The Emergence of China as a Polar-Capable State

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Photo: Yong Wang, the Chinese Arctic and Antarctic Administration, Beijing, China

***Xue Long** in Arctic waters, August 2010.*

Introduction

In 1999 Canadian authorities were taken by surprise when the Chinese ice-capable research vessel, *Xue Long* (*Snow Dragon*) made port in Tuktoyaktuk, Northwest Territories, without being detected. That port call should not have been a surprise because Canadian authorities were in fact notified of the vessel's presence in the region. This call and subsequent activities affirmed China's presence and capabilities in the region, further consolidating polar credentials which were already well-established in the Antarctic.

China's emerging polar capabilities and interests in the Arctic are attracting attention in Canada and elsewhere. In February 2010, the China Institute for Marine Affairs of the State Oceanic Administration of China hosted what was probably the first Sino-Canadian Workshop on the Arctic. The meeting was convened with the cooperation of the Polar Research Institute of China, the Marine and Environmental Law Institute at the Schulich School of Law at Dalhousie University and the Ocean Management Research Network. The workshop was mainly an exchange of views among Canadian and Chinese scholars.

Shortly after that event, a significant study focusing on China's Arctic interests by Linda Jakobson was published under the auspices of the prestigious Stockholm International Peace Research Institute.[1] Jakobson's report highlighted China's stated and unstated interests in the region and was quickly picked up by the global media and Canadian scholars. Another Canadian study on the subject was published by the Canadian International Council, and other Canadian and US scholars joined this discourse. This interest is not unreciprocated. Several Chinese policy scholars are observing Arctic governance, including Canadian initiatives in the region. Thus, following Prime Minister Stephen Harper's five-day tour in the Arctic in August 2010, one Chinese commentator posed the question "why is Canada obsessed with the Arctic?"[2]

First Steps

China has not yet issued a foreign policy statement on the Arctic, similar to those issued by Canada, Russia and the United States, or even a preliminary release such as the European Union (EU) Arctic Communication. Jakobson has described China's approach to the Arctic as a "wait-and-see approach."[3] Arguably China has already done more than that. It has built a credible polar research capability and has also expressed views on some Arctic issues, perhaps not at the highest levels, and cautiously, but certainly at a sufficiently senior level to suggest that a policy is evolving.

Xue Long is not China's first step in the Arctic. China has been a party to the 1920 Treaty Concerning the Archipelago of Spitzbergen (also known as the Svalbard Treaty) since 1925. It was not an original High Contracting Party, but became a party in 1925 on an invitation through France as the depositary state. China did not, however, undertake any significant activity in relation to the region before the 1980s. It was with the establishment of the Polar Research Institute of China under the auspices of the State Oceanic Administration in 1989 that its modern interests were given impetus.

Photo: Cpl Jax Kennedy, CF Combat Camera

*Prime Minister Stephen Harper during **Operation Nanook**, one of three major sovereignty operations conducted annually by the Canadian Forces in Canada's Arctic, 25 August 2010.*

The Maritime Trade Imperative

The potential for new Arctic trade routes stands out against the backdrop of China's tremendous economic stature and position in maritime trade. In August 2010 the size of China's economy surpassed that of Japan, elevating China to the status of the world's second largest economy. By some estimates, it will surpass that of the United States some time after 2020. Close to half of China's Gross Domestic Product is dependent on maritime trade.[4]

The EU is China's biggest trading partner – its trade in goods with the EU, which is largely seaborne, was valued at €326 billion in 2008.[5] China is the EU's second largest trading partner, but the EU's largest source of imports. China's two-way trade (i.e., imports *and* exports), mostly seaborne, with the United States was valued in 2009 at over US $360 billion. China became the second largest trading partner (after Canada) of the United States in 2006. In 2007 Canada's two-way trade with China was just shy of CAD $40 billion. China is Canada's second largest trading partner. In 2010 China surpassed Germany as the world's largest exporter and also overtook the United States as the world's largest auto market.

