Security in the North

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Geopolitics meaning either military strategies or the utilization of natural resources, or both, has traditionally been a dominating part of the relations between the North and the South, i.e. the circumpolar North and the outside world. In the 1990s there was a change in circumpolar geopolitics from the political competition and the military confrontation of the Cold war period into international cooperation in many civilian fields, and partly even within the military. It also became relevant to define security in a more comprehensive way and to discuss, for example, environmental security and everyday security.

At the beginning of the 21st century the Circumpolar North has, however, still a high strategic importance both militarily, especially for the USA and the Russian Federation, and economically due to the utilization of, and competition over, rich natural resources, especially dealing with strategic ones like oil and gas, on one hand, and on the other sea and air transportation routes. Following from this as a sensitive field of politics, traditional security-policy is mostly excluded from the official political agendas, and disarmament in the North has been slow. Apart from military security, comprehensive security from the point of view of people deals with practical issues of the environment and social and economic conditions of people like, for example, the following questions show: How to clean-up the mess after a 'party' such as the nuclear waste in the Barents Sea region and the pollution in the radar stations of the DEW-line in North America? Does the public concern over trans-boundary pollution and academic discourse on risk and threat transfer into action, i.e. push the officials to implement the changes in problem definition?

When dealing with security it is necessary to ask more fundamental questions like: Whose security, security from what point of view, and what kind of security? How to define, or conceptualize, security matters and correspondingly, how to measure a threat and risk? What does security at an individual level mean exactly? Does a comprehensive security give some added value, or is it, actually, a trap, meaning militarization of the environment or a new mission to an army? And, finally, what about security from the point of view of a region?

1. Different concepts of security

Discourses on security include different concepts of security, and terms of a risk and a threat. Security has usually meant, and still mostly means, the so-called traditional security, i.e. security-policy and military-policy of a unified state. It is sometimes called hard security. Broadly addressing the question of security there is a need to take an another approach and broaden the definition of security from traditional security and the military into comprehensive security, which is sometimes called soft security. This can mean either environmental security, when environmental problems and pollution are interpreted as a threat or risk to people and a society, or socio-economic security, or both. Then there is also civil security, i.e. security from the point of view of citizens as individuals meaning, for example, human rights and human health.

1.1. Traditional security

The international system is still largely based on unified states and inter-governmental cooperation, i.e. the unified state system. Correspondingly, the ultimate aim of a unified state is to guarantee security of its citizens and the sovereignty of a state, which is done, for example, by controlling the

national borders and trying to implement national interests. Here the national borders are the outer edge of national sovereignty and the foundation for international law. Correspondingly, hegemony and force, gained first of all by a military power, are the main means to establish and maintain sovereignty and national interests. Recently a military force has also been used to defend human rights against ethnic and other violence.

Traditional security means weapon-orientated security, i.e. that security is finally guaranteed by the military. It emphasizes power, both political and military power, as a useful tool for national security, which is very much according to the theory of new realism (e.g. Waltz 1979). This deals closely with the core of the unified state system. Security achieved by the military is, first of all, for the state centers and their interests including to gain control over the whole territory and its natural resources, even beyond the national borders. Through an army, and arms race and arms trade, traditional security also deals with economy of a state as an important field of industry and a relevant part of the growth-orientated market-economy.

Either due to an expansion of a state, for example according to the theories of explanative geopolitics, or because of a need to the defend yourself, there have been, and are, wars or other armed conflicts. In international relations, when we speak about conflicts, we usually mean either armed conflict or war, which is the most extreme form of conflict, or international or regional conflicts. These conflicts on different levels are mostly either inter-state conflicts, where the main actors are states, internal conflicts or civil wars, state-formation conflicts between armed and organized opposition or tribes, or a new kind of warfare like fight against terrorism. Competition is usually distinguished from conflict, but it is also a type of opposition (Wright 1980).

The post-Cold War international organizations and fora like for example, the Arctic Council and the Barents Euro-Arctic Region (BEAR) are, at least are said to be, mostly for security and stabilization, which is according to the concept of a security community by Karl Deutch, and further, a part of the stability policy, or the so-called peace project, of the West (e.g. Heininen 2002). However, they do not include traditional security-policy in their official agenda, and matters related to military security are excluded (e.g. Declaration 1996). The situation is not, however, so clear, because on one hand, these external political structures deal with nuclear safety, which is related to the military (e.g. Heininen and Segerståhl 2001), and on the other hand, the future of security, meaning mostly traditional security, can include the three scenarios of divided, partly divided, and non-divided, depending how security is defined narrowly or comprehensively (Nokkala 2002, 77-85). ´

Thus, traditional security is not so much for peripheries, which are sparsely populated, although many of them as strategically important are target areas for the projection of military power. This is also the case in the Circumpolar North Security and security policy in the North is still largely determined by state centers outside the region, such as Moscow and Washington, and not by actors inside the region. Northern residents are excluded from security policy planning because of the problematic and sensitive nature of security policy in general and especially the military, because of the international nature of competition and disputes over the natural resources of the North like for example, oil and gas deposits of the shelf of the Barents Sea.

