Climate Change and Security in the Arctic

The Links between Geopolitical Concerns and Local Challenges

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Climate change has been described as one of the biggest challenges facing humankind in modern times. The Arctic is one of several "hot spots" where the impact of climate change is expected to be especially acute. Using Iceland as a case study, this paper examines the links between geopolitical concerns and local challenges related to the impact of climate change in the Arctic. Policy documents focusing on Arctic security are reviewed and compared to policy documents at the national and municipal level in Iceland that discuss climate change impacts and local environmental security. This paper addresses two key questions. Do decision makers at the local, national and international levels perceive threats related to climate change differently? If so, does this difference affect the way climate change is responded to at the different levels of governance?

This paper relies on the theoretical framework of social constructivism, examining, in particular, how the concept of "security" is constructed and if its meaning varies as a function of level of governance. Constructivists within the academic discipline of international relations emphasize the social dimensions of international relations, including the importance of norms, rules and language and the possibility of change (Fierke, 2010). My analysis also links to the broader debate about the meaning of security generally, and to the question of whether new security threats like climate change are challenging traditional realist security paradigms focusing on military threats and national security.

Climate change and international security

Climate change has been on the international agenda as an environmental issue since the early 1990s. But recent years have brought increased concern over the impact of climate

change on security in international relations, as references to climate change as a serious threat to international peace and stability are heard more and more frequently.

Cold war security analysts viewed international security from a relatively narrow perspective, relying on realist theories, in which the political power of states is considered the main driving factor in international relations. Walt's (1991) much-cited article is an example of such a realist position; he argues that security studies are about war and can be defined as "the study of the threat, use and control of military force". He warns against those that want to widen the security agenda outside the military domain, because defining the field in this way would: "destroy its intellectual coherence and make it more difficult to devise solutions to any of these important problems" (Walt, 1991, pp. 212-213).

This traditional definition of security is state-centric, focusing on securing states from external threats, and looking at military strategies as solutions. In today's globalized world, where a number of new, global issues have emerged, and where states must share the stage with such other actors as multi-national firms, international non-governmental organizations and other trans-national players, its application is limited.

The Copenhagen school of security studies attempts to widen the security concept, without losing coherence, by examining the process of securitization. Its pioneers, Buzan, Wæver and de Wilde (1998), argue for a conceptualization of security that is wider than the traditionalist position – that security must relate to military threats – but means something more specific than any threat or problem. They propose that in order for threats to be categorized as a security issue: "They have to be staged as existential threats to a referent object by a securitizing actor who thereby generates endorsement of emergency measures beyond rules that would otherwise bind," (p. 5). Thus, security is, in part, a speech act, given that something is designated an international security issue because it is considered more important than other issues and should take priority. An issue becomes a security issue, therefore, not necessarily because a real existential threat exists, but because the issue is presented and perceived as a threat. In response, emergency measures are discussed and justified.

Climate change entered the scene of international politics when states signed the 1992 UN Convention of Climate Change (UNFCCC) that entered into force in 1994. The Kyoto Protocol was signed in 1997, introducing more powerful (and legally binding) measures than the UNFCCC does (UNFCCC, 2009). Negotiations over ways of further strengthening the climate regime, by trying to reach agreement on more ambitious emission targets and by forming an adaptation strategy to help countries cope with the changes, have been ongoing for several years. Yet progress has been slower than many hoped for.

Voices calling for the securitization of climate change were already sounding during the early days of negotiating the text of the UNFCCC. "The 1990s will demand a redefinition of what constitutes national security," wrote Mathews (1989, p. 1). She argues for the importance of broadening the security concept to include resource, environmental and demographic issues. The potential results of global warming are discussed at some length, as one example of environmental issues posing security threats. At that time, however, Mathew's view belonged in the group of marginal voices. In the dominant discourse, climate change was treated as a political issue that needed to be addressed, but states were not ready to commit to measures that called for prioritizing climate change over such issues as economic growth.