This economic and trade profile triggers a strong interest in safe, secure and commercially-feasible maritime trade routes. Studies carried out by a Japanese-Norwegian funded project in the 1990s, The Northern Sea Route Project (INSROP), underlined the significance of the Northern Sea Route through Russian waters for east-west trade. This route is 4,800 miles (7,700 kilometres) shorter than the Suez Canal route for a Hamburg-Yokohama voyage.[6] Other northern passages are also much shorter than current routes. In linking Europe and Asia, the Northwest Passage is 5,600 miles (9,000 kms) shorter than the Panama Canal route and 10,500 miles (17,000 kms) shorter than the Cape Horn route. The transpolar route (cutting across the Arctic Ocean and bypassing the other two routes), the least feasible in the foreseeable future, is almost 5,000 miles (8,000 kms) shorter than the Hamburg-Yokohama route through the Suez Canal and over 6,000 miles (9,600 kms) shorter than the Panama Canal course for the same route.

Photo: Internet

*The China Shipping Line container ship the CSCL **Long Beach** bound for European markets transiting the Suez Canal via the Al Ballah By-pass sea lane.*

Graphic: Internet

The Northern Sea Route to EU markets is not only shorter it is pirate-free and thus less dangerous than the route via the Strait of Malacca and the Suez Canal.

The Arctic is not shorter for all maritime trade between Europe and Asia.[7] For instance Mediterranean ports are closer to Shanghai and Hong Kong using the Suez route. Nonetheless, other potentially significant routes, such as Shanghai-Rotterdam and Shanghai-Bordeaux, are substantially shorter through the Arctic.

No one is expecting that new maritime trade routes through the Arctic will displace the current Suez and Panama Canal routes, especially with the latter's enlargement to be completed in 2014. However, there is an expectation that the Arctic will be increasingly attractive for certain kinds of trade, in particular related to hydrocarbons and other minerals produced in the region and exported to China and other Asian countries, and for some seasonal transcontinental trade.

Photo: Internet

*The MV **Nordic Barents** carrying 40,000 tons of iron ore takes an Arctic Ocean shortcut from Norway to Shanghai, September 2010.*

Thus China's interest in new Arctic trade routes is to be expected. This interest is further justified by recent commercial transits. In 2009 two German commercial vessels transited the Northern Sea Route from Ishan, South Korea, to Rotterdam, demonstrating feasibility. In September 2010 the Hong Kong-flagged MV *Nordic Barents* (ice-class 1A) transported a cargo of iron ore from Kirkenes in Norway to Shanghai using the same route. This voyage was one-third shorter than the traditional Suez route, saving time, fuel and carbon dioxide emissions. Indeed, about $180,000 worth of fuel was saved. A month earlier, the first-ever high tonnage tanker, the 100,000 ton *Baltica*, transited the Russian route from Murmansk to China with a cargo of gas condensate. If current ice formation trends continue, the Northern Sea Route could be available for a period of two to four months every year.

If there is an increase in transits, at reasonable cost for the services supplied to each transit (icebreakers, pilotage, etc.) and at competitive insurance rates (at the moment insurance is mostly at a costly per voyage rate), China's large shipping companies (at this time on the sidelines) can be expected to avail themselves of Arctic routes, even though Arctic trade routes will be open only on a summer seasonal basis. There is likely to be most interest in the Russian route because the infrastructure and support services for shipping, although needing upgrades, are better developed than they are in the Northwest Passage. In fact, most of the pioneer transits to date have been through this route. Chinese shipping companies will compare the costs of financing, building, chartering and operating polar-class vessels with other major routes. There are draught restrictions in Arctic straits and channels that will likely rule out large container vessels.

