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Foreword

On the 24th of June 2008 in Oslo the research institute Ocean Futures and the Northern Research Forum jointly hosted a very well attended seminar that explored various aspects of Arctic and northern affairs. The seminar was entitled “The Politics of the Eurasian Arctic. National Interests and International Challenges”.

Inspired by the attention the Arctic and the northern areas have received in recent years, the seminar itself and the presentations by the four principal speakers are a reflection of at least five distinct but related developments.

First, Arctic and northern regions are seen as potentially substantial suppliers of increasingly scarce resources, especially oil and gas.

Second, the scramble for resources has brought to the surface as never before several unresolved and difficult jurisdictional and sovereignty issues which are or will be subjects of bilateral negotiations and resolution and/or international adjudication.

Third, driven in part by the exploitation of resources, concern for the fragile Arctic and northern environment has raised important questions of conservation and sustainability, including the effects of pollution and global warming that is happening at a faster rate in the Arctic than anywhere else in the world.

Fourth, having been somewhat of a military-strategic backwater after the collapse of the Soviet Union, Arctic and northern areas, and especially the Euro Arctic regions, have again entered the global military-strategic arena as important areas of activity.

Fifth and last, non-Arctic states have increasingly begun to show an interest in the affairs and potential of the Arctic and northern areas. The United Kingdom, for example, has traditionally been active in the north and, now accompanied by the rest of the European Union, has served notice of increased interest in the north. Other distinctly non-Arctic states, such as China, are also on the move in this regard.

The principal speakers at the seminar were:
Olafur Ragnar Grimsson, President of Iceland
Lassi Heininen, Professor, University of Lapland
Marit Nybakk, Member of the Storting, Norway
Willy Østreng, Professor, Ocean Futures

Jan Magne Markussen, Director, Ocean Futures

and the Future of the North

Ólafur Ragnar Grímsson, President of Iceland

The President of Iceland, Dr. Ólafur Ragnar Grímsson, began his presentation by announcing his intention to address the subject of his presentation from a broad perspective.

The first issue which the President mentioned dealt with the context of the Oslo seminar, the Northern Research Forum (NRF), particularly its origin and main aim. Almost ten years ago, President Grímsson initiated the establishment of an international forum called the Northern Research Forum. His celebratory speech in September 1998 at the Opening Ceremony of the 20th Academic Year of the University of Lapland, Finland, sparked interest among people in both Iceland and Finland to take up these challenges which consequently became the core of the NRF. The aim was to generate more interest in international cooperation in the circumpolar North per se – a region which was rapidly increasing in importance – and, in particular, to place more emphasis on international scientific cooperation within the region. Since the time of the President's speech in Rovaniemi, the strategic importance of the North and the activities of the NRF have significantly increased.

President Grímsson identified five main reasons for why the Arctic and the Northern regions are important:

1) Energy is a fundamental issue of the 21st century and the Arctic is rich in unharnessed energy.
2) Northern Sea Routes, both existing ones and those that are either under planning or only a vision, might lead to a revolution in global transportation and trade. Iceland and Norway can play a large part in these matters.
3) The legacy of the Cold War concerning strategic issues.
4) Rights of Indigenous Peoples and their land claims. In modern democratic states, the interests of the Indigenous Peoples are important.
5) The Arctic as a Parameter of Climate Change. The ACIA report showed that the knowledge it produced is valuable, both internationally and inside the Arctic. But the report was not adequately noticed. Climate warming is three times faster in the North than was previously thought. A report like the ACIA can be beneficial for regions outside the Arctic, e.g. in the Himalayas. Glacier meltdown is also a problem there and thousands of glaciers might disappear over the next three or four decades.

According to President Grímsson there are important reasons why Iceland, Norway and other Nordic countries should be interested in the Arctic. They are located in the northernmost part of the globe and constructive and important role can be played in the international arena through the Arctic Council. The Northern Research Forum was established to deal with these matters.

The circumpolar North is our backyard, but also that of the USA and Russia. Consequently, the Arctic Council is an international organization of which Russia is a member together with the other major power of the Northern Hemisphere, the USA, and the Nordic countries and Canada. The critical actor here is Russia; the Nordic countries are better able to engage Russia in this cooperation than other actors. It is not possible to deal adequately with northern issues without the constructive engagement with Russia.

Moreover, President Grímsson said that he does not know any other region where Iceland and Norway can play as fundamental a role as in the North.

An interesting new situation has been created after the US troops left Keflavik in the autumn of 2006. Now Iceland has become a militarily-free country. Ten years ago nobody would have believed that this could happen.

The Northern Research Forum should be utilised to prepare for changes and for moving forward on Northern issues. There is a need for a platform where all interested actors, whether heads of states, other policy-makers, NGO personnel, business leaders and scholars, are able to come together for open discussion and dialogue on these relevant issues. The Northern Research Forum and its Open Assemblies offer a suitable platform for such issues.

A speech synopsis based on rapporteurs' notes

Norwegian Policy in the High North

Marit Nybakk, Storting, Norway

The High North has been defined as the government's main strategic issue and the main strategic area in our foreign policy. This may surprise – even puzzle – people. After all – Norway is a key player in international conflict prevention and peace negotiations. We have the highest percentage in the world of GNI to development cooperation and are considered a great power in the UN. Still – our main foreign policy focus is the high north. There are both strategic, geopolitical, security and environmental reasons for that:

- The discovery of huge energy resources.
- The technological development which makes it possible to produce them.
- The activity which the energy resources will generate both on- and off-shore in a vulnerable environment.
- The research and development involved.
- The prospects of booming business development in the northern parts of Norway, Finland, Sweden and Russia.
- Melting ice and consequently new shipping routes opening up as a result of climate change.
- Some of the world's largest surviving fishery resources.

I might add security and defence policy, but that has so far not been a main issue in our High North strategy. But we have signed an MOU with Iceland about cooperation on civilian defence. And when the Americans left Keflavik, Norway was one of the countries to speak within the NATO Alliance for a NATO presence to replace the Americans. And the last weeks French Mirage fighters representing NATO has been in Iceland. Interesting – because it shows a new NATO attitude in France with the new president.

