WORTH THE ENERGY? THE GEOPOLITICS OF ARCTIC OIL AND GAS

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Abstract: *Climate change is literally and metaphorically bringing the Arctic in from the cold in international affairs with new economic opportunities emerging with the retreat of the ice sheets. Prominent amongst these is the prospect of previously inaccessible oil and gas sources in the High North becoming available for extraction. A spate of extended maritime claims by the states of the region and some high profile diplomatic posturing has prompted much anticipation of a new scramble of resources and even a new, more literal Cold War. The reality, however, appears to be more mundane with the Arctic oil rush proving to be more of a slow and cooperative saunter thus far, as the Arctic powers, and others, seek the new riches with a degree of caution, employing – and even sharing – lawyers and geologists rather than deploying troops.*

Keywords: Arctic, oil, gas, geopolitics, maritime claims

Introduction

In 2007 the Arctic was uncharacteristically thrust to the forefront of the world's media when a robot from a Russian submarine placed the national flag on the exact location of the North Pole for the first time in history in a symbolic act of "conquest" both retro and futurist. The Russophobic response of the Western media and politicians to this stunt was also reminiscent of fears from yesteryear provoked by "the Bear" and seemed a likely precursor for a new, modern, high-tech geopolitical struggle between East and West. Canadian Foreign Minister, Peter Mackay, epitomised Western irritation at the Russian initiative by stating; 'You can't go around the world and just plant flags and say "we're claiming this territory."'[1] However, the governments of Canada, along with fellow Arctic littoral states Denmark and Norway, have been busy in recent years claiming extra (underwater) territory, albeit in a less extravagant fashion. The

melting of the Arctic ice sheets has opened up new possibilities for navigation, fishing and, most particularly, the exploitation of underground resources once thought too costly to extract, awakening the interests of governments and Multi-National Corporations (MNCs).

Frozen Assets

At around the same time the Russian robot was at the North Pole the US Geological Society was carrying out a 'Survey of undiscovered Oil and Gas in the Arctic,' the results of which further kindled geopolitical interest and thrust the region further into the media spotlight and realms of realpolitik. The much quoted survey estimated that the region contained 22% of the world's undiscovered fossil fuels: 13% of oil and 30% of gas. This is in addition to proven reserves currently being extracted near the Northern coasts of Alaska, Canada and Russia, amounting to 10% of the world's known remainder.[2]

Table 1. Estimated Oil and Gas Deposits in the Arctic

	Oil- billion barrels	**Liquefied Gas**- billion barrels	**Natural Gas**- trillion cubic feet	**TOTAL**- billion barrels equivalent
Undiscovered	90	44	1,669	412
Known	40	8.5	1,100	240

Source: UGSS (2008)

The US Geological Society Survey in conjunction with fellow geologists from Canada, Denmark, Greenland, Norway and Russia, divided the whole area north of the Arctic Circle into 33 geologically-defined regions. 90% of the unclaimed hydrocarbons lie in eight fields identified in the map below. 84% of all the undiscovered deposits are offshore.

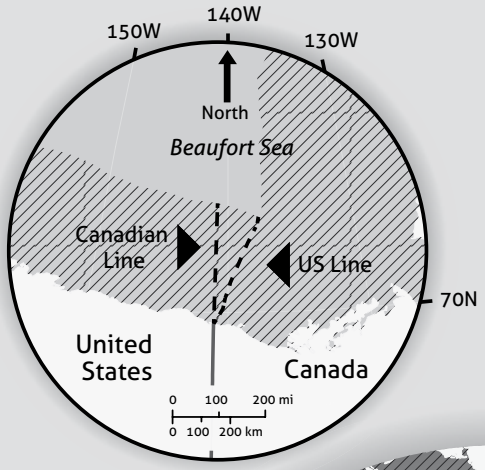
Three of these eight regions – Laptev, Yenisey-Khalana and West Siberia – lie exclusively within Russian jurisdiction. The Alaskan sea region is under US jurisdiction whilst Denmark has sovereignty over the East Greenland region, although economic authority is