Photo: University of Georgia

*Scientists embarked in **Xue Long** collect water samples to determine salinity, temperature, nutrient concentration, chlorophyll activity and levels of carbon dioxide during University of Georgia-led international expedition to the Arctic, August 2008.*

In addition to the prospect of savings on new trade routes, China may well have an additional incentive to promote trans-Arctic trade. Piracy has affected the cost of trade using the Indian Ocean and South China Sea routes. As well, Arctic shipping could contribute to economic development in east and northeast China. Known as the rust belt, China is actively promoting the economic and industrial revitalization of this region, which lags behind other major industrial and manufacturing centres. China is also seeking cooperation with Russia, among other states in the region, particularly because of energy sources.

Marine Resources and Research

Recently the US Geological Survey published the most authoritative statement on Arctic oil and gas resources to date. With the knowledge available at this time for all areas above the Arctic Circle, it concluded that "about 30% of the world's undiscovered gas and 13% of the world's undiscovered oil may be found there, mostly offshore under less than 500 meters of water."[8] The region also contains many other strategic minerals. Given that China is the world's largest importer of iron ore and copper, and second largest importer of hydrocarbons, it would be surprising if China did not have an interest in the Arctic's mineral and hydrocarbon resources, especially with the ground-breaking transit of the iron ore shipment from Norway to China in 2010.

China is seeking greater cooperation with Norway, in particular because of Norway's advanced technology capabilities for deep water and cold environment extractive activities. China may have the capital, but it does not have the technical capability to engage in extractive activities in such an environment at this time.

Since the establishment of the Polar Research Institute in Shanghai, China has invested heavily in building its marine research capacity and has now become one of the major polar research countries in the world. In 1996 it joined the International Arctic Science Committee and participated actively in the International Polar Year. Recently the institute received new premises that include research laboratories with a capacity to accommodate 180 scientists and staff (currently at over 140), as well as administrative space, a large wharf, warehouses and workshops. Its areas of research at this time are polar glaciology, polar oceanographic science, polar upper atmospheric physics, polar biological science and polar information platforms. The Polar Research Institute has several dedicated labs for each of its research programs. It operates on the basis of five-year plans and is responsible for organizing Chinese National Arctic/Antarctic Research Expeditions (CHINARE), of which there have been several.

Photo: China Defence Blog

***Xue Long** navigates through Antarctic ice during China's 24th scientific expedition to the region in March 2008.*

Equally impressive is China's presence on both poles through the establishment of research stations. It has three research stations in the Antarctic. The first is the Antarctic Great Wall Station, established on King George Island in 1985. This substantial station accommodates 80 summer and 40 winter personnel. The second is Zhongshan, located in east Antarctica in 1989. It accommodates 60 summer and 25 winter personnel. In January 2009 work commenced on the building of a third research station, Kunlun, located inland at Dome Argus, with a capacity to accommodate 20-24 research personnel. To date, China has mounted 26 CHINARE research expeditions to Antarctica.

In the Arctic China established the Yellow River Station in Ny-Ålesund, Svalbard (Norway) in 2003, accommodating up to 18 research personnel. It has four resident scientists. China was able to do this by virtue of the Svalbard Treaty mentioned earlier which provides certain rights to nationals of other countries. There are 11 such stations in the region of Svalbard and China is a party to an association of these research stations. To date, China has sent four CHINARE research expeditions to the high Arctic (1999, 2003, 2008, 2010). The fourth Arctic expedition was in the Arctic for 85 days between July-September 2010. It studied changes in the ice surface and their effects on the

environment in the Bering Sea, Bering Strait, Chukchi Sea, Beaufort Sea, Canada Basin and Alpha-Mendeleev Sea Ridge. This was no small expedition. It was the largest to date, with over 120 scientists, logistical staff and media persons from China (including one scientist from Taiwan) and seven scientists from Estonia, Finland, France, South Korea and the United States.

Xue Long was used as a platform. It is an ice-strengthened vessel (class 2A, 167 metres, 21,000 tonnes with a capacity to break 1.2 metre ice, 32,000 km range). It has 128 berths, seven labs, a helicopter and an underwater robot. It has been described as the largest non-nuclear icebreaker, but a more precise characterization is that it is an ice-strengthened vessel which was originally built in Ukraine in 1993 for a different purpose. China has determined that a single research platform is not sufficient to meet the demands of expeditions to both poles and has accordingly commissioned the building of a smaller vessel, an icebreaker of 10,000 tonnes at a cost of US $300 million.