All this brings Norway and its Nordic neighbours together, and it brings us into contact with our Russian neighbours. The High North can once again take a prominent place on the European stage. Norway has increased the focus and strengthened our contact with cooperating partners in the region: Neighbouring countries, but also multilateral councils and bodies. Like the Arctic council, the Barents Council, the Baltic Council, the NATO-Russia Council.

During the cold war, during the years of the Soviet Union, the High North was a frozen region, both climatically and politically. Many considered the region to be just about fish and navy submarines. Less than 20 years ago the eyes of the international community were focused on the military tension in the north. We considered ourselves to be the most strategic country in the NATO-alliance, due to the border between us and the Soviet Union. We were actually being spoilt – in the alliance. NATO invested in infrastructure and NATO troops were training in Norway. The High North was a security centre in Europe. Then the attention shifted elsewhere. Today, the High North is just *one centre* in Europe.

Nineteen years have passed since the first East Germans broke through the Berlin wall. The young people today may ask: which wall? I was recently in Berlin, and it is unbelievable that there was once a wall through the city centre. The new order in Europe started on the 9th November 1989. The Soviet Union collapsed like a house of cards. New states emerged. Both NATO and the EU have enlarged.

Of course, Norway's relations with Russia have fundamentally changed. Those relations have many aspects, some of them are demanding. But both Norway, Finland and Sweden have developed a unique form of cross-border and regional cooperation with Russia. Fifteen years of Barents cooperation has created a community of interests and opportunities for creating growth. Throughout the High North, neighbours have grown closer. We have increased our room for manoeuvre, which makes it possible to take advantage of this community of interests. The government's high North strategy provides important guidelines for just that. The Nordic countries have shown a will to create new regional opportunities in the Baltic and Barents regions. We will continue to do so.

The Norwegian idea of a cooperation zone extending over the Russian border has grown out of this tradition. But it is also a fact that we can best manoeuvre in new political waters and currents if we keep our most central anchor points. Being part of the transatlantic community is one such vital anchor point, now as before.

Our membership in NATO and our relations with the US form our security policy guarantee. And guarantees must stand firm. Close friendships, not least with the US, must be fostered and renewed. We share the responsibility for this. For Finland and Sweden, membership of the EU is a similar anchor point. And for all of us, the cornerstones of our foreign and security policy are the UN and international law.

But even-though these anchor points stand firm, they are also changing in the face of new challenges. Membership in NATO still entails solidarity among all the members of the Alliance. There is no change here. But the perspectives on today's security challenges vary more than they used to from one member country to another.

The 196-kilometre land border between Norway and Russia is a very peaceful one. Norway has never been at war with Russia. Indeed it is the

only one of Russia's neighbouring states that has not been at war with Russia at any time. And I would also like to remind you of a fact of great importance to the Norwegian people – that it was the Red Army which liberated the north of Norway in 1944, after which it withdrew. Historians have debated why this happened, but it did happen.

Since 1990, things have been changing. In 1990, approximately 3000 people crossed the border in both directions. Last year, there were more than 100 000 crossings. Moreover, we have created – together with Russia, Finland, Sweden and the European Union – an innovative regional pattern of cooperation in the north called the Barents Cooperation. This demonstrates in an interesting way that we can work with Russia from new perspectives. Moreover the European Union has established the Northern Dimension – a semi-institutionalised cooperation, of which Norway, Iceland and Russia are full participants.

Of course Norway and Russia are both global energy players and share interests in developing energy resources. The Snøhvit, or Snow White, gas field was discovered in 1980, but it was not until 2000 that new technology was developed which allowed it to be explored. It has been developed without a platform. All the installations are on the seabed and the gas is taken onshore by pipeline.

Then there is the Shtokman field on the Russian shelf. It is probably the world's largest offshore gas field. But it is situated 500 kilometres north of Murmansk and will probably not enter into production until the middle of the next decade. Meanwhile exploration continues for other geological structures in the area.

The management of energy resources, of fish and of transport – all of which Russia desperately needs for its development depends on cooperation and stability.

There are several issues in our High North strategy. We have a scientific programme called Barents 2020 to strengthen knowledge and research in the area. This includes all the Nordic countries and Russia, and a cross-border cooperation. The research infrastructure in the region will also have to include research concerning climate change. We invite scientists from all over the world to Svalbard to let them better understand the threats, and use the forces of the important and current political issue to draw the attention to the north.

The High North is environmentally vulnerable. Also ecologically and biologically. Climate change effects the globe as such. But the consequences will be particularly strong in the Arctic, in the polar areas. That is why we give such high priority to both multilateral and bilateral cooperation in the region. Important cooperating countries are Canada, Russia, Denmark/ Greenland, and increasingly the US. As parliamentarians we have given priority to talking to our American colleges about the vulnerability of the Polar areas and the possible global consequences.

In the Arctic we have witnessed an important international cooperation. The scientists have gone from being a tool of the military presence in the Arctic to deliver important information about the Arctic environment. The indigenous peoples in the Arctic have in a successful way found their voice in sharing with the rest of the world what they think about the impacts of the global change. The indigenous people's organisations have developed partnerships with scientists. This cooperation has brought us valuable knowledge about the Arctic environment and given scientific reports new dimensions.

At the global scene of politics two of the most debated topics are climate change and natural resources. Changing climate, with the melting ice, big storms and floodings, are on everyone's lips. The world's dependence on non renewable natural resources, and the connection between the extensive use of these resources and the changing climate, is widely

discussed. Climate change and the use of natural resources are the two most important topics in the Arctic cooperation. The solutions found between the Arctic countries will influence the rest of the world.

The Arctic plays a key role concerning both climate change and natural resources. The Arctic is believed to hold large parts of the world's undiscovered petroleum resources in the world, as well as large fish stocks and other natural resources, such as minerals. In the "Arctic Climate Impact Assessment" (ACIA), launched in 2004, the results of global warming in the Arctic were analyzed. The findings in this comprehensive report showed that the temperature in the Arctic is rising twice as fast as lower latitudes and reiterated that the Arctic is an early warning sign for the rest of the world with regard to climate change. Its major implications for the whole planet need to be addressed globally.

