastructure projects all along the "cold Silk Road" have been announced with great fanfare. What is more, as we have seen, hydrocarbon exploration and project development has been an especially important and high profile arena of activity in the new Sino-Russian relationship in the Arctic.

To be sure, Russia's goal of "mastering the Arctic"—a vital part of the Russian leadership's plan for the country's economic resurgence—requires significant capital investment; without the possibility of attracting Western capital for the vast majority of these projects, China's financial participation balances Russia's investment need.

Thus, this Arctic case study suggests that not only is it possible for China and Russia to move beyond an uneasy association of convenience toward a genuine partnership in areas of mutual interest—despite several continued difficulties confronting the overall relationship—but also that the Western-backed sanctions regime has acted as a catalyst for closer Sino-Russian relations.

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