In the background is traditional geopolitics, as portrayed for example by the Heartland theory of Halford J. Mackinder, which uses to define geographical regions from the point of view of geography, technology and military power like for example teleology on space includes the so-called technology models of geopolitics, where geography and technology meets each other (Apunen 1991). Advanced military technology as a part of technological revolution forms the technical base by which humans relate to the physical environment (Till 1987, 25). These models have been applied into the situation of the Circumpolar North, where the shortest geographical distance between Eurasia and North America made possible short flight routes over the Arctic Ocean for both U.S. and Soviet bombers and missiles possible. Due to the experiences of the World war II the technology models, in a way, opened the North to the military strategies of the

super powers in the Cold War period. And finally, the new arms technology and technical innovations like for example, missile and radar technology and especially nuclear arms and energy made it possible to use of the Arctic for military purposes (Heininen 1991). The strategic importance of the SSBNs in the Arctic Ocean is one of the most impressive implementations of these technology models.

1.2. Comprehensive security

It is well known, and recently more so, that wars always damage the environment, both the natural and human environment, and there are also different remnants of wars like, for example, sea and land mines. The Gulf War in 1991 is a good example here, because it was the first modern environmental war, or eco-war, because the environment was used for the military, and it was warned beforehand. Further, the so-called environmental warfare, as one but prohibited model of war, has the main aim to influence or modify the environmental for the military (e.g. Warfare in a Fragile World 1980). (Heininen 2000, 107-114)

Social scientist Johan Galtung went further, when he emphasized in the beginning of the 1980s, that there is a keen relationship between the environment and security and the military: "It is an error to think, that there is little or no relation between the degradation of the environment and security matters" (Galtung 1982). Indeed in general, and on a global scale, there are relevant links, relations, and contradictions between the military and the environment that can be seen in the routine activities of armies (e.g. Westing 1988).

It has even claimed that there is going another kind, much unknown war, the so-called "armies' war" on the environment in peacetime, which means that the military is causing local and global environmental degradation both through direct pollution of the air, the earth and water, and indirectly by causing continuous environmental and social threats and risks related to nuclear and other weapons of mass destruction (Renner 1991). And that armies are not only "normal" polluters, i.e. pollution caused by regular human activities, and "special" polluters, i.e. toxic and radioactive waste, but are "protected" polluters in that they generally operate outside environmental legislation (Finger 1991).

Although tens of regional and civil wars per year threats and security matters have changed, and include such issues as trans-boundary pollution and environmental catastrophes, infectious diseases such as HIV/AIDS, illegal immigration and organized crime such as drug and human trade. After the collapse of the Soviet Union the list of threats was increased by the smuggling of components of nuclear or other weapons of mass destruction and by the a gap in living standards (e.g. Pursiainen 2003).

Followed from this, such terms as civil, or civic, security and civility have been launched to replace the old-style security thinking, and this kind of everyday security at an individual level deals with practical issues of human health, and social and economic conditions (e.g. Griffiths 1993; also Security in the European North 1999). This kind of social, or civil, security which involves also culture, human rights, freedom of expression and security of communication, is an alternative point of view to traditional security thinking. Further, this kind of broader concept of security is not only theoretical thinking or discourse but also practice in many, but unfortunately not all, parts of the globe. In the North it is important to have another point of view like for example, that of indigenous peoples to the interests of southern majorities in order to decrease the influence of, and the dependence of the region on, non-regional actors and outside forces, who interpret the region as a potential military arena (e.g. Heininen, Käkönen and Jalonen 1995).

Today, the extended concept of security, comprehensive security, is widely accepted and used in the, especially, when issues of trans-boundary influences and cross-border co-operation are being discussed. This extended definition of security is based on the idea that there is a vast number of

threats and risks to national security, besides traditional military threats, such as nuclear accidents, crime across national borders and international terrorism (Buzan 1991). For example, nuclear safety is an acute and challenging topic of the current discourse on security, especially when extended definitions of security are used. This is quite natural because security is an attractive concept that appeals to basic human instincts—everyone wants to be secure.

Behind are those other theories and points of view, which take into consideration the so-called fields of "low" politics, such as environmental, social and cultural issues and civil society, and even emphasize the importance of the environment. For example, new geopolitics has another approach to power and security and challenges both the power and hegemony politics of the Cold War period and the geo-strategic discourse of the unified-state system. The focus is not how to control a region and get more power through the control but how to reach socially stable and peaceful situation and environmentally sustainable order (Chaturvedi 2000). New geopolitics emphasizes different actors, space including a social space and identity, or identities, which can be taken as the main factors of new geopolitics. This means that not only geography and political systems are important but also people(s), societies and the environment.