The opening of a Northern Sea Route has been discussed many times in the multilateral councils and bodies. The topic raises many important aspects; the increased marine access to the Arctic as a result of climate, commercial possibilities and environmental challenges. The prospect of routine shipping along the Northern Sea Route in summer raises important implications for the regional and global economy, for coastal communities, and for marine resources.

For Norway the living conditions for the people living in the Arctic is important. "The Arctic Human Development Report" was initiated at the Arctic Parliamentary Conference in 2000, and delivered at the Ministerial meeting in Reykjavik in 2004. This report is an important instrument in helping to remind us that there is more to the Arctic than flora, fauna and climate; people live there! We must ensure that we don't arrive at a stage where we end up knowing everything about the living conditions of the polar bear, but very little about those of the people who live in the region: The inhabitants!

The Arctic parliamentary committee has been a driving force in establishing the University of the Arctic, a virtual network for cooperation between universities in the Arctic region.

In the Arctic region we need to find ways to exploit all the rich natural resources in an environmentally sound and sustainable manner. We have to promote and invest in research, development and deployment of new technology. Thus, there is a need to establish a closer cooperation in the field of energy, with a focus on sustainable development of existing natural resources, energy efficiency and renewable energy resources.

Finally, a part of our High North strategy is to maintain a secure and stable area by the rule of international law. In this work we use both NATO and the UN. The rule of international law must be a basis for any activity in the north. In terms of land Norway is the 75th largest country in the world. In terms of population we are the 125th. But if we add the waters under our jurisdiction, we end up as no. 15 in terms of size. We have a jurisdiction over waters which are seven times as large as our territory. That gives us responsibility.

and Climate Change in the Regional and Global Context: A Historical Account

Willy Østreng, Ocean Futures

The last decades have seen dramatic changes in arctic politics and natural conditions. Due to a set of intermingling political and environmental factors, civil societal organizations are slowly but surely gaining access to areas of the North previously either designated for military purposes only or sealed off from human exploitation by the frosty fences of the sea ice. As a consequence, a brand new set of values, interests and priorities are increasingly making their mark on the political agenda setting of the High North, affecting the geopolitical significance of the region in international relations. A new 'Age of the Arctic' is in the making.

The purpose of this article is to substantiate and explain some of the driving forces behind this shift as they have manifested in the last decades. Two kinds of changes are at work here. One is *political*, referring to the cessation of the Cold War, whereas the other is *environmental*, stemming from the reductions in sea ice extension and volume.

Political Changes: From Cold to the Post-Cold War Politics

Cold War Politics

During the Cold War three intertwined and partly overlapping political

processes defined the preconditions for civil involvement in Arctic affairs: I. *Militarization,* II. *Centralization* and III. *Marginalization* (See Figure 1).

(I) *Militarization*: After World War II, the High North became the object of an unprecedented and large-scale militarization. This was due to the fact that the shortest attack route between the belligerent parties of the Cold War are above the Arctic Ocean. To be prepared to counteract the anticipated hostilities of the other party, both sides designated the airspace above the polar ice cap as a deployment area for their strategic bombers and intercontinental missiles, whereas the water column beneath the sea ice was assigned to strategic nuclear submarines. This deployment pattern gradually made the Arctic transform from a *military vacuum* prior to World War II, to a *military flank* in the 1950-70 period and to a *military front* in the 1980s. The gradual inclusion of the North into Cold War nuclear planning made most governments conceive of arctic security solely in military terms. National security became synonymous with military security. This had its bearing on the way in which political decisions were made in all the Arctic states.[a]

(II) *Centralization*: To retain authority and to avoid civil activities interfering – directly and/or indirectly - with military-strategic interests, central governments assumed control of the national decision-making process, and made arctic affairs the prerogative of the executive branch. Thus, interests of *high politics*, i.e those concerning the very survival of the state, ruled the day and defined the content of policy, managerial procedures and legislation in all littoral states to the Arctic Ocean. This prioritisation resulted in

(III) *Marginalization* of civil issue areas, which were subordinated to military needs and priorities and were controlled to keep a low profile in regional affairs. As a rule of thumb, security considerations gained the upper hand in setting national priorities for the North, and civil issue areas like resource exploitation, transport, research, rescue operations, native communities,

environmental protection etc were integrated into the realm of military and political tension. Whenever the military establishment perceived of a conflict between the two types of interests, the civil sector was obliged to yield.

Thus, the combined processes of militarization, centralization and marginalization deprived the Arctic of a cooperative atmosphere and sidetracked the interests of civil society in policy formulation (See Figure 1).

Post Cold War Politics

The first public attempt to break out of the Cold War security thinking came from the party most rigorously insisting on it in the past. On 1 October 1987 Secretary General, Mikhail Gorbachev gave a speech in Murmansk in which he signalled a willingness to initiate international cooperation in five civil issue areas: *energy planning*, *environmental protection, scientific cooperation*, and *transportation.*[b] In identifying these areas, Gorbachev also introduced a distinction between *military* and *civil* security. Both were regarded as vital for safeguarding national security, but the civil component was to be given priority from then on. The purpose was to create *extended security* through international cooperation by *decoupling* military and civil issue areas. Coexistence between rather than exclusion of interests was the prescription suggested to transform the region into a cooperative place for civil activities to take place on their own preconditions and on an equal footing with military activities.[c] This re-conceptualisation of national security unleashed three interrelated and partly overlapping political processes, counteracting the effects of the three Cold War processes:
A. *Civilianization,* B. *Regionalization*, C. *Mobilization* (See Figure 1).