Participation in Arctic Governance

In the view of a growing number of Chinese scholars, the Arctic is a region in which the international community has interests. In other words, the Arctic is not for the exclusive benefit of the Arctic Ocean coastal states. China views the Arctic Council as an important mechanism for the cooperative governance of the region, and to date has attended three sessions as an ad hoc observer. In 2009 it requested permanent observer status, but was turned down together with requests from Italy, the EU and South Korea. It expects reconsideration at a future ministerial meeting, after all there are already six permanent observers on the council – France, Germany, the Netherlands, Poland, Spain and the United Kingdom. The significance of permanent observer status is the concomitant ability to participate in most meetings without the need to seek permission to participate on a meeting-by-meeting basis. Permanent observer status is not just symbolic. It better positions non-Arctic states to participate in the governance of the region. The Arctic Council does not normally reject requests for ad hoc observer status, but this status limits participation in the council's activities.

In a speech in Beijing in August 2010, Norway's Foreign Minister Jonas Gahr Støre supported China's application and hoped that consensus could be found in the council.[9] At the outset of its current presidency of the Arctic Council, Denmark stated that "[o]bservers and ad hoc observers are assets, and the Arctic Council should look for ways to further involve those that are ready to cooperate under the premise that the primary role of the Arctic Council is to promote sustainable development for the Peoples of the Arctic and the Arctic States."[10] Among non-Arctic states, China stands out in terms of its resource commitments, activities and presence in both polar regions. The next opportunity for a council decision on this matter will be the Ministerial Meeting in Nuuk, Greenland, in May 2011.

Photo: Chinese Defence Blog

*Chinese scientists onboard **Xue Long** enjoy an outdoor feast during an expedition to the Arctic Ocean, 21 August 2010. The scientists carried out a series of research activities, including collecting sea ice and seawater samples.*

The UN Convention on the Law of the Sea (UNCLOS) and its application to the Arctic also features in Chinese Arctic interests. In 2008 the 'Arctic five' (Canada, Denmark for Greenland, Norway, Russian Federation, United States) adopted a declaration in which they expressed commitment to UNCLOS as the legal framework containing rights and obligations for the Arctic Ocean.[11] This was assurance to the international community that the balance between the rights of coastal states and the international community enshrined in that instrument will be respected. China sees UNCLOS as providing the framework for governance in the region, but believes that this is not the only instrument to do so. For example, the Svalbard Treaty also plays a role in the region and international law as it applies to the region may need to be further developed.

Coastal state entitlements in the Arctic Ocean are accompanied by a responsibility not to encroach on international seabed areas, which are designated by the UN convention and international customary law as the common heritage of mankind and therefore cannot be appropriated. Assistant Minister of Foreign Affairs Hu Zhengyue was reported as stating in 2009 that "[w]hen determining the delimitation of outer continental shelves, the Arctic states need to not only properly handle relationships among themselves, but also consider the relationship between the outer continental shelf and the international submarine area that is the common human heritage, to ensure a balance of coastal countries' interests and the common interests of the international community."[12] Thus, although China did not issue a *note verbale* to the UN Secretary-General (as it did in the case of the Japanese submission), it is likely that it is concerned about

Photo: Nick Cobbing / Greenpeace

*The crew of the Greenpeace ship MY **Esperanza** works with German marine scientists near the Arctic research station of Ny-Alesund in Svalbard, May 2010.*

the Russian submission concerning its continental shelf in the Arctic to the Commission on the Limits of the Continental Shelf. China's view is that while coastal states have a right to establish "outer limits of their continental shelf beyond 200 nautical miles, States Parties shall also have the obligation to ensure respect for the extent of the International Seabed Area … which is the common heritage of mankind, and not to affect the overall interests of the international community as a whole."[13]

Despite differences in the region, China prefers not to pronounce views on the region's disputes, including on the status of Canadian and Russian Arctic waters, possibly because in turn it does not welcome pronouncements by non-regional states on its sovereignty and maritime boundary disputes in the South and East China Seas.