In the circumpolar North this is relevant. Northern indigenous peoples have been worried about both toxic threats and impacts of climate change in the Arctic, especially dealing with their traditional livelihoods such as hunting and food security (Paci, et al, 2004). They have already successfully pushed the governments to sign the Stockholm Convention on persistent organic pollutants (POPs), which can be taken as an interesting success story on fruitful cooperation between northern indigenous peoples and Arctic epistemic community (see e.g. Northern Lights against POPs, 2003). There are more and more complicated environmental conflicts, which are mostly due to the increased utilization of, and competition over, natural resources, but also due to the rich variety of both regional actors and actors from outside the regions, and their different interests. Further, competition, even conflicts, between the indigenous peoples and the states might also continue especially in the context of the Arctic Council, when trying to define 'sustainable development' in the Arctic as the main goal and another pillar of the Council.

The concept of environmental security, however, appears much less fruitful than some of the proponents have realized, and the result of that discourse has been much opposite. In the debate of comprehensive or alternative security there have been argumentations and contributors arguing that the concept of security carries such a heavy militaristic, nationalist and ideological aspects and burden, that it is even dangerous to label non-military issues such as the environment as security ones (Deudney 1999). The main risk lies in applying the traditional means of providing security to new kind of threats: conventional security institutions, like armies, are not very practical for securing people and states against new threats. To the contrary, armies are likely to produce these threats themselves, as was the case in the Kursk accident. (Häyrynen 2003)

Thus, to try to broaden the mission of the military to include environmental protection has more often meant vice versa some sort of militarization of the environment or 'militarized environment' than 'green security' (e.g. Käkönen 1994). Or, even when the military comes to control ideas about environmental problems, an environmental rearmament of an army greatly strengthening authoritarian tendencies in environmental policy and given a new mission to it (Haila and Heininen 1995).

1.3. Threat – Risk

When dealing with security, either traditional or comprehensive, we deal with a threat and a risk. In the background there is a discourse, what to mean by a threat and a risk, and cross-border threats, environmental hazards and catastrophes, and for whom, for individual(s), community/ies, (sub)region(s) or country/ies. In other words, relevant is how to define a threat and a risk, and how to put them into the hierarchy of threat pictures.

There is a principle difference between a threat and a risk, although so often they are taken as synonyms: A threat can be physical or economic, it can deal with traditional security, human rights or social status. It is multi functional, mostly subjective and psychological, and when dealing with a threat it is needed to ask, a threat from whose point of view, because it depends what is an interpretation. (Nokkala 1999, 48-52) Unlike, you are able to qualify, rank and measure a risk based on a probability calculation – how probable is a risk. A risk is, however, relative, because people interpret different things as a risk. A risk is socially real, if it is interpreted real, either it has materialized or not. (Haila 1989, 10; Wahlström 1994, 37-40). The relevant difference between a threat and risk is that a risk is conscious, and therefore risks are a part of normal human life.

Ulrich Beck (e.g. 1992) has claimed that a modern society is a risk society, because modernization is based on industrialization, which has interpreted to mean progress, and it includes environmental risks of technology. The military is here a good example, since the development of technology has not meant a decrease of accidents due to either human mistake or technical error, or combination of these two (Heininen 1991, 110-118). Therefore, there is a need for reflexive modernization, radical skepticism and thinking that there is a lesson from the discourse on the concept of a risk society.

This is very much the case with nuclear power: Although the so-called Nuclear Dream promised lot of cheap energy and security, nuclear affairs, either nuclear power
for civilian purposes or nuclear weapons, always include risks, risk for people and the environment. The fundamental difference between nuclear risks and other types of environmental risks is that, as a rule, non-nuclear risks are caused by activities within the industrial, agricultural, or urban systems, without any significant security dimensions.

2. Northern geopolitics I: traditional security-policy and the military

At the beginning of the 21st century security is still largely structured according to the concept of traditional security-policy guaranteed by the military. Although the international system is still in a transition after the end of the Cold War period, there is a possible transfer from the prevailing state of continuous regional wars and conflicts into a continuity of global warfare, some sort of endless fight against a new kind of evil enemy (e.g. Litmanen & Peltokoski 2003).

Among the signs of this are on one hand, the new hegemonic, or neocolonial, global trend by one super, or hyper, power and its alliance in name of a war against international terrorism, and on the other hand, a capability, and need, of non-state actors like for example, ethnic and religious groups to act globally and challenge the unified state system. One of the implementations of this is international terrorism, which has brought the so-called invisible enemy in a focus. This picture is possible, especially if there will be no solution for the most urgent challenge in the globalized world, how guarantee equal development for the whole human kind.