The process of (A) *civilianization* is preoccupied with regime formation to foster international cooperation in multiple civil issue areas. It started out with the formation of the *International Arctic Science Committee* (IASC) in 1990. One year later, three new establishments saw the light of day:

the *Northern Forum* (NF), the *Aboriginal Leaders Summit* (ALS) and the *Rovaniemi process.* Then followed the founding of the *Barents Euro-Arctic Region* (BEAR) and the *Parliamentarians of the Arctic* in 1993. Last, but not least, the *Arctic Council* (AC) was formed in 1996. These spontaneous and highly uncoordinated establishments have opened up a whole new era of cooperation slowly but gradually doing away with the traditional East/ West divide. They manifest that civil issue areas have been assigned an independent position and role in relation to military priorities and that the endeavours to foster civil security has become a general concern of all littoral states. For the first time in Arctic history, a pan-arctic cooperative structure has been established to deal with the challenges of *low politics*, i.e those of civil society. *Environmental protection and preservation*, *scientific exploration* and *indigenous peoples* have been singled out by all these regimes as the most suitable issue areas for promoting multilateral cooperation. This development triggered the process of

(B) *regionalization,* which invites for the participation of lower levels of government in decision-making for the region. This first came to expression with the founding of the *Northern Forum*, whose prime objective is to further the dialogue and promote cooperation between regional governments in the circumpolar area, and to make the regional voice stronger and more influential vis a vis central governments in policy formulation. Another example is the Barents Euro-Arctic Region, that is based on the premise that the prime responsibility of furthering transregional cooperation across national borders rests with local governments and the civil societal organizations in the sub-region.[d] This process, in turn unleashed the process of

(C) *mobilization,* which addresses the broader participatory dimension of politics. All the cooperative regimes established in the 1990s explicitly invite for instance native participation. The Arctic Council has designated native organizations as Permanent Members, whereas extraterritorial States (i.e. states with an Arctic interest but without territory in the region) have been

assigned the status of Observers, ranking below the participatory status of indigenous organizations. In the context of the BEAR, no less than six different types of actors have been invited for participation: *external polities* (EU, non-subregional states), *regional territorial states* (Norway, Sweden, Finland and Russia), *subnational regions* (the eleven cooperative counties/ oblasts), *structural actors* (Secretariat, the Regional and Barents Council), *transregional actors* (Samis) and *societal actors* (companies, universities, cultural organizations etc). This multi-level and multi-player setting have given rise to a most pluralistic decision-making structure labelled the 'polity-puzzle' of the BEAR.[e] And what is more: societal actors like companies, universities, cultural organizations etc have been politically defined by central governments as the prime movers of regional development.

Combined the processes of civilianization, regionalization and mobilization make room for political authority and influence in different forms and on other levels than the state. None-state polities are increasingly claiming to be points of identification, as well as claiming greater political autonomy (for instance indigenous peoples). Thus, a new era of low politics and civil involvement in regional affairs has been put in the post-Cold War melting pot of Arctic affairs. The incentives to utilize this fresh political foundation for civil purposes is being strengthened by changes in the ice cover of the Arctic Ocean.

Environmental Changes: Sea ice reductions

Over the last 30 years, the average winter temperature in the Arctic has increased by six degrees Celsius. This warming has resulted in a decrease in snow cover and glacier mass balances, thawing of the permafrost, and a notable reduction in sea ice extent and thickness. Since 1978, the overall reduction of sea ice extent has been more than 10%.[f] New extreme minima of summer ice extent have been established repeatedly ever since 1980. As an example, the September ice extent in the Chukchi Sea was in 1998 25% below the prior minimum value over a 45-year period.[g] In late July

2007, the Arctic Ocean reached its absolute sea ice minimum so far. One year later the extent of sea ice was about 1 million square km bigger than at the same time the year before.[h] This notwithstanding, expert opinion is that the thawing is long-term and that the ice-edge will steadily migrate northward. In the last 30 years, sea ice thickness in the Central Arctic Ocean - a sensitive indicator of climate change - has decreased by 42%, a decrease of 1.3 meters – from 3.1 to 1.8 meters.[i] As a consequence, the influx of multi-year ice from the Central Arctic Ocean to the coastal areas – where shipping, fishing, whaling and oil prospecting takes place - has decreased by 14 percent from 1978 to 1998. On the basis of these and other scientific observations, model experiments suggest a further decrease in sea ice thickness of some 30%, and an ice volume decrease between 15 and 40% by 2050.[j] If this trend continues, one postulate is that summertime disappearance of the ice cap is possible in the course of this century and that significant areas of the Arctic Ocean may become permanently free of sea ice on a permanent basis.[k] Global warming is a fact, but how should it be interpreted? Are the recorded trends due to cyclical natural variations of restricted duration or evidence of long-lasting climate change?

Since science on complex non-linear systems, like the global "weather machine", cannot be modelled exactly, our knowledge on the relationship between global warming and climate change will remain somewhat simplified and limited, leaving room for scientific uncertainties, doubts and even controversies. This notwithstanding, prominent climatologists estimate the probability that the recorded trends result from natural climatic variability to be less than 0.1 percent.[l] The UN International Panel of Climate Change (IPCC) follows suit, stating with increasing certainty that the prime driver of global warming is anthropogenic, mainly caused by greenhouse emissions. This conclusion finds support in the fact that there is a 90% match between rising greenhouse gas emissions, mainly from use of fossil fuels, in recent decades and observations of a retreat of sea ice.[m] Most governments have taken the position of the IPCC, on which this paper is also based.

In the Arctic, the projected trends will raise a whole new set of social, economic, environmental, political, cultural, human rights and strategic questions presenting governments and civil societal organizations with complex challenges as well as fresh opportunities. The regional utility pattern is about the change. Let us illustrate this point by a limited number of sketchy examples.

An Emerging New Utilization Pattern

Petroleum prospecting

The continental shelf north of Russia is the biggest and shallowest in the world and assumed to be abundantly rich in oil and gas. This shelf has hitherto been off limits to the oil industry due to the presence of sea ice, lack of adequate technology, low energy prizes and Cold War-politics. Only the southernmost parts of the marginal seas of the Arctic Ocean have sufficiently benign ice conditions for seasonal prospecting and production, for instance the Barents and Bering seas.

The attraction of these resources are on the increase. Apart from the specific political and environmental drivers in the region itself, the attraction is also fed by the war against terrorism and the enduring political dramas of the Middle East and Central Asia providing the bulk of fossil energy at present to import-dependent countries in the Western world. To take energy resources from the Arctic complies with the policy of most oil and gas importing countries to reduce their vulnerability of being subjected to energy blackmails from governments in politically unstable areas. Thus, extraterritorial political conditions in southern latitudes may turn out to be a most important driver for producing oil and gas from the Arctic. This shows the integration of the High North in world politics on an issue area belonging to the realm of extended security.