As scientific data has become more definite, and the consequences of increasing temperatures are beginning to emerge, concerns about climate change have increased. It was not until in 2007, however, that climate change really became a security issue. This was the year Al Gore and the Intergovernmental Panel for Climate Change (IPCC) were awarded the Noble Peace Prize for their efforts in highlighting the dangers of climate change. Earlier that year, the IPCC published its fourth comprehensive assessment report, in which scientific evidence for climate change was reinforced. Also in 2007, the UN Security Council held its first debate about the impact of climate change on peace and security. Although some delegates raised doubts over the Council being the proper forum for the issue, the message from the chair, British Foreign Secretary Margaret Beckett, was clear: that climate change was a security issue, and not a matter of narrow national security. Rather, it involved collective security in a fragile and increasingly interdependent

world. “Climate change can bring us together, if we have the wisdom to prevent it from driving us apart,” she declared (Security Council, 2007).

Although it might not have been the intention, the securitization of the issue can also carry certain risks. The possibility cannot be overruled that the act of securitization will backfire – that it will motivate states to engage in military build-up and other traditional security measures, in order to protect themselves from this new threat. Challenging the traditional, state-centric view of security thus seems an important component of any attempts to securitize climate change in an effort to channel more resources into political processes. Rather than focusing on states, the more people-oriented approach of human security may be more appropriate as a framework for analyzing threats posed by climate change. By employing a human security perspective, the focus also moves from the global to the local.

Climate change has generally been framed as a global issue. Nilson argues that this focus can delay a regional response and decrease policy makers’ awareness of the need for local adaptation. How an issue is framed, she explains, defines a problem, its impacts and potential solutions in ways of highlighting certain aspects and downplaying others. Framing is important because it molds and influences policy debates. Nilson uses the process of the Arctic Climate Impact Assessment (ACIA) as a case study to demonstrate that moving the focus from global to regional brought new actors into climate knowledge production and policy, with an increased emphasis on the complexity of social and cultural impacts of climate change among indigenous peoples (Nilson, 2009).

In the following sections, attention moves from global to regional, national and local levels. The focus is on the Arctic as a region; within the region, the lens moves to Iceland. Is climate change perceived as a security threat regionally in the Arctic and locally in Iceland? If so, what specific threats are being discussed, and who is being threatened?

Geopolitics and regional security in the Arctic

During the Cold War, the Arctic region was strongly affected by political and military competition and by the arms race between the two superpowers – United States and the

Soviet Union. Nuclear weapons were deployed into the region, and the superpowers developed new maritime strategies for the High North (Heininen, 2010). As the Cold War came to an end, military tensions were released, and cooperation among Arctic states and among Arctic civil society organizations increased. In 1991, the Arctic Environmental Protection Strategy (AEPS) was created. It eventually lead to the establishment of the Arctic Council – a high-level intergovernmental forum for promoting cooperation, coordination and interaction among the Arctic States of Canada, Denmark (including Greenland and the Faroe Islands), Finland, Iceland, Norway, Russian Federation, Sweden and the United States. Membership is also open for civil society organizations of Indigenous peoples in the region (Arctic Council, n.d.). But will this spirit of cooperation automatically continue when new challenges like climate change emerge?

"The increasingly rapid rate of recent climate change poses new challenges to the resilience of arctic life," states the Arctic Climate Impact Assessment (Arctic Council, 2004, p. 5). Its publication was important for both the region and the global context, as it was the first attempt to produce a regional assessment of the impact of climate change. A cause for grave concern, the study showed that Arctic's average temperature had risen at almost twice the rate of the rest of the world's in the past few decades. These climatic trends are expected to accelerate during this century, due to an ongoing increase in greenhouse gas concentrations in the atmosphere. The impact will be far reaching, affecting both ecosystems and people (Arctic Council, 2004). Whereas many of the changes can threaten the livelihood and wellbeing of northern communities, other changes may provide new economic opportunities. Severe coastal erosion is expected to increase the vulnerability of many coastal communities; thawing ground will disrupt transportation, buildings and other infrastructure; and indigenous communities will continue to face major economic and cultural impacts. On the bright side, reduced sea ice is likely to increase marine transport and access to resources. However, even this potential positive impact has been a cause of concern by many, worrying about a "race for resources". In fact, it is this tension between states about who has the right to resources in the Arctic that has grabbed a large share of the attention when it comes to the links between climate change and security in the Arctic.