2.1. From a hot and cold war into transition

The 20th century brought the first wars into the circumpolar North and was characterized by a general militarization of the Arctic. After the World War II, which brought the first hot war into the North, the region was transformed into a military flank during the Cold War period, from the 1950s to the 1970s. By the 1980s it became a military front spiced by the nuclear weapon systems of the USA and the Soviet Union. Finally, in the last hot period of the Cold War period, the 1980s the maritime strategies of these two super-powers made the Arctic and northern seas, especially the ice-free reaches of the Barents, Norwegian, and Greenlandic seas, a heavily militarized 'military theater', both a military front and targets of both the Soviet and the U.S. militaries (e.g. Miller 1989).

As large and sparsely populated areas northern peripheries were, and still are, they are potentially suitable for the deployment, operation and testing of arms systems including the nuclear-weapon system. Military tests and manoeuvres considerably increased in the 1980s, like for example, nuclear tests in Novaya Zemlya, Russia, naval manoeuvres in the Norwegian Sea and low-level flights for military training in Goose Bay, Labrador, Canada. Indeed military presence and action in the Circumpolar North were comprehensive and diverse in the end of the Cold War period: there were naval bases, airfields and radar stations, modern nuclear-powered and -armed strategic submarines (SSBNs), nuclear attack submarines (SSNs), C3l systems, and areas for military tests and maneuvers, and all the categories of nuclear arms and energy facilities, too (e.g. Heininen 1991, 59-94).

In spite of the arms race and military tension between the two superpowers there were also negotiation processes on arms-control, and proposals and acts for arms control and confidence and security-building measures (CSBMs) with an aim to increase the stability of the international system (e.g. Purver 1988). Among the treaties are Soviet/Russian-US bilateral treaties like for example the Anti-Ballistic Missile (ABM) Treaty and the Strategic Arms Limitation Talks (SALT) 1 and 2 and, global treaties such as the Non-Proliferation Treaty (NPT) and regional treaties like the Intermediate-range Nuclear Forces (INF) in 1987 and the Treaty of Conventional Forces in Europe (CFE).

The geopolitical situation of the circumpolar North started to change in the 1980s. The so-called Murmansk Speech by President Mikhail Gorbachev (1987) in October 1987 as part of Glasnost and Perestroika of the Soviet Union was an indicator of the forth-coming change, because it initiated and encouraged to start international co-operation in the Arctic. It was especially the European North that changed dramatically, what was once primarily a security area and a military theatre evolved into a new kind of state of trans-boundary cooperation by many international actors.

Neither arms control treaties and confidence and security-building measures nor all the proposals for arms control had, however, any direct influence to the arms race and the military-political situation of the circumpolar North. The West did not even interpret the proposals of the Murmansk Speech in the right spirit and, instead of giving a positive response, suspected that the proposals for arms control were one-sided (Scrivener 1989). Although, the Strategic Arms Reduction Talks (START) I and II and the Comprehensive Test Ban Treaty (CTBT), signed in 1996, there is little real evidence of disarmament in the Arctic and northern seas, even though the military presence has decreased.

After the end of the Cold war period global and regional security arrangements were in transition, and there was some sort of competition between two kinds of forces: The so-called forces of continuity supported traditional security and arms technology, particularly nuclear weapons system. Correspondingly, the so-called forces of change indicate that there are new kinds of threat pictures like, for example, a lack of border security, regional armed conflicts, and trans-boundary environmental degradation, and therefore, a different kind of definition of security is needed. As a result, while armament was decreased, unilateral disarmament, which was mostly due to economic reasons, led to a decease in quantity, and there has been a rationalization of armament and armies, many of the old military structures, like the nuclear weapon system, are still there and in use.

The end of the Cold War and east-west tensions was followed by some sort of euphoria of peace and friendship, especially after the collapse of the Soviet Union, and this was strengthened by concrete actions for arms control and arms treaties between Russia and the USA. The West also gave promised to take new member-states into NATO and the EU. Indeed there was a strong support in Eastern Europe for a rapid NATO enlargement due to a sense of a lack of security with an emphasis that it should be a political project rather than a slow, bureaucratic process. The West

had, however, difficulties to implement its promises quickly, and therefore, several so-called waiting rooms of NATO like the Partnership for Peace (PfP) and the Euro-Atlantic Partnership Council (EAPC) were established.

The legacy of the Cold War period also exists partly in NATO as a military bloc and the European Union as a economic and political union. In spite of the establishment of several new external political structures for international cooperation these old structures were attractive enough, not only to exist in the post-Cold War period, but to expand beyond the former Iron Curtain and even dominate international politics and discourse of it. As a result, the first new member states, Czech Republic, Hungary, and Poland, were taken into NATO in 1999, and the next enlargement process, which happened in April 2004, included seven more. Also the EU has expanded into the East, when it took ten new member-states, mostly from East Europe, in spring 2004.