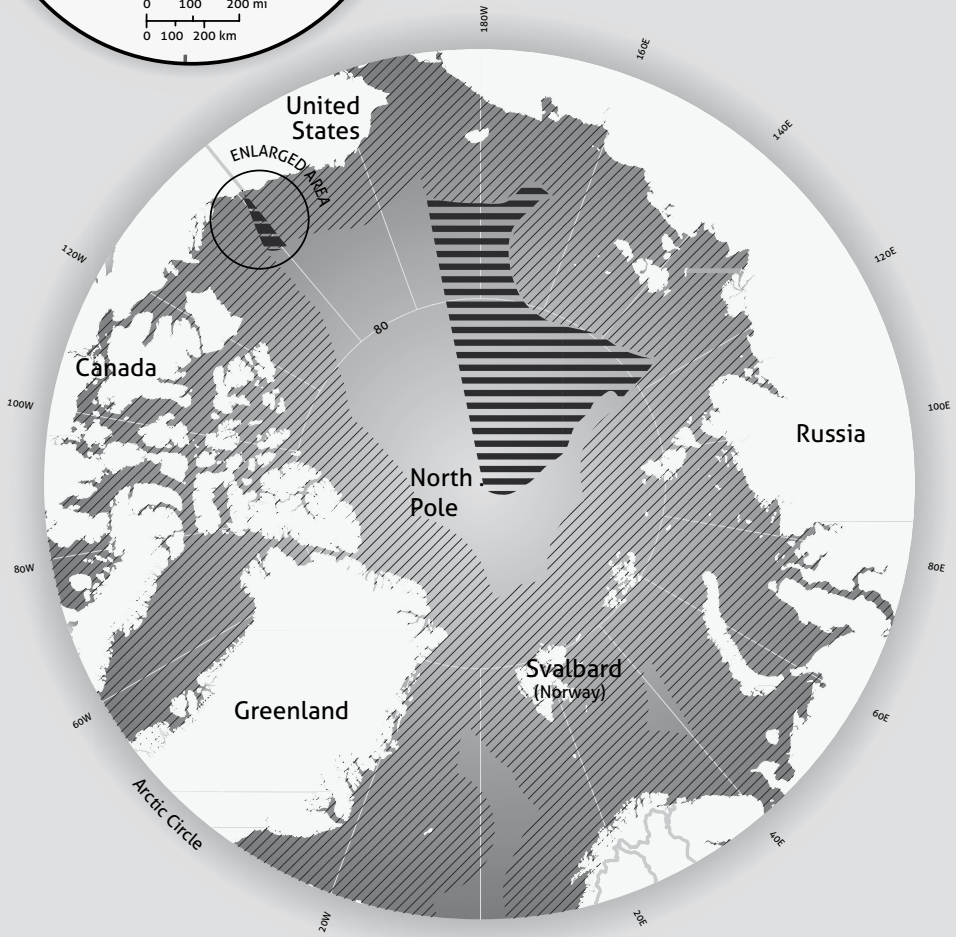
currently devolved to Greenland itself. The East Barents region is politically divided between Norway and Russia; Amerasia between Canada and the US and West Greenland / East Canada between the two named countries. All of these eight regions contain a range of fuels; however West Siberia has by far the largest proportion of remaining gas and Alaska a majority of the oil. Containing smaller estimates of hydrocarbons, though nonetheless politically significant, are two huge regions spanning the North Pole area; Lomonosov-Makarov and the Eurasia Basin, much of which lie outside of the 200 mile Exclusive Economic Zones (EEZ) of any Arctic states and therefore outside any sovereign authority.

Arctic oil is nothing new of course. Commercial oil activity began in Canada's North West Territories in 1920, closely followed by ventures in the Kenai Peninsula in Alaska along with the Komi and Nenets regions of Siberia. The 1968 oil discovery in North Slope, Alaska was a landmark breakthrough and since that time this site has produced 11 billion barrels of oil/gas. At around the same time, the Soviet Union made several new major gas discoveries in West Siberia and the Russians have since been the world's biggest producer and exporter of this energy source. Off-shore drilling in the USSR, US, Canada and Norway (in the Barents Sea) then slowly began to develop from the 1980s.