Borgeson (2008) argues that global climate change has given birth to a new scramble for territory and resources among Arctic powers. He warns that although other Arctic powers are in a race to claim additional territory in the region, the USA is remaining on the sidelines. “Although the melting Arctic holds great promise, it also poses grave dangers. The combination of new shipping routes, trillions of dollars in possible oil and gas resources, and a poorly defined picture of state ownership makes for a toxic brew,” he says (p. 73).

Borgeson’s concern has been echoed in numerous newspaper accounts in recent years. Diplomats and officials of Arctic states have complained about an overemphasis on the potential for conflict, however. The rhetoric of states is clearly one of cooperation. In a 2010 conference, Karen Elleman, then Danish Minister for Nordic Cooperation and the Environment, emphasized that there was little reason for the predicted rush for Arctic resources. According to the UN Convention of the Law of the Sea (UNCLOS), approximately 97% of resources under the Arctic Ocean fall within the states’ Exclusive Economic Zones (EEZs), so there is little left for other, outside players. “In other words, there is not much left to disagree about,“ she claimed. “The Arctic is not – and will not – be an area of conflict, no matter how much of the ice sheet should melt or how fast. All Arctic states agree on a peaceful future for the Arctic.” (Nordic Council of Ministers, 2010, p. 14). A Russian official, Anton Vassiliev, expressed similar frustrations at the same conference over the emphasis the media has given to potential conflicts in the Arctic:

> The predominant feature of state of affairs in the Arctic is low tension, growing cooperation and mutual trust among the regional states, who will not allow to “rock the boat” or impose on themselves non-existent or artificially overblown problems (Nordic Council of Ministers, 2010, p. 32).

In spite of this emphasis on cooperation, some tension is lurking beneath the surface. For example, secret US embassy cables released by Wikileaks in May 2011 quoted comments by Russian Ambassador Dmitriy Rogozin to NATO saying, "the 21st Century will see a fight for resources and Russia should not be defeated in this fight". The cables also claim Danish Foreign Minister Per Stig Moeller joked with the Americans saying "if you stay out, then the rest of us will have more to carve up in the Arctic" (Jones & Watts, 2011).

Although the potential for tension over access to resources has made headlines, other issues related to local human security challenges are receiving less attention, with the exception of a strong focus on indigenous communities. Notably, there is a dearth of research into the socio-economic impact of climate change on non-indigenous communities in the Arctic, and scant attention has been paid to the possible threats that climate change poses to urban areas.

Iceland, the only Arctic state located entirely within the Arctic region, demonstrates this point. The country has no indigenous populations, and over 90% of its inhabitants live in urban areas. In January 2011, 63% of the population resided in the urban area in and around Reykjavík (Statistical Series, 2011). Although climate change has generated considerable domestic discussion in recent years, and has been identified as a possible threat to Iceland's security, surprisingly little information exists about the threat of climate change on the nation, and which groups could be vulnerable to these threats.

Iceland and national security

Since independence, Icelandic authorities have identified Iceland as a Nordic country belonging to Europe. Regarding national security, the primary ties were with USA and NATO; the Arctic identity of Iceland has not been strong. This situation has been changing in recent years, however, as demonstrated in the following quote by Iceland's Foreign Minister Össur Skarphéðinsson (2011) in a speech at an Arctic conference in Tromsö: "In essence, the Arctic is our home and its' development is inherently linked with our own fate as a nation state". During his time in office, the Arctic has been pushed higher on the agenda in Iceland's foreign policy. In 2009, the report, *Iceland in the Arctic*, was published by the Icelandic Ministry for Foreign Affairs and Iceland's parliament, Althingi, adopted a special Arctic strategy for the first time in 2011. A review of these documents provides strong evidence of increased emphasis on the Arctic in Iceland's foreign policy; clearly, security concerns related to climate change impacts are now an important factor for Iceland.