The Russian federation reacted strongly against the NATO expansion beyond the "red line" of the former Soviet Union (Foreign Policy 2000), but has not protested against the EU enlargement. Among the Russians there is a feeling that the West is hostile toward Russia and might try to harm or even attack it (HS 24.11.1999). In response to Western encroachments into the former Soviet sphere, political alliances have been created and a new, rapid-action military troop to fight against terrorism and extremists in Central Asia. After the September 11th terrorist attacks in the USA NATO has adopted a new strategic concept, and first time in its history implemented the article 5, which includes the expansion of military actions outside the geographical areas of its member states. It is argued that NATO has transformed from a military union into a political alliance, and is open to all countries preferring peace and partnership. Among the eight Arctic states, however, the same five, Canada, Denmark, Iceland, Norway and the USA belong to NATO, Finland and Sweden joined the EU but are officially non-aligned. The change, and a dramatic change, is that Russia is involved in some NATO activities through the new NATO-Russia Council.

2.2. The beginning of 21st century

Due to a clear change in the northern geopolitics there is now less tension and in general less military presence and more international, both civilian and military, cooperation in the North, and thus an increased stability and some sort of cooperative security (Östreng 1999, 48-51). If the current development of the international community includes three trends of concert of major powers based on balance, liberal hegemony based on the principles of liberal democracy, and the US empire i.e. Pax Americana, then liberal democracy dominates the Arctic states because of common values such as legal and welfare state, private ownership, human rights and free mass media. At the same time, there are also influences from outside the region through globalization.

In spite of recent changes and increasing regional cooperation, the circumpolar North is still an area with great geo-strategic importance in the global strategic thinking and the balance between the main nuclear powers. Due to this the navies of Russian Federation and the USA, and most probably United Kingdom, are permanently present, and mobile, in northern seas through patrolling and also testing new weapons. Especially the Arctic Ocean is highly strategic as a bastion sea-area for nuclear-powered and nuclear weapon-equipped strategic submarines (SSBNs) with ice-capability as the sea ice allows them to hide. (Salminen 2004) This guarantees the capability to a revenge strike by nuclear weapons, and shows how tension or armed conflict in other part of the earth can be reflected in the circumpolar North.

There has been a clear shift from quantity into quality in the military and military technology, as was proved in the Gulf War in 1991, which has continued. This phenomenon of less quantity and more quality is also a relevant factor in the large and sparsely-populated, northern regions, where it has led to fewer military bases, troops and radar stations in fewer geographical places; this can be interpreted as de-militarization. However, in some 'empty' areas suitable for military operations and testing of arms systems the military presence has become more intensive; this can be interpreted as re-militarization of the Arctic. This dualism of de-militarization and re-militarization

can be tricky: while in parts of some regions military bases are closed and troops are decreased, either new areas are taking for military use or other parts of the same region military areas are extended like for example, in North Norway.

Among places of high current geostrategic position and high military interest are for example, the Kola Peninsula in Russia, North Norway, Thule in Greenland and Alaska. The strategic importance of the Kola Peninsula and the Barents Sea to the Russian Federation has increased in a relative sense since the collapse of the Soviet Union due to two simple geopolitical reasons: first, there are located the main Russian naval bases, because there is the only free access to the Atlantic Ocean by the Russian Navy (e.g. Skorve 1991); and second, this brings the US Navy for patrolling close to Russian waters. This is strongly indicated by the recent decision to move of all Russian nuclear submarines to the bases of the Kola Peninsula, the missile tests by the Russian Navy in winter 2004 as a manifest of the current Russian military activities in the Arctic (e.g. Newsweek, March 1, 2004), and the plan that the Northern Fleet will start again patrolling in 'blue waters' outside the Barents Sea (Inkinen 2004). On the other hand, behind of the high geostrategic position is also the increased importance of the Kola Peninsula as a potential new main platform for transportation and export of oil and gas coming from West Siberia and the Nenets Autonomous Okrug, and later from the shelf of the Barents Sea.

North Norway in the coast of the Barents Sea faces the dualism: Although located just beside the Kola Peninsula, it has interpreted that North Norway has lost its strategic importance and is no longer a military front of NATO. Behind is thinking that the Russian military does not be considered in the West to be an equal military challenge or threat as it was in the Cold War period, but caused more an environmental threat due to its nuclear problem. However the military importance of these northern regions remains high for Norway and NATO (Nokkala 2002), and it might even increase relatively due to the above-mentioned reasons, when the radar stations in Vardö are strategically important (Salminen 2004). There is also a plan to extend a military training area for bombing and exercises in Lakselv.

As a relevant part of the new US nuclear weapons strategy is the program for the National Missile Defense (NMD) system. According to the official U.S. rhetoric the main idea of the NMD is to build a large national ballistic missile defense capability to protect the U.S. territory and its forces against ballistic missile attacks coming from the so-called rogue countries like North-Korea (Landau 2001). The National Missile Defence system is planned to use both satellites and radar stations to find missiles attacking to the USA, and they are expected to come through the North using the northern trajectories, and destroy them by counter-attacks of ballistic nuclear missiles. Russia opposes the National Missile Defence program and has warned the United States that the program will restart the nuclear arms race. The National Missile Defence program is not only an issue between these two states, but also between the United States and China, whose missile attack is among the potential threats although not mentioned. It is also an issue of debate between the United States and its European allies, who also believe that it would stimulate a new arms race. In general, many experts are sceptical like American scientist James Pike put it, the N MD program is "a weapon, which does not work, and which has been targeted into a threat which does not exit" (Zakaria 2001).