Shipping: regional development and international trade

As part of the re-conceptualization of regional security and the civilianization

policy, the Russian government on 1 July 1991 opened up the NSR north of the Eurasian continent for international shipping (see figure 2). Although various transportation options are being studied at the moment,[n] sea transportation of fossil energy from these areas is certainly a strong candidate.[o] The Timan-Pechora Company – a consortium led by Exxon and StatoilHydro – is for instance focusing solely on tanker transportation for export of its oil output from these areas westward along the NSR. Ever since 1978 the Russian icebreaker fleet has succeeded in keeping the stretch of NSR from Murmansk to Dudinka on the banks of Yenisei river open for sailings 12 months a year. Revenues stemming from shipments of nickel from Igarka was the driving force behind this achievement. Revenues generated from sale of oil and gas will surpass those of nickel many times, and is highly needed and a backbone in Russian national economy. In anticipation of this, the Russian oil company, Lukoil has invested in a modern fleet of 11 ice-strengthened tankers to operate in these waters. In recent years a steadily increasing number of shipments of petroleum have been transported by this fleet from onshore production sites in West Siberia and Northwest Russia to Murmansk. Here the cargo is reloaded and transhipped with super tankers southward along the Northern Maritime Corridor to European and US ports.[p] Expectations are that these shipments will increase in the years ahead.

As seen from a geopolitical point of view, thousands of kilometres can be saved in freight distance, and 10 to 15 days in transit time between ports in the Pacific and Atlantic Oceans by using the Northeast and Northwest Passages instead of the Suez and Panama Canals. If this can be done on a year-round basis, the economic attraction of arctic waterways will be unmatched and can in the long haul contribute to revolutionize parts of international trade. There is an obvious, and at times considerable, distance advantage involved in using the NSR between ports in the Pacific and those in the Atlantic, as compared to the Suez and Panama Canals. The distance from Yokohama in Japan and Hamburg in Germany, for example, is only 6.600 nautical miles by way of the NSR, as against 11.400

nautical miles through the Suez Canal. This implies a 42% reduction in freight distance.[q] During summer time, when ice conditions are more manageable, voyages undertaken by Russian freighters confirm that the savings in freight distance can be converted into savings in freight time. Ten to fifteen days have been saved in actual operation time by using the NSR instead of southern routes. The continuous weakening of the sea ice regime makes such scenarios likely on a year round basis in a not too distant future.[r]

Environmental challenges

Increasing shipping with hazardous cargo through environmentally fragile waters may pose a serious threat to the well functioning of specialized polar ecosystems. The Arctic – of which the NSR area comprises a substantial part - contains some of largest pristine wilderness areas remaining on earth, including sizeable animal populations hitherto affected by little other than natural environmental factors. The state of the arctic environment is also important to many ecosystems further south, for instance the migratory fish species in the Bering and Barents Sea. The ecosystems of Gaia are interconnected. Although, arctic organisms and habitats are no more vulnerable to human impacts than those of other regions, the physical conditions of the Arctic, such as low temperatures, may render the effects of such impacts more complex, long-lasting and far-reaching than at lower latitudes. For this reason, there is a pressing need to take extraordinary precautionary steps to make economic activities environmentally sustainable.[s] Here, economic benefits have to be weighed against environmental concerns.

Indigenous peoples

The social consequences of a changing ice regime are no less serious. The northward movement of the ice edge forms leads of open water between land and sea ice. This implies that indigenous peoples can no longer use the ice cap effectively and readily for hunting and transportation – a core parameter in their culture and way of life. Wherever depth conditions allow,

these leads will also be used by cargo vessels to keep up the speed of deliveries and reduce the risks of accidents. This will in turn affect native fishing and whaling taking place in the same leads as those used by ships. Here, the objective of preserving indigenous cultures as expressed in the various regimes of the civilianization process is put to a serious test.[t]

Military interests

The melting of sea ice is about to change the operational conditions of strategic submarines (SSBNs) operating beneath the sea ice canopy in the Central Arctic Basin. The sea ice has ever since the late 1970s, early 1980s acted as a "protective shield" preventing the effective application of anti-submarine warfare (ASW) against SSBNs seeking protection from the ice cover. It prevents the effective use of most ASW measures from the ocean surface (i.e. deepwater bombs) and reduces the effectiveness of listening devices on the sea bed. Even hunter-killer submarines are restricted by sea ice conditions in their efforts to detect, track and destroy SSBNs in these waters.[u] The US Office of Naval Research puts it succinctly: "The geographic proximity of the Arctic Ocean to North America, Europe and Asia makes (the Arctic Ocean) a particularly attractive area for the stationing of strategic (ballistic missile) submarine. …….(T)he ice canopy makes deployment of surveillance systems costly and difficult. Stationary submarines can take refuge near the ice, where they are virtually undetectable and invulnerable to attack: or in the marginal ice zones, where environmental noise masks their presence."[v] The Central Arctic Basin has to a large extent served Soviet and Russian SSBNs as an operational sanctuary for decades, preserving the strategic balance.

The gradual disappearing of the ice, will according to the US Office of Naval Research "..eliminate the haven now provided to stationary submarines by ice keels. Active sonar detection of submarines, both by ASW sonars and acoustic torpedoes, will become feasible… (and) the melting of sea ice will turn (the Arctic Ocean) into a conventional open-ocean ASW environment, with none of the advantages it now affords to an adversary

strategic submarine."[w] The usefulness of the sea ice for enhancing the survivability of Russian SSBNs is in the process of changing, requiring dramatic alterations of existing strategic concepts. The same applies to military surface operations.

Conclusion

Changing politics and environments have altered the operational preconditions of human involvement in the utilization of Arctic potentials. The processes of civilianization, regionalization and mobilization, have multiplied the number of voices having a legitimate interest and say in the outcomes of this development. The regional political agenda setting is getting more complicated, not least because the interests of high politics will share operational space in these waters with low politics. This increases the likelihood of contacts between spheres of interests, enhancing the possibility of conflicts. Thus, the challenges of regional post-Cold War politics in light of the climate change calls for cooperation within and between sectors, nations and governments extending far beyond the region itself. The Arctic at large is gradually being assigned a new geopolitical role in international affairs. It is no longer off the beaten track of southern civil politics.