The "supermajor" Multi-National Corporations (MNCs) and state-owned energy companies have gradually moved further afield to explore new options as Alaskan, Russian and Norwegian reserves have all peaked. In 2011 after a barren decade, the Norwegian state controlled Staoil, in conjunction with private domestic firms Eni Norway and Petoro, discovered between 150-250 million barrels of oil on the Skrugard Prospect in the southern Barents Sea. BP have been active for several years in the Canadian Beaufort Sea and in 2011 the US government finally gave the go ahead for Shell to explore the Alaskan part of that sea, having restricted this over several years for environmental reasons. In the Russian part of the Arctic Ocean, Western MNCs in cooperation with the state owned groups appear to have been falling over themselves to secure access to new oil and gas fields. In 2011 the French-based giant TOTAL bought a substantial stake in Novatek to develop the Yamal LNG field, whilst US-based Exxon-Mobil quickly stepped in to form a strategic partnership with Rosneft to look for oil in the Kara Sea, when a similar

Arctic Boundaries





North Pole Azimuthal Equidistant Projection

Russian-claimed continental shelf beyond 200 nm territory

200 nautical miles territorial sea and exclusive economic zone (EEZ)

US and Canadian claims

Source: ESRI, VLIZ Maritime Boundaries Geodatabase,
International Boundaries Research Unit (Durham University), United Nations
Maps: David Erkomaishvili

deal with BP was scuppered by domestic opposition. Prominent amongst newcomers have been UK based Cairn Energy, who were quick to negotiate their rights with the Greenlandic government to establish four new rigs in the Baffin Sea.

Arctic Hot Air

The combined effect of the Russian robot and the geological survey prompted some shrill and bellicose reactions in the Western media and academia. A 2008 article in *Jane's Intelligence Review*, widely cited in the UK popular press, reasoned that Russia's recent war against Georgia paired with the heightening stakes could see them, and possibly other Arctic states, 'make pre-emptive military strikes' to secure resources in advance of the UNCLOS adjudication of 2020.[3] Similarly, another widely cited article by a former US Coast Guard Officer in the journal *Foreign Affairs* warned of 'armed brinkmanship' due to the anarchic nature of the emerging Arctic political landscape: 'Decisions about how to manage this rapidly changing region will likely be made within a diplomatic vacuum unless the United States steps forward to lead the international community toward a multilateral solution.'[4] Cold War stereotyping seemed to emerge in a special edition of the *Eurasian Review of Geopolitics* on "The Polar Game" which declared that, 'Russia's decision to take an aggressive stand in the polar area has left the US, Canada and the Nordic countries little choice but to forge a cooperative High North strategy and invite other friendly countries, such as Great Britain, to help build a Western presence in the Arctic.'[5]

Seemingly supporting such reactions was a notable reassertion of energy security interests in foreign policy statements by the Arctic powers. *The Fundamentals of Russian State Policy in the Arctic up to 2020 and Beyond* vowed to establish military and coastguard groups to protect new economic interests in line with their extended Continental Shelf claim and stated that the Arctic would become 'the country's top strategic resource base by 2020.'[6] One of the last acts of the Bush (Jr.) administration was to release a *Homeland Security Directive* on the Arctic, the first official US foreign policy statement on the subject since 1994, which announced that Washington would 'assert a more active and influential national presence to protect its Arctic interests.'[7] The release of the Canadian government's

Comprehensive Northern Strategy in the same year was cohesive with their already well-established "use it or lose" strategy which had prompted regular naval manoeuvres around the Arctic islands and promised the construction of a major military base at Resolute Bay on Cornwallis Island.[8] This new assertiveness was demonstrated in 2009 in what came to be referred to in some North American media as Foreign Minister Mackay's 'Dr Strangelove moment.' During President Obama's visit to Ottawa, Mackay despatched fighter planes to "meet" Russian jets that were flying over the Beaufort Sea only to be corrected by bemused US military officials that the Russians had not entered Canadian airspace.[9] A further militarisation of the Arctic seemed apparent elsewhere that year when the Norwegian government moved their national military headquarters north of the Arctic Circle from Jalta near Stavanger to Reitan near Bodo.