The NMD plans affect the Circumpolar North greatly, which it is possible to interpret as re-militarization of the North. Among these implementations of the NMD are: First, Alaska has taken the place to deploy the underground silos for missile interceptors and associated communication systems of the NMD, and the construction has started (Burns 2002). Second, there is also a plan for more intensive use of the US air base and radar installation, which was modernized in late 1980s (Fischer 1993), in Thule, Greenland, as a part of the National Missile Defence program. The Greenland Home Rule Government and public opinion in Greenland is partly "sceptical, bordering on hostile" to return to the atmosphere of the Cold War period (International Herald Tribune, Sept. 19, 2000; Schultz-Lorentsen 2001). Third, as counter-acts to the NMD system in Russia there are both the official political rhetoric and real actions to develop strategies and test both decision-

making processess and new military technology. For example, a new torpedo in the case of the accident of the Kursk nuclear submarine in August 2000 and missile tests in the annual Russian military maneuvres in winter 2004 in the Barents Sea.

What might be challenging in the near future is a dramatic change in the sea ice condition of the Arctic Ocean. If the current phenomenon of the thinning of the sea ice of the Arctic Ocean due to climate change will continue, it will increase the ice-free areas of the Arctic and also create new possibilities to increase both civilian transportation like for example, oil tankers, and the military activities like for example, patrolling and military manoeuvres in the two passages of the Arctic Ocean, and possibly also in the high sea of the Arctic Ocean, and the utilization of natural resources (On Thinning Ice 2002). Further, this might mean dramatic changes, new challenges and potential conflicts for example due to smuggling and other associated crimes, both for the national sovereignty and traditional security of the Arctic states, especially for Canada and its sovereignty claim over the Canadian Arctic archipelago (Huebert 2001). These challenges might also appear as traditional security-political conflicts, which will again raise up a relevant question, how to define security from the point of view of a region.

3. Northern geopolitics II: comprehensive security

As a result of the large and high-tech military presence and activities of the super-powers in the Circumpolar North there are also impacts and influences of the military to both the environment, and human beings and societies like for example, pollution, socio-economic influences and risks of nuclear accidents. There have also been potential, and in some cases actual, conflicts of interest between the military and the Arctic environment, and between that and northern peoples. The relationship between the environment and the military is common all over the world, and thus, universal. It is, however, especially relevant and sensitive in the Arctic and the sub-Arctic lands and seas due to on one hand, the vulnerability of a nature and northern cultures, and on the other hand, the heavy military presence and intensive activities of the Cold War period (e.g. Heininen 1994).

In order to response the situation, i.e. clean-up the mess after a =party=, in the 1990s there was a change in problem definition dealing with the relation between the military and the environment. Thus, through nuclear safety and clean-up the issue has become onto the political agenda of the unified states and intergovernmental organizations like for example, the Agreement of Military Environmental Cooperation (AMEC) between Norway, Russia and the USA shows.

3.1. The military and the environment

The intensive military presence and activities in the Cold War period, in peace time, have had a direct impact on the environment through a damage of the air, the earth and seas like for example, by the radar stations of the Distant Early Warning Line (DEW Line) in the Canadian North (Poland 2001) and those in the Russian North.

There have also been severe and lethal nuclear accidents of the military like for example, the accident of the American B-52 bomber in 1968 in Thule, Greenland with a result of radioactive release into ice and sea (Shaun 1990, source?). Among total numer of hundreds of accidents of nuclear-powered and –armed submarines (see Arkin and Handler 1989) in northern seas there have been for example, the accident of the Soviet Komsomolets class submarine in 1989 in the Norwegian Sea, and that of the Russian Kursk submarine in 2000 in the Barents Sea (e.g. Häyrynen 2003). Thus, the technology models of geopolitics embraces a contradiction: a strategic nuclear submarine, that once was the most important tool to project and maintain military power all over the oceans, has become a potential, severe environmental risk, and thus a problem, either in operation or in a dock waiting for to be decommissioned (Heininen 1996, 156-157).

This is very much the situation in the Barents Sea region, which has the largest concentration of nuclear weapons, reactors, and military facilities and industrial activities in the Russian Federation, and the whole Circumpolar North. Therefore, the nuclear problem of the Barents Sea region presents a new kind of challenge for international cooperation on nuclear issues (Heininen and Segerståhl 2002). Among the risky hotspots of the rtegion are storehouses of highly active spent fuel, old storage vessels and a big number of submarines with nuclear reactors waiting for decommissioning (see also the position paper by Alexander Ruzankin 2004). Severe socioeconomic and environmental influences are there, and people face them. Being trans-boundary they do have impact in the whole region, which is the main reason for Norway's clear policy of participation and Finland's assistance to solve the problem.