Environmental security is a major focus in the report, *Iceland in the Arctic*. The report states that the risk of armed conflict between states in the region is not high. Thus, key security threats in the region are not so much about inter-state conflicts; rather they relate to

environmental changes – the increasing danger of oil spills due to increased shipping traffic in the area and the risk of accidents due to utilization of natural resources that were not previously accessible. The report concludes that Arctic security will be ensured only with the close cooperation of relevant states, focusing on environmental security and creating a trusting and cooperative atmosphere among all players (Icelandic Ministry for Foreign Affairs, 2009b). Similar emphasis on broad security can be found in the Arctic strategy adapted by Althingi in March 2011 (Althingi, 2011). It states that Iceland should protect its security interests in the high north, that the focus should be on the security of citizens, and that militarization of the region should be opposed. The importance of contributing to the mitigation of climate change in the region and to enhancing adaptation to existing change is highlighted as important in order to secure the general wellbeing of inhabitants and communities in the north.

Climate change is also finding its way into Iceland's general security policy. The geopolitical status of Iceland changed drastically after the Cold War. The country received its independence from Denmark in 1944, and since 1951 the USA has manned a NATO base in Keflavík – the cornerstone of Iceland's defense system. The base was closed in 2006, however, and the last US soldiers left Iceland on September 30th, 2006 (Ingimundarson, 2008). For the first time since independence, the prime responsibility for forming a national security policy rested on the shoulders of Icelanders themselves. In 2009, the Icelandic Ministry for Foreign Affairs published a risk assessment for Iceland, written by a team of experts. This report analyzed global, societal and military threats, and climate change is one of the factors identified as a threat to Iceland's security (2009a). Specifically, it emphasized that climate change will increase the danger of natural disasters, something that the Civil Protection Department must consider in the future. The expert team concluded that there are no indications of a military threat to Iceland in the near future, and that the focus should be on societal or civil security (Icelandic Ministry of Foreign Affairs, 2009a). This approach is more in line with a human security agenda than with traditional ideas about national security.

Given the focus on societal security over military security, one would expect that public documents on climate change policy would provide some elaborate analysis of the potential

socioeconomic impacts of climate change and how those effects could threaten the security and wellbeing of the people living in the country. Such is not the case, however. The main focus has been on the impact climate change could have on the natural environment; notably the potential impact on humans has received less attention. *Iceland's Fourth National Communication on Climate Change* takes special notice of the lack of research in this area, stating that: "Academic research on how climate change could affect socio-economic factors has not been substantial" (Icelandic Ministry for the Environment, 2006, p. 48).

Inadequate information on the socio-economic impact of climate change can also be noted in a recent report by the Scientific Committee on Climate Change, published by the Icelandic Ministry for the Environment (Björnsson et al., 2008). The composition of the committee writing the report is the first indicator of an imbalance between natural sciences and social sciences. This ten-member group includes experts on meteorology, biology, forestry, geology and engineering; but not a single social scientist was appointed to the committee. The report does cover socio-economic impacts, however, both related to predicted changes in natural disasters and to the effects on such economic sectors as agriculture, forestry, fisheries, transportation and energy production. There is also discussion about the potential health effects of climate change, and a chapter devoted to the need to consider sea level rise when designing harbors and other coastal constructions. In many cases, however, the analysis is relatively shallow, and does not seem to be built upon research. This is particularly true in creating the link between potential environmental changes and how these changes will influence people and communities. For example, the report states that climate change will likely have a positive impact on agriculture, due, among other factors, to higher temperatures and longer growing seasons. But the report does not address the implications for Icelandic farmers. Will it improve their economic situation? Are those changes likely to create more jobs in the agricultural sector? Will climate change lead to any changes in settlement, resulting from shifts in the suitability of the land for animal husbandry and crops?

The Scientific Committee postulates that the socio-economic impact is likely to be positive more often than negative. Moreover, cases for which a negative impact could occur are

thought to be manageable for a society like Iceland, with its strong institutions and proven capacity to cope with changes. This prediction leads one to wonder if climate change as a security issue is even relevant in Iceland.

Yet, in spite of limited of knowledge about the socio-economic impact of climate change in Iceland, and the Scientific Committee's prediction that the identified socio-economic impacts are likely to be more positive than negative, public documents consistently identify climate change as a threat. This is emphasized both in the Scientific Committee's report (Björnsson et al., 2008) stating that climate change creates multiple threats and in the risk assessment report published by the Icelandic Foreign Ministry (2009a), in which the following quote can be found in the English summary:

> Climate change is now considered the greatest global environmental threat, and its impact has already been noted in Iceland. While it is not possible to predict the consequences of global warming in Iceland with any accuracy for the next 10-15 years, it is clear that efforts must be made both to fight and reverse climate change and curtail its effects (p. 131).