Like the Russians, Norway, Canada and Denmark are making extended continental shelf claims a further 150km from the edge of their EEZs. This has been done by submitting geological evidence to the International Tribunal for the Law of the Sea, established by the United Nations Conference on the Law of the Sea (UNCLOS). The United States have not been part of this process since they are not party to UNCLOS. Isolationist opposition in Congress to the notion of being beholden to an international political body has hence prevented the Americans from participating in the new "carve up." This provides a classic example of "bureaucratic politics" in foreign policy as favoured by liberal analysts over the "rational actor" model of the realists. Presidents Bush and Obama, Secretary of State Clinton and the navy have all promoted ratification, however the government has not been able to implement a self-identified national interest policy due to internal politicking. The Russian, Norwegian, Danish and Canadian continental shelf claims overlap in several places, including the Lomonosov ridge which runs to the North Pole, claimed by Copenhagen, Moscow and Ottawa. Longer running territorial and particularly maritime disputes in a number of the shared seas of the Arctic Ocean have also been given greater prominence.

Energy Costs

It seems increasingly apparent that whilst the Arctic natural environment is undoubtedly changing, the economic and political climate is not heating anywhere near the widely predicted rate. Despite how it was widely reported and commented upon, the USGS survey did not bring anything revelatory. Its findings were not out of step with previous estimates of untapped Arctic energy supplies and broadly similar to its previous 2000 report. It does appear to have been the spectacle of the robotic Russian flag bearer which elevated the significance of the survey.

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Logistical Costs

The USGS Survey itself warns that, 'no economic considerations are included in these initial estimates; results are presented without reference to costs of exploration and development which will be important in many of the assessed areas.' [10] Evaluating energy opportunities is not, of course, simply a matter of estimating the likely amounts of oil and gas under the ice and rock of the Arctic and comparing this to estimates of the rest of the world. The costs of exploration, extraction and transport are much different. The economic downturn the world has experienced since 2008 has made such costs all the more apparent and many of the companies that have acquired drilling licences for new Arctic fields have not yet set to work. The Shtokman LNG field project, for example, a much heralded joint venture between Gazprom, TOTAL and Statoil, launched in 2007 in the Russian Barents, has yet to begin operations due to the increasing doubts of shareholders.

Even with warming temperatures the Arctic drilling season will only be three months long for the foreseeable future. Despite its retreat, thick ice cover will be a reality in most of the Arctic for most of the year and 24 hour darkness is a constant in the winter months. Offshore prospecting, extraction and transport is much more expensive than onshore anywhere in the world and the costs are multiplied when in such remote locations. Shipping in the Arctic will gradually become more straightforward with warming but still not easy. Many new routes, such as the fabled North West Passage, will

only open for short seasons and an increasing number of icebergs from melting glaciers will present new hazards.

A False Dawn?

Added to all this is the fact that energy supplies are notoriously difficult to predict. There have been many false dawns in petroleum exploration. The "Deal of the Century" struck by the government of Azerbaijan with eight western MNCs in the 1990s to exploit the oil fields of the Caspian has never lived up to expectations owing to downwardly revised estimates, political squabbling over where to locate pipelines and changes in the world price of oil. Oil finds are frequently exaggerated for economic or political effect. Shares in Cairn Energy plummeted in 2010 after their preliminary report on their exploration in Greenland was released with no evidence of significant oil deposits.[11] Arctic oil hunts have been initiated and abandoned before. In the 1970s the Canadian government backed private domestic companies carrying out exploratory projects offshore in the McKenzie Delta and Beaufort Sea. However, even after several successful test drills, federal funding was withdrawn and rigs scrapped or capped-off when the prohibitive costs of extraction and transport became apparent. In a wider sense it suits Russia, the US, Norway, Canada, and the extended community of oil importers, to give the impression that they are not as reliant on OPEC reserves as is commonly perceived.