Accordingly, conscious of its potential clout as well as its own disputes with neighbours, China has been careful in advancing its interests in Arctic governance and has consistently placed emphasis on cooperation, especially on marine scientific research, clearly an international community right in the UN convention of which it is availing itself. This explains the significant investments it has made in marine scientific research to establish itself as a credible and desirable research partner.

A Unique Role?

Some scholars view China's foray in the Arctic with suspicion while others see China's current activities in the region as exercising its rights under international law. As a nascent global power, China should be expected to assert interest in both poles and to expect to be included in the governance of the Arctic. Its political interests will be driven by its economic interests, primarily maritime trade and long-term access to new energy sources and minerals. China has ocean and climate change research interests and it is arguable that a global power with such scientific and economic clout should be contributing to building understanding of climate change impacts at a global scale.

Beyond building knowledge and displaying increasing skill, China appears to be using marine scientific and climate change research as a way of engaging the Arctic region. Indeed China may be building confidence among regional states that it has something important to contribute and the capacity necessary to cooperate effectively in the region. It has invited foreign researchers on its vessels. In 2010 Norway signed an agreement on polar research cooperation with China. In the same year, Canada and China signed an agreement on scientific cooperation which could be a framework for cooperation in polar science.

It is also interesting to note that China has spoken for the global commons in ways that no other major state has done in recent times. Clearly there is self-interest in reminding Arctic states that extended continental shelf claims, while permitted to coastal states under UNCLOS, should not trench on the international seabed area. In doing so, however, it is also playing the role of advocate for the common heritage of mankind and interests of developing countries, which no other Arctic state is doing. It has given itself a voice for developing countries. Considering its substantial official development assistance in all developing regions, this is a role which many developing countries are likely to endorse.

Notes

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2. Wang Wei, China Institute of International Studies, on China.org.cn, available at www.china.org.cn/opinion/2010-09/08/content_20889311.htm.
3. Jakobson, "China Prepares for an Ice-Free Arctic," p. 2.
4. *Ibid*., p. 5.
5. "EU-China Trade in Facts and Figures," European Union Press Release, 4 September 2009, available at http://europa.eu/rapid/pressReleasesAction.do?reference=MEMO/09/375&type=HTML.
6. See Willy Østreng, *The Natural and Societal Challenges of the Northern Sea Route. A Reference Work* (Dordrecht: Kluwer, 2000).
7. Frédéric Lasserre, "China and the Arctic: Threat or Cooperation Potential for Canada?" Canadian International Council, China Papers No. 11, May 2010, available at www.onlinecic.org/resourcece/archives/chinapapers.
8. Donald L. Gautier et al., "Assessment of Undiscovered Oil and Gas in the Arctic," *Science*, Vol. 324, No. 5931 (May 2009), pp. 1,175-1,179, available at www.sciencemag.org/cgi/content/full/324/5931/1175?ijkey=uhqc1jv8QmWt.&keytype=ref&siteid=sc.
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10. The Kingdom of Denmark, Chairmanship of the Arctic Council 2009-2011, 29 April 2009, Arctic Council, available at http://arctic-council.org/filearchive/chair-013-240209-program-final.pdf.
11. The Ilulissat Declaration, 28 May 2008, Arctic Council, available at http://arctic-council.org/filearchive/Ilulissat-declaration.pdf.
12. As cited by Jakobson, "China Prepares for an Ice-Free Arctic," p. 10.
13. China's note to the UN Secretary-General, dated 6 February 2009, UN Secretariat, Division for Ocean Affairs and the Law of the Sea, available at www.un.org/Depts/los/clcs_new/submissions_files/jpn08/chn_6feb09_e.pdf.

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