But do those threats apply only to ecological systems and plants and animals, or are humans also at risk? And if so, which humans? Clearly, more research is needed in this area in order to provide more in-depth answers.

This missing link between environmental changes and socio-economic impact may exist because the securitization of climate change in the dominant political discourse in Iceland is a recent phenomenon. Although Iceland has participated in international climate change negotiations from the start, and is a party of both the UNFCCC and the Kyoto Protocol, climate change has not been perceived as a threat during much of this period. An analysis of Iceland's negotiation strategy during international negotiations about climate treaties between 1990 and 2005, showed that the main drive for defining Iceland's position was the desire to prevent limitations to the country's opportunities for economic development – specifically, opportunities to attract foreign investors for energy-intensive industries (Ingólfsdóttir, 2008). Economic interests, rather than concern about climate change, was the driving factor for Iceland's participation in the negotiations. Iceland's commitments to the Kyoto Protocol are a result of this strategy. Not only is Iceland allowed to increase

greenhouse gas emissions for the period 2008-2012 by 10 percent, compared to emissions in 1990, but the negotiation team also managed to acquire a special decision – Decision 14/CP.7 – on the "Impact of single project on emissions in the commitment period", whereby emissions from specific types of industrial projects are not included in total emissions (Icelandic Ministry for the Environment, 2006).

Climate debate reached a turning point in Iceland in 2007, influenced, without doubt, by the securitization of climate change in the international political discourse, but changes in domestic politics also played a role. In parliamentary elections in spring 2007, the coalition government of the Independent and Progressive parties, which had been in power since 1991, was replaced by a new coalition of the Independent Party and the Social Democratic Alliance. Both the new minister of environment and the new foreign minister were Social Democrats, and they were more occupied with global responsibility than their predecessors were. For the first time, climate change was mentioned specifically in the political agreement between the two parties, and it was categorized as both an environmental and foreign policy issue (Policy Statement, 2007). This emphasis has continued in spite of the turmoil related to the collapse of the Icelandic banks in October 2008, and the subsequent political and economic crisis. The new government that took over in 2009 included the Social Democratic Alliance and the Left Green, and both had a stronger focus on environmental issues than did the parties in power prior to 2007.

The increased focus on the security dimension of climate change has also influenced Iceland's position in international negotiations. In negotiations about a post-Kyoto climate treaty, the Icelandic government used a different approach to that used in the negotiations for the Kyoto Protocol. Svandís Svavarsdóttir, who then Minister for the Environment, was quoted before the 2009 climate negotiations in Copenhagen: "In Kyoto, Iceland's plan was mostly to ask for an exception from the general rules of the Protocol. In Copenhagen, Iceland is going to join those states that plan on being in the forefront in combating climate change" (Svandís Svavarsdóttir, 2009).

In short, in parallel with the international securitization of climate change and the increasing attention climate change is receiving regionally in the Arctic, the presentation of climate

change as a threat to security has also begun to emerge in national policy documents in Iceland. Along with this shift in focus, a change in both domestic climate policy and international negotiation strategy can be detected. Yet, how climate change threatens security is not quite clear from the national policy documents. Although the emphasis is on the broader notion of security, on societal and civil security rather than only traditional military security, it is still not clear how these threats could materialize.

But what of the normal citizen, people living in communities around Iceland. Do they believe that climate change is threatening their security? To explore this question, the lens must be aimed at the local level, where municipalities are in charge of policy and collective decision making.

Human security at the local level

One way to determine the level of threat is to simply ask people about their fears. According to a Gallup poll conducted in January 2010, 40% of Icelanders are gravely concerned about climate change, 33% are neutral, and 27% report no worries. Women are more concerned than men are, and older people are more concerned than younger people. The survey also asked if people believed that climate change was already having a serious impact on their local environment; 36% of respondents, agreed with this statement (6% answered “strongly agree”, and 30% “somewhat agree”) – slightly less than the 40% that registered grave concern about climate change (Capacent Gallup, 2010). The results could have been influenced by the survey being completed a few weeks after the Copenhagen Summit in December 2009, when global climate change was high on the agenda in the international media.