The International Political Environment

The political environment is also very different from the time when the US, Canadian and Russian governments could and would pour funds into speculative oil prospecting ventures. Whilst energy security concerns are rising again the stakes are not as high as they appeared to be in the 1970s with Cold War rivalry and the rise of OPEC. In addition, the commitments of the Kyoto Protocol in limiting carbon dioxide emissions impose additional costs on new ventures compared to the past for at least the Canadians, Norwegians and Russians. Added to all of these business costs will be the price of fighting off the inevitable environmental protests that will accompany this most aesthetically brutal of industrial encroachments

into pristine wilderness. In 2010 Cairn, irked by two Greenpeace activists who had managed to spend four days in a survival pod on a drilling platform, initiated legal actions against the NGO for the loss of earnings which they estimated at 2 million euros per day.

Domestic Political Costs

Indicative of the slow progress of Arctic oil exploration, the McKenzie gas pipeline, bringing fuel from the delta to the south of Canada and the US, was first discussed in 1974 but has yet to be put into operation. One "complication" has been the need to compensate indigenous Canadians for building through lands they have acquired legal rights over. This represents another key difference between setting up energy operations in the Arctic as opposed to most parts of Latin America or the Middle East. Alaskan Inuits have also negotiated shares in the North Slope oil extraction and even in Russia the notionally federal structure has allowed Siberian territories to extract concessions from Moscow. The regional authority in Murmansk struck a deal with Gazprom to ensure a proportion of gas extracted from the Kola peninsular and Arhangelsk governors have a similar arrangement with Statoil linked to the construction of an onshore base to service the Shtokman field.[12]

Accidental Costs

Oil spills can occur at various levels in the process of extraction, storage or transportation. These may be routine hazards for the industry, but are greatly exacerbated in the Arctic. Oil persists longer in frozen conditions; it evaporates at a more gradual pace and can be trapped in the ice and hence released much later in melt waters. The 1989 Exxon Valdez environmental disaster, in which a tanker hit a reef in Prince William Sound in Alaska, was one of the most notorious in history and the slick continues to affect fishing and wildlife in the region to this day. The US government tightened regulations in the aftermath of the disaster and the threat posed by ship-source pollution does appear to have lessened. Rig spills however, have become more frequent with an average of 4 per year in Alaska in the 1990s growing to 22 per year by the late 2000s.[13] Seas replete with floating pack ice and round-the-clock darkness in the

winter months present particular hazards. Of greater significance than such natural factors that magnify the environmental hazards posed by oil spills are the social characteristics of the Arctic which make the "response gap" bigger than for most arenas of oil industry activity. A paucity of airports, industrial ports, reliable land transport routes or emergency services make this region ill-equipped to cope with a sudden oil rush. The scale of the 2010 Deepwater Horizon oilrig disaster (which surpassed the Exxon Valdez disaster as the greatest US oil spill in history) and the struggle to contain the spill reinforced this fear. That prospecting for new oil sources in the Mexican Gulf, with its benign climate and heavily populated and industrialised coastline, could wreak such havoc led many to speculate that a replication of such an incident off the Alaskan or Siberian coast would have far worse consequences. The US coast guard possesses only one ice-breaker. Environmentalists have poured scorn on assertions of safety planning that have been made by the supermajors. WWF have commented that, 'Shells' 2010 contingency plan for a Chukchi spill identifies the village of Wainwright as the marine hub for a response effort – when Wainwright (population 494) doesn't even have a dock.'[14]

The Cooler Reality of the Arctic

The Russian North Pole flag planting exercise was, as Dodds notes, an act of 'stagecraft rather than statecraft.'[15] As Russian Foreign Minister Lavrov was quick to point out at the time, this was a piece of exploratory showmanship comparable to the Stars and Stripes being planted on the Moon in 1969. Indeed, it is generally overlooked that some of the money for the expedition came from Western sponsors.[16]

The 'supermajor' oil companies' interest in the region is not necessarily indicative of a new black gold rush. Increasingly, they have been compelled to look further afield as a result of the rise in "resource nationalism," as shown by increased state control of hydrocarbon reserves. The Russian government in particular has acquired more direct influence over domestic energy companies and foreign investment ventures as part of the centralization that has occurred since Putin succeeded Yeltsin as President in 1999. The expertise of the supermajors is needed by the Russian government,

inevitably leading to a series of cooperative international ventures at odds with the nationalistic scramble popularly portrayed and predicted.