Civil Societies in Arctic Security Politics: From the Cold War to Post-Cold War

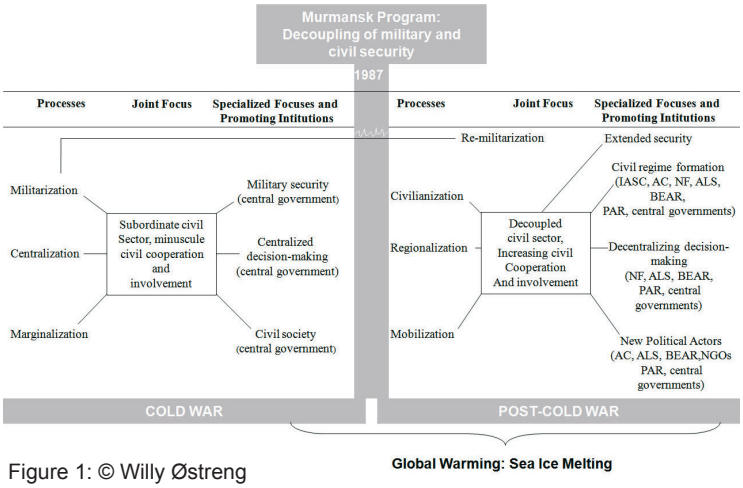

Figure 1: © Willy Østreng

Figure 2: The Northern Sea Routes

Endnotes

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Changing Geopolitics of the North

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The circumpolar North has been described on a spectrum ranging, from a colonial external point of view, from a periphery to an internal image of a homeland of peoples with their identities. In classical geopolitics the North was seen as a reserve of natural resources and military space for patrolling, training and testing for the sovereignty, and security-political and economic interests of the arctic states. The industrialized, militarized and divided circumpolar North of the Cold War, however, started to thaw in the late 1980s as a result of increased interrelations between peoples and civil societies, as well as international cooperation and region-building by states.

This more human approach of geopolitics in the 1990s meant, on one hand, increased stability and decreased military tension, and, on the other, a rise of wide and deepening international and inter-regional cooperation. As a result of these developments, the circumpolar North has become a stable and peaceful area. Further, this meant a significant change in northern geopolitics. However, neither international relations nor geopolitics remain unaltered, and consequently, the geo-strategic importance of the region is growing, with significant geopolitical, socio-economic and environmental change occurring in the North with regard to certain factors, such as strategic energy resources, energy security and climate change (e.g. Heininen 2007b).

In the manifold growth in its geo-strategic importance, which the North has recently witnessed we can find on one hand, continuity of how in the North "space" has been utilized and treated as "non-political" in classical geopolitics. Unlike new geopolitics that emphasizes indigenous peoples as (international) actors and the importance of identity/ies. Further, critical geopolitics has another approach of "politicization" of space which can be seen on one hand, in external and internal images on the Arctic (e.g. Heininen 2007a), and on the other, how knowledge and power are used when defining impacts of climate change such as 'uncertainty' in the North. (see Table 1)

Significant geopolitical change: from confrontation into cooperation

The transformation from the confrontation of the Cold War period into wide international cooperation in the 1990s was the first significant change in circumpolar geopolitics and international relations. Further, this development emphasizes the importance of cooperation across national borders to foster political, common and comprehensive security and promote human development and democracy (Östreng 1999, 16-17; Heininen 2004). The change also meant a new institutional landscape based on wide international, mostly multilateral, cooperation in and for the circumpolar North with both intergovernmental and civic organizations and forums (e.g. Chaturvedi 2000), such as the Conference of Parliamentarians of the Arctic Region, the Arctic Council, the University of the Arctic and the Northern Research Forum.

In the circumpolar North the end of the Cold War period has meant many changes and been perceived in various ways. For example, according to Willy Østreng (see this volume) the endeavour of the post Cold War world society, mostly meaning re-conceptualization of national security has been promoted through the sets of interrelated processes, of "civilianization", "regionalization" and "mobilization". Correspondingly, as stated by the Arctic Human Development Report the main themes, or trends, of

circumpolar geopolitics and international relations in the early 21st century are first, the increasing circumpolar cooperation by indigenous peoples' organizations and sub-national governments; second, region-building with states as major actors; and third, a new kind of relationship between the circumpolar North and the outside world, demonstrating that the North has relevance in world politics (Heininen 2004; also see Table 2). These processes and themes include region-building and the establishment of new organizations such as the Arctic Council (Ottawa Declaration 1996), devolution of power and high activity of indigenous peoples' organizations, growing academic and scientific cooperation as well as concern over the environment by civil organizations and civil societies. As a result of the latter, a new kind of 'wild' circumpolar cooperation for the environment and some sort of 'connectivity" between non-state actors was born, and consequently, central governments were forced to react to the new situation by more sophisticated mechanisms such as institutional inter-governmental cooperation to regain control over international cooperation and reassert the primacy of their national interests (e.g. Käkönen 1992).

All in all, each of the above, *per se,* indicates and reflects a significant change, and when all are put together the picture is a multi-functional process more complicated than previously in the colonial days or in classical geopolitics.

Further, northern peoples' organizations have become international actors with their own agendas and certain relevance in world politics like the influence of the epistemic community in the Stockholm Convention on POPs shows. This is largely based on the above-mentioned 'connectivity', which has also been interpreted to mean that the circumpolar North can be defined as an internationally distinctive region (e.g. Young and Einarsson 2004, 18-19), in addition to the ability of northern peoples and communities to develop "innovative political and legal arrangements that meet the needs of the residents of the circumpolar North without rupturing the larger political systems in which the region is embedded" (ibid, 237).

All in all, the international cooperation of the circumpolar North at the early-21st century can be interpreted to be a success story due to the fact that the main aim of all relevant international actors, i.e. to decrease military and political tension and increase stability and peace in the northern 'military theatre' of the Cold War, has been reached. Consequently, security-politically the circumpolar North is a stable and peaceful region without wars and armed conflicts or even reasons for serious conflicts. It is not challenged with significant global issues such as food crisis, climate crisis and developing crisis, as defined by the General Secretary of the UN at the G8 Summit in July 2008. This is a real achievement in a time that has seen about twenty major armed conflicts the world over, mostly in Africa, Asia and the Middle East (Harbon and Wallersteen 2007).