The relationship between the Arctic and the outside world is also concrete in the case, because a substantial part of the radioactive contamination of the Barents Sea like e.g. technetium-99 has come from nuclear tests in the atmosprehe and comes from southern latitudes, especially from nuclear the reprocessing plants of Sellafied, United Kingdom (e.g. Inari Declaration 2002), and also from Chelyabinsk, West Siberia along the River Ob. The irony is that while environmental impacts and risks of the nuclear problem have most of the interest, the Barents Sea is, however, among the cleanest seas of the world, and the biggest pollution comes from outside the region.

Fortunately, both intellectual and technical ability to clean up pollution and environmental catastrophes already exists. For example, Russia has got both economic and technical assistance from abroad for nuclear safety since the early 1990s like e.g. the AMEC and the Multilateral Nuclear Environmental Programme in the Russian Federation (Declaration 1999). And the DEW Line Clean Up Protocol on an environmental assessment with the categories of contaminated soil, landfills and dumps, and physical debris and demolition was signed in the early and carried out (Poland 2001).

The effects of the military on the quality of the environment was neither much known nor discussed in the Cold War period, although it was already a relevant issue at the time. In the 1970s Canada passed the Arctic Waters Pollution Prevention Act (AWPPA) due to environmental protection. In the 1980s, people in North Europe started to be concern on trans-boundary pollution in general and especially on radioactive contamination due to nuclear tests in Novaya Zemlya, the Chernobyl accident and accidents of nuclear submarines. For the reason, environmental organizations such as Greenpeace International (Greenpeace 1987), civil organizations such as the Nordic Saami Council, citizens of Iceland and Norway and some researchers became active against these new environmental risks, which were partly influenced by the military. Also the Government of Iceland started to demand a decrease and control of nuclear-submarines in North Atlantic due to a risk of a nuclear accident and potential radioactive contamination in the Northern Atlantic, which was a reason for an anxiety of the Icelandic government (e.g. Palsson 1988). In the early 1990s this was followed by other Nordic governments, when they began to express concern about nuclear waste, mostly coming from Russia. (Heininen 1999)

In the circumstances of these kinds of nuclear accidents, the relationship between the environment and the military is a concrete thing, because the result can be a real environmental damage to the environment. And even rumours of a possible radioactive leakage can damage for example, fishery, the industry of great importance to the economies of Iceland and Norway. Thus, these citizens and countries consider themselves as stakeholders in the international nuclear negotiations process, although, in most cases, they are outside the formal negotiations; this is already some sort of effort to define security from the point of view of a region.

There are also arguments against this environmental concern. Some argue that the environmental effects of the military are no longer a relevant issue in the North, because military activities have decreased. Further, in the North there is space and land enough both for military testing and training and other activities. Some argue that it is difficult, or even impossible, to show any

dramatic evidence of pollution that would affect the Arctic ecosystem, that the ownership of some areas by armies has prevented environmental degradation, and if damages so, clean-up is already going-on like for example, the international cooperation in the case of the Barents Sea nuclear problem and the DEW Line Clean Up Protocol. Or, that there are much bigger sources of pollution like oil-drilling, long-distance air and sea pollution, and traffic, bigger polluters like industry, and further, there are bigger environmental threats like the climate change, than the military.

3.2. Security, the military and societies

The relationship between security-policy including the military and northern societies and peoples is also relevant. The relationship between indigenous peoples and the military is also one of the secret issues, even taboos, of the Cold war period, and it is still sensitive. For example, Canada made its efforts to force Inuit people to move up to the Canadian Arctic Archipelago for the sovereignty of Canada. When the Thule US air base was founded in 1953 in Greenland, the land of the Inuit people, by the secret agreement between the US government and the Danish government, the Inughuit had to move from their traditional living area to another place in Greenland (Brästed and Faegteborg 1985). Correspondingly, when the Soviet Army built up two nuclear test sites to Novaya Zemlya in the middle of 1950s, the Nenets had to leave their traditional area to live, fish and hunt, and since that time it has been prohibited to them to live or hunt there. When the nuclear tests started there in 1957, there was a growing awareness about radioactive contamination among scientists and authorities, but worries about possible contamination of food products or health effects did not progress to widespread public concern. (Heininen 1994, 155-157)

The appearance of the military and the construction of new infrastructure or training areas, i.e. a sudden industrialization on one hand and on the other, that there is land and water pollution coming from military bases and radar stations are general problems in northern communities, especially for remote indigenous communities based on fishing and hunting livelihoods. Examples of these are the construction of, and pollution from, the DEW Line and its equipments in the northern most part of North America, the low-level flights for military training in Nitassinan, near Goose Bay, Canadian Labrador where Innu Indians used to live (e.g. Lloyd 1989), and the new plan of Norway, and NATO, to expand a military training area for testing of missile systems and bombing in the traditional summer reindeer herding area in Lakselv, North Norway (Nelleman 2003).