As well as working with Western MNCs, the Kremlin has also engaged cordially with Western governments over the Arctic. In April 2010, whilst President Medvedev was visiting Oslo, the Russians and Norwegians concluded an agreement ending a low level 40 year diplomatic dispute over how to partition the Barents Sea by amicably splitting it in two. In a joint communiqué that followed, the two foreign ministers announced that 'We firmly believe that the Arctic can be used to demonstrate just how much peace and collective interests can be served by the implementation of the international rule of law.'[17] This initiative took much of the world by surprise but should not have done given that it was a win-win result. Doggedly sticking to their divergent claims had created a "grey zone" amounting to some 12% of the Sea in which neither side could prospect for oil. A discourse analysis of policy statements and speeches by the two countries carried out by Jensen and Shedsmo noted that behind the different tones it was 'tempting to ask whether the Norwegian and Russian approaches to the European Arctic are that different at all.'[18] In line with their relative levels of political power and democracy, Norwegian foreign policy appeared particularly discursive and cooperative whilst Russian policy statements tend to be much more representative of a "zero sum" approach to international political economy questions. Rhetoric and reality are not the same thing when it comes to examining diplomacy. Russian policy in the Arctic has actually consistently been far less belligerent and more cooperative than portrayed in the West. The thaw has been evident since Gorbachev's 1987 Murmansk speech in which he declared: 'What everybody can be absolutely certain of is the Soviet Union's profound and certain interest in preventing the North of the planet, its Polar and sub-Polar regions and all Northern countries from ever again becoming an arena of war, and in forming there a genuine zone of peace and fruitful cooperation.'[19] Russian overtures to the West on the Arctic have been consistently conciliatory, whilst maintaining their claims to the Seas to their north. Gorbachev's words were re-echoed in 2010 by (then) Prime Minister Putin at a meeting of the International Arctic Forum in Moscow where he stated: 'We think it is imperative to keep the Arctic as

a zone of peace and cooperation,' since; 'We all know that it is hard to live alone in the Arctic.'[20]

A similar agreement to the 2010 Barents Sea agreement was reached by the Danish and Norwegian governments four years earlier when they applied the equidistance principle to split the Greenland Sea between Denmark's giant colony and Norway's Svalbard archipelago (over which Oslo's sovereignty is constrained by International Law to permit foreign economic activity). The Canadians and Danes did much the same thing in the Baffin Sea between Greenland and Baffin and Ellesmere Islands in their 1973 maritime boundary treaty. This reliance on legal solutions to territorial sea squabbles can actually be traced as far back as 1893 when US and British (back then the imperial ruler of Canada) agreed to go to international arbitration over how to divide the Bering Sea, producing the settlement inherited by the Soviet Union and US in 1990.

There is only one territorial question to be resolved in the Arctic; a somewhat surreal and ridiculous, although generally good natured dispute between Canada and Denmark over the tiny uninhabited Hans Island in Baffin Bay (which was overlooked in their 1973 boundary treaty). This looks increasingly as though it will be resolved by either dividing or co-ruling the icy slab. Some maritime disputes still exist but this is far from unusual in international relations and there is little precedent for fighting over fish and water. Areas of contention remain in the Bering Sea between the US and Russia, and between the US and Canada over the North West Passage and Beaufort Sea, though these are lower level disputes than the Barents Sea which was amicably resolved. In practise, the US and Canada have cooperated in the disputed areas with arrangements for coordinating coast guard work ,and special permissions for navigation having been in operation since the 1980s. Also, it again appears to be dawning on both sides that a compromise would be a win-win situation since the Canadian claim in the Beaufort (based on extending the territorial border northwards), whilst giving them a larger slice of the Sea up the 200 mile EEZ limit, would also actually give them less of the sea beyond this than under the terms of the US claim (based on equidistance). This is because at this distance Canada's Banks Island comes into the equation. Hence, in a bizarre twist, the Canadian claim has come to favour the Americans and the US claim has come to favour the Canadians.[21] There has been

a deal on the table over the Bering Strait since 1990, though it has never come to fruition due to a reluctance by the Duma to sanction what some Russian nationalists see as a sell out to the Americans by the, in their eyes, discredited Gorbachev government. In practise though, both sides have since stuck to the delineation agreed by foreign ministers Baker and Sheverdnadze and again there is real-politik for domestic consumption masking the reality of peaceful coexistence at the intergovernmental level.