Another significant geopolitical change: growing global interest toward the North

As a stable, peaceful and advanced region, the circumpolar North has seen positive developments within the Northern Hemisphere as well as in world politics: Within the region, a number of innovative political and legal arrangements have been developed, while a certain devolution of power has also taken place. The diversity of northern nature and northern cultures is remarkable. Due to the fact that climate change has influenced greatly the northernmost (coastal) regions of the globe, their peoples, settlements, man-made infrastructure and nature (e.g. ACIA 2004), the Arctic has become one of the first fronts, and is used as a parameter, of climate change. Indeed, the circumpolar North has become a global "laboratory" or "workshop" for (multidisciplinary) research on climate developments which has made the North academically interesting (e.g. Heininen 2005).

Further, the circumpolar North has recently witnessed a manifold growth in its geo-strategic importance due to, on one hand its rich natural resources such as conventional oil and military-political reasons, and on the other, global security and environmental problems such as the existence of the nuclear weapons system, long-range air and sea pollution and climate

change (Heininen forth-coming). There are also international governmental organizations and major powers from outside the region which take an interest in the North. For example, the new Northern Dimension is interpreted to mean a common policy of the European Union (EU), the Russian Federation, Iceland and Norway in Northern Europe.

In addition, northern issues are finally being given a higher priority on the EU's agenda and matters relating to the north have been an important concern of the United Nations (UN) for years; for example, the UN has special duties in the region through the UN International Law of the Sea. Major powers from outside the region, such as the UK, France, Germany, China, Japan and South Korea are taking a growing interest in many aspects of the North, such as in scientific research, a field which allows the waving of a "flag", particularly in the IPY 2007-2008.

Finally, there is a growing world wide, even global, economic and political interest toward the northernmost regions of the globe, particularly due to the estimated fossils in the shelves of the northern seas and visions of new trans-arctic sea routes. Consequently, trans-national corporations (TNCs) have strong commercial interests in becoming involved in the utilization of energy resources. However, state-owned, national oil and gas companies, such as those in Norway and Russia, now control about 80% of the world's reserves (Robinson 2007).

Indeed, the North of the 21st century is not isolated, but closely integrated into the current world of globalization and a part of the international system. For example, two of the above-mentioned themes of circumpolar geopolitics are contextually related to globalization as cooperation between indigenous peoples' organizations can be seen to be global, and the relationship between the North and the rest of the world is of a global nature. Furthermore, individuals, societies and governments are impacted by similar global problems and challenges, and the growing demands placed upon them by the rest of the globe - all of which transcends the traditional distinction between a core and a periphery.

At present, however, this is not the whole picture; in addition to the circumpolar North being the focus of growing global interest, the eight arctic states also demonstrate a growing, national interest in the region and its resources. For this there are certain geographical, geopolitical, legal and historical reasons; geopolitically and according to international law the region consists of the northernmost parts of the eight arctic states with their sovereignty and national interests; therefore although the region has much in common such as geography, common history, same kinds of natural and climatic conditions and the current intensive interrelations, it is not totally correct to claim the circumpolar North as a distinctive international region.

Whereas for centuries the arctic states maintained a colonial policy toward their northern peripheries, nowadays they have concentrated their national interests on the North, and some of them have a special Northern agenda and policy. Consequently, in northern regions there exists a recognition of the politico-cultural legacy of state colonialism as well as a firm residue of 'national interest' by a state.

All in all, in the North a significant level of rapid and multi-functional change, which might have several consequences, is occurring. This raises a number of questions, e.g. whether the governments of the arctic states are ready for a thorough discussion on relevant issues, such as mass-scale utilization of basically untapped natural resource endowments of the region, existing disputes, and energy security in the context of institutionalized international cooperation like the Arctic Council and the United Nations. Or will there be more traditional responses and solutions, such as increased emphasis on national defence in Northern regions? Or, will this happen in a bilateral context or in the context of different *ad-hoc* coalitions such as the five littoral states of the Arctic Ocean (e.g. Ministry of Foreign Affairs, Norway 2007)?

Key indicators of a geopolitical change

All this indicates that in the circumpolar North significant and rapid environmental, geo-economic and geopolitical change is occurring. As a result of this, northern regions and seas have become a target area for the growing economic, political and military interests of central governments of the arctic states as well as of major powers outside the region and trans-national companies. A major attraction in this regard are on one hand, the huge (mostly potential) deposits of oil and natural gas in the region and the potential contribution of northern sea routes for global shipping; "states' activities aimed at ensuring energy security are an important element in their foreign policy", and "countries' efforts to assure access to natural resources affect security dynamics" (Proninska 2007, 227-228).

With a view to the above, on one hand, scenarios for the future have been established (e.g. PAME; Brigham 2007) and on the other, security implications and threat pictures due to global warming have been drawn (e.g. Hubert 2007; Borgerson 2008), trying to foresee what will happen in the North. It may be more relevant and useful, however, to identify main indicators, i.e. the precise factors and dynamics which are indicative of changes in northern geopolitics. Consequently, I have listed the following geopolitical factors / dynamics, and relevant phenomena behind them, to be regarded among key indicators of the on-going multi-functional change in, and growing global interest toward, the North (see also Table 3):

1) First, **national sovereignty** which is seen to be endangered by climate change in some of the littoral states of the Arctic Ocean such as Canada. On the other hand, it acts like a trigger of, or it is used as an excuse for, new national claims to expand executive economic zone, or a right to utilize natural resources or make an option for them;

2) Second, **military presence** is there for the defence of sovereignty and national security of the state. Security and military-policy includes first of

all aspects of normal national defence and routine patrolling such as the patrolling of strategic nuclear submarines (SSBNs) and long-range strategic bombers in and above the Arctic Ocean, testing of weapons and military training, and deployment of radar stations, but also other implementations of the nuclear weapon system such as the missile silos in Fort Greely in Alaska as parts of the US national Missile Defence (NMD) system (e.g. Heininen forth-coming). In spite of the dualism of climate change here the development is not determined and does not necessarily mean that "the Arctic could descend into armed conflict" as for example, Borgerson (2008) has speculated;