It appears, however, that more than one-third of the population is gravely concerned about climate change and believes that climate change is already having an impact locally. Yet, it seems difficult to identify exactly how those changes may impact socioeconomic factors and how the security of individuals, specific groups or entire communities may be threatened.

By framing climate change as a local issue, it becomes more difficult to isolate climate change impacts from other environmental factors and various cultural and political factors.

Nilson reinforced this point in her discussion about the ACIA process, in which there was strong emphasis on exploring local perspectives of indigenous groups in the Arctic. These perspectives often highlighted the fact that climate change was only one of many interacting factors determining vulnerability and the capacity of a community to adapt to change (Nilson, 2009). One consequence may be that local adaptation to climate change cannot be identified as such in a separate climate policy, but are perhaps integrated into other policies as urban planning, health policies or local economic development plans.

Such complexity makes it difficult to trace where and how concern for climate change is influencing public decision making at the local level, within municipalities. In Iceland, many municipalities have used the Local Agenda 21 project to increase awareness of environmental issues and the need to integrate those issues with economic and social factors. Local Agenda 21 originates from the Earth Summit in Rio 1992 and entails the idea that local communities should form their own comprehensive plan for sustainable development. As of the end of 2009, 39 out of 77 municipalities in Iceland had formed their own Local Agenda 21 policy or were in the process of doing so. This number includes all of the most populated municipalities, where urban centers are located (Gíslason, 2011). The only municipality that has adopted a special climate policy, however, is Reykjavík, which is also the capital of Iceland and the most populous municipality. The focus of those local policies, specifically the climate chapters in the Local Agenda 21 documents and the Reykjavík climate policy, is first and foremost on mitigation, with little attention paid to adaption. The main objective of the climate policy of Reykjavík, for example, is to reduce greenhouse gas emission from 2007 levels by 35% before 2020, and by 73% before 2050 (Reykjavík, 2009). The climate policy has been followed by additional climate-related documents, one estimating the greenhouse gas emissions originating within the city (Mannvit, 2010), and another presenting an action plan for a more sustainable energy use (Reykjavík, 2011). In all three documents, there is no mention of local adaptation.

This lack of attention to adaptation does not necessarily mean climate change impacts are not being felt locally; rather it may mean that the impact is so entangled with other factors that it is difficult to identify and respond to it. Also, the global framing of the climate change

discussion may have influenced local authorities to emphasize global responsibility as the reason for mitigation measures, rather than local impacts.

Conclusion

At the beginning of this paper I asked two questions. Do decision makers at the local, national and international levels perceive threats related to climate change differently? If so, does this difference affect the way climate change is being responded to at the different levels of governance? The analysis in this paper provides no definitive answers to those questions. Nevertheless, some conclusions can be drawn, at least for Iceland, the state used as a case study in this paper.

First, climate change has been framed as a global issue, which has influenced policy making within Iceland, both at the national and local level. Emphasis is placed on Iceland's global responsibility to reduce greenhouse emissions in order to avoid catastrophes in faraway places, but less attention is given to possible threats at the local level and the need for adaptation policies domestically. Global discussion trickles down to the local level, as exemplified by the influence of international securitization of climate change on the presentation of domestic policy documents in Iceland. This trickle-down effect happens in spite of the fact that little information exists about the socioeconomic impacts of climate change.

Second, and related to the first point, is the fact that geopolitical tensions over access to Arctic resources, due to melting of the icecap, has received greatest attention in discourses related to security and climate change. This is true for media discussions, some policy documents and academic literature. Yet, a closer look reveals that the danger of a resource conflict does not seem high, and most state officials and diplomats emphasize, at least publicly, the cooperative spirit of Arctic states in addressing climate change issues. At the same time, local human security challenges that are almost certain to arise, are receiving less attention, at least in Iceland. Although extensive research has been conducted on the current and potential climate change impact on the natural environment, this knowledge has not been translated into the meaning of those changes for humans – Icelanders in general and specific groups within the country and local communities. The complex interaction

between the impact of climate change and other environmental factors, as well as political and cultural factors, is one likely explanation. But a general lack of awareness may also explain the scant attention given to local adaptation needs.

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