The Arctic continental shelf claims are being pursued in a distinctly legalistic manner with the Russians, Canadians, Danes and Norwegians patiently presenting claims to UNCLOS and showing every indication that they will abide by their arbitration. Canadian and Danish geological teams have even shared information in compiling their overlapping claims in the Lomonosov ridge area. This legalistic approach was made public with the *Ilullisat Declaration* which followed a meeting of the Arctic 5 in Greenland in 2008 which concluded that: 'We remain committed to this legal framework [UNCLOS] and to the orderly settlement of any overlapping claims.'[22] Whilst this declaration irked the governments of the three other Arctic States and members of the Arctic Council who were not consulted – namely Sweden, Iceland and Finland who are not Arctic Ocean states – it very much indicated that a peaceful carve up of the Arctic between the sovereign powers is in their mutual interests. Hence the declaration also stated the opposition of the Arctic 5 to the alternative model of governance of an Antarctic-style "world park" conservation area outside of sovereign jurisdiction as frequently suggested by other countries and environmentalists.[23] Danish Foreign Minister Moller hence felt fit to announce to the world after the Ilullisat release that: 'we have hopefully quelled all of the myths about a race for the North Pole once and for all.'[24]

Foreign policy statements assert national interests and zero-sum characterisations of energy security because that is what foreign policy statements are supposed to do and what most expect to read. Formal Realism though, often masks a truer discourse of cordial cooperative relations and that is the case with the *Arctic Five*. The toughest posturing has come not from the Russians or the Americans, but from Canada, and even this is still more rhetoric than reality. Grant suggests that, 'claims of protecting Arctic sovereignty seem little more than paper sovereignty' given that no

new icebreakers have been constructed and the Resolute Bay military base has not advanced in spite of the tough talk.[25] In addition, Canadian public opinion is much more sensitive about their Arctic hinterlands than the rest of the world generally appreciates, and the Harper-MacKay government have been playing to this audience more so than an international one.[26]

Conclusions

Rhetoric and reality are often not the same in international relations and particularly not in the politics of the Arctic where declarations are often the howls of sheep in wolves' clothing. Arctic exploration, whether for adventure or profit, has always seemed to be accompanied by much symbolism, jingoism and bombast as man seeks to conquer nature at its most brutal in something of a "masculinist fantasy."[27] This, though, flies in the face of the reality that making money in remote, difficult conditions necessitates cooperation rather than nationalist rivalry. Instead of the old maxim that a successful foreign policy requires one to "speak softly but carry a big stick" what we are witnessing in the Arctic is more a case of, "talk tough but carry a big bag of carrots." Exercising sovereign control over vast, thinly inhabited tracts of land is a difficult task; hence the tradition of cooperation and sharing in the use of common land and resources between Inuit, Sami and other regional indigenous groups. Arctic "incomers" generally come to recognise the reality of this to some degree but domestic public opinion often sees only the flags and oilfields displayed on maps. The cordial cartel that is the *Arctic 5* and the energy-seeking ventures bringing together Western MNCs and the Kremlin represent more a case of transnational symbiosis than a new Cold War nationalism. Far from the lucrative scrambles produced by the discoveries of Yukon gold in the 1920s or Alaskan oil in the 1960s, future energy exploration in the High Arctic is set to be much more long-term and speculative or as Emmerson terms it, a 'slow rush for Northern resources.'[28] Whilst global warming is rightly bringing much needed attention to the needs of its indigenous populations whose lives are being transformed by a transforming physical and economic climate, an awful lot of hot air has been spoken about an Arctic oil rush and a new Cold War.

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