Consequently, it could be argued that nuclear security, understood as a part of comprehensive security, is a particularly complicated question. Usually, nuclear issues have to do with both military and civil securities, although nuclear power was originally utilized for the military purposes. In the whole Arctic region, especially in the Russian North, there are no clear lines of division between military and civilian issues. Nuclear activities cover the whole spectrum from use in medicine to nuclear warheads and, especially the management of waste, involves so many stakeholders and partly conflicting interests that a simple labelling of topics and priorities would lead to an oversimplification of the issues (Heininen and Segerståhl 2001)

In this context both terms, a threat and a risk, have been used, but often meaning a different thing: While Nordic environmental organizations and citizens took the gradually grown nuclear problem as a threat, and scientists started to analyze it as a risk, for the Russians, who lived in the middle of the nuclear problem, the situation was more complex, neither a threat nor risk. Decreasing the risk of nuclear problems in the Kola Peninsula was, however, in the interests of the administrations of the Murmansk region and the City of Murmansk, when they for example, tried to attract foreign investment to the oil and gas industry. (Heininen 1999) While there the first lectures on eco-catast-rophes and nuclear accidents for the citizens of Murmansk took place in the end of the 1990s, nowadays the nuclear problem has taken as a threat on the environment and people (e.g. Ruzankin 2004).

In contrast, and a continuity of the debate on security, there are arguments against these concerns and estimations like for example, in the North there is space, land and seas, enough for both the traditional livelihoods of the northern indigenous peoples and the action and other needs of armies. Further, that armies have brought development to northern peripheries in general and especially for the northern indigenous peoples and others who live in the North, through employment, needed services, tax revenues and flight routes inside the northern peripheries. Finally, there are indigenous groups who support military defence and believe that they should have at least some representation in national defence decision-making. (e.g. Gaup 1990; Jull 1990)

Correspondingly, there is also counter-argumentation that the whole viewpoint of the military and armies as polluters is complicated and still sensitive, and thus very political on one hand. And in spite of arms control, disarmament and rationalization of the military arms race continues in the circumpolar North. On the other hand, it has been seen as a real problem for a short time, and therefore, more monitoring and evaluation about their real environmental impacts and socio-economic influences is needed in order to have better knowledge and understanding. Finally, we discuss on potential threats, i.e. risks, and the nuclear weapon system includes always risks of nuclear accidents, which consequences can not know beforehand.

4. Conclusions

As conclusion of this chapter, broadly addressing questions of security, both scientific discourse and political debate on that, there is a wide ranging of security from notions of military security and the nation state, which many consider to be outdated, to environmental security including interpretations of a risk and threat in a modern society, and civil security including human health, human rights, right to own language and culture, and freedom of expression and security of communications. This is relevant in the circumpolar North because of its high strategic importance: the military is both present and active there, and therefore there are broader impacts of the military on its environment and societies. .

On the other, although not determined, the Northern geopolitics has changed and moved from state-dominated and militarized state into more humanist direction (Chaturvedi 2000), like for example, the activities of new non-state actors, example of region-building and new kind of regional dynamics show. Followed from this, after the end of the Cold War period different kinds of competition and potential for conflicts, or conflicts of interests, could be found. They often refers to "inconsistencies in the motions, sentiments, purposes, or claims of entities" (Osherenko and Young 1989), and can have many forms like for example, a conflict of interest between the military and the northern ecosystem, or a competition between military activities and livelihoods such as reindeer herding of northern indigenous people.

In international co-operation the problem sometimes arises that security is, in practice, broader than the traditional security. For example, environmental protection dealing with radioactive contamination from military sources may become a part of high politics, even as a part of hard security, which makes the situation complicated and challenging. Based on the lessons of the nuclear problem of the Barents Sea region it is necessary to take into consideration, and try to understand, all aspects of security as parts of the same agenda in international negotiations for example, the management of environmental risks cannot be separated from infrastructure development of economic conditions. Therefore, although security-policy per se is officially excluded from the official agendas, if stability, environmental protection including nuclear safety and sustainable development are the main aims of the current international cooperation in the North, then security is there, both meaning comprehensive and traditional security.

These relations are, however, often complicated. While evidences of pollution or elements of risks of environmental catastrophes are there, and many northern people have expressed their concern on that, there is support to the military presence and demands more representation in national

security-political decision-making. A part of the background is that people, who live in the North, also need development and surviving living standard, although not necessarily the mass-scale kind of industrialization what the military also represents. Further, a northern population is also needed to prevent these areas from becoming desolate, which would correspondingly have security policy implications. The discussion on security in the North from the point of view of northern citizens has started, and will hopefully continue, because neither civil security nor regional security is easy to define.

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