3) Third, the **utilization of natural resources** has high strategic importance due to basically untapped rich natural resources, particularly oil and natural gas. Already the current total gross production of the circumpolar North of about $225 billion (Duhaime and Caron 2006), based predominantly on the large-scale exploitation of hydrocarbons for the energy needs of the northern developed countries, is high, but the rough estimation that circa 20-25% of the world's undiscovered oil and natural gas resources are 'hidden' in the shelf of the Arctic Ocean makes the utilization of strategic energy resources a very important factor;

4) Fourth, **energy security** is an important factor here due to the fact that it has a growing strategic importance among national interests for the state to assure access to energy resources. Further, energy issues are assuming a central position for the relations between major powers such as the USA, the EU, Russia, China and India, the interruptions of Russia's energy supplies with its neighbours finally "made energy security a central topic", and security relations became 're-energized' (Dunay and Lachowski 2007, 23 and 48). Consequently, due to the fact that energy security is a very global phenomenon the North is becoming highly strategic in world politics and geo-economics;

5) Fifth, following the growing utilization of energy resources and increased flows of globalization, infrastructure and transportation are badly needed.

Proper logistics include both the existing sea routes and trans-arctic routes through the Arctic Ocean which indicate a revolution in global shipping and trade.

6) Sixth, **technology**, particularly a faith of technology, is an important factor, because the mainstream thinking is that an advanced, new kind of cold climate technology will solve the challenges and problems and thus save us. Here the irony is that at the same time when climate change helps to overcome the (last) challenges of nature such as sea ice and makes it easier to "conquer" the North Pole, it creates bigger challenges for human-built infrastructure in melting permafrost, which is considerable according to the theory of "risk society" (e.g. Beck 1992), and a need for accident prevention;

7) Seventh, clear indicators of impacts of globalization in the North are on one hand, **global security problems** such as the nuclear weapon system and its new applications and testing of new weapons. On the other, there are global environmental problems such as long-range air and water pollution, and climate change which are able to create major challenges and risks to communities on coastal regions, forcing people either to adapt or become environmental refugees;

8) Eight, there are more **flows of globalization** such as flows of raw materials and goods, or those of labour and tourists, and they are detectably influencing the northern environment and northern communities;

9) Ninth, institutionalized **international, mostly multilateral cooperation** with stability emphasizes cooperation instead of confrontation and consequently, is the most fundamental human response to new challenges. Here climate change can be taken either as a new kind of a (geopolitical) factor to challenge the current intergovernmental cooperation or a good reason for deeper scientific, educational and other knowledge-based cooperation between different actors;

10) Tenth, followed from the previous **education, science and traditional knowledge** can be included as relevant new geopolitical factors in the age of uncertainty, particularly in combination with resilience, and political and legal innovations; and

11) Eleventh and final, **climate change** with its multi-functional impacts is one of the newest factors, in actuality a significant factor *per se* (Heininen 2008), to change northern geopolitics by bringing uncertainty into the societies, politics and governance of the region. Like the approach of "politicization" of space by critical geopolitics knowledge and power are used when defining impacts of climate change ´to mean 'uncertainty' in the North.

In sum, all this entails the undoubted emergence of relevant issues and challenges which we will face, and consequently, we could analytically discuss these relevant issues and challenges, which are both northern and global and have a sort of costs and benefits calculation, too.

Conclusions

At the beginning of the 21st century, the circumpolar North is a stable and peaceful area with institutional, international cooperation, and the region has relevance in world politics. There is an increase of the geo-strategic importance of the region due to, on the one hand, an emphasis on geo-economics and the importance of global problems such as climate change, and on the other, growing interest among the arctic states and major powers outside the region in the huge energy resources and the potential share of more accessible arctic regions in the global economy. Consequently, the strategic importance of the North is becoming high on the agenda in geopolitics and economics, both in the Arctic states and major powers outside the region. Furthermore, due to a growing need for, and even competition over, energy resources, there has been a steep rise in competition and claims on northern sea areas and shelves.

Further, and following from the above, significant geopolitical, socio-economic and environmental changes are occurring in the North with relevant consequences, such as conditions of uncertainty, bigger risks to the environment and human security, threats to local autonomy and sovereignty. These developments have given rise to traditional responses by individual governments, reducing the impact of multilateral cooperation, when actually there is a need for broader and deeper international cooperation both within the region and on a global level.

As a result of these developments, there is a growing and obvious need for fundamental discussion and negotiations on these issues and challenges. It has become an urgent question on which platforms these discussions will be conducted, either in the context of some *ad-hoc* coalitions or in institutionalized fora such as the Arctic Council and conferences of the Parliamentarians of the Arctic. Further, due to a growing and obvious need for fundamental discussion and open dialogue, the interplay between science and politics might help. One potential stage for open dialogue on relevant northern and global issues, as well as the implementation of the interplay between science and politics, is an Open Assembly of the Northern Research Forum.

Table 1: Main contents of Geopolitics and its implementations in the North

Classical geopolitics: occupation and control of (physical) space, power politics of a state
– e.g. the resource models, the technology models

New geopolitics: geo-economics, actors and identities
– e.g. Indigenous peoples as actors, the Northern Dimension

Critical geopolitics: politicization of (physical) space, importance of social space, interrelation between knowledge and power
– e.g. Arctic images, uncertainty of climate change

Table 2: Main themes of circumpolar geopolitics and international relations (according to AHDR 2004)
.. and how Globalization can be seen here

1) Increasing circumpolar cooperation by indigenous peoples' organizations and sub-national governments
- using the definition of globalization in geo-economics this is global

2) Region-building with unified states as major actors
- first of all regional, but can as well be defined global

3) New kind of relationship between the circumpolar North and the outside world
- definitely global, and has always been there, but the point is the direction(s)

Table 3: The Changing Geo-Politics of the North: Main Indicators

Factors	Phenomena
1) National sovereignty	Physical space
2) Military presence	National security Power
3) Utilization of natural resources and new claims	Resource models Jurisdiction
4) Strategic (energy) resources	Energy security
5) Transportation	Logistics
6) Technological development	Modernization Faith of technology
7) Global (security) problems World order (models)	Globalization
8) Flows of globalization	Geo-economics
9) International cooperation and dialogue(-building)	Integration Governance
10) Education, science and traditional knowledge	Human capital Interdisciplinarity Interplay
11) Climate change	Uncertainty Epistemic community

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