

## The tip of the iceberg: Ice as a non-human actor in the climate change debate

## La pointe de l'iceberg: la glace comme acteur non humain du débat sur le changement climatique

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Résumé de l'article

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Lill Rastad Bjørst\*

**Résumé:** La pointe de l'iceberg: la glace comme acteur non humain du débat sur le changement climatique

L'Arctique est au coeur du débat global sur le changement climatique et la glace est devenue un aspect central des discours. Cet article discute des représentations de la glace à partir de six contextes différents liés au Congrès des Nations Unies sur le changement climatique de 2009 à Copenhague. Même si les discussions semblent souvent centrées sur la glace, l'auteure soutient que cette dernière s'inscrit dans des récits et métaphores qui ont de plus vastes implications sur la façon dont l'Arctique et ses peuples autochtones sont représentés. La glace devient un acteur non humain, encadrant les discussions, jouant des rôles spécifiques et liant des réseaux hybrides. En effet, elle est utilisée sur diverses plates-formes tant par des scientifiques, politiciens, gouvernements, ONG, que par des chasseurs et pêcheurs inuit.

**Abstract:** The tip of the iceberg: Ice as a non-human actor in the climate change debate

The global climate change debate has the Arctic as a core region of concern and ice has become a central aspect of discourses. This article discusses ice representations from six different contexts linked to the 2009 United Nations Climate Change Conference (COP15) in Copenhagen. The author argues that even though the discussions often seem to be centred on ice alone, the latter enters into narratives and metaphors that have wider implications for how the Arctic and its Indigenous peoples are represented. Ice becomes a non-human actor, framing the discussions, acting in specific ways, and linking hybrid networks. Indeed it is used in diverse platforms by scientists, politicians, governments, and NGOs, as well as by Inuit hunters and fishers.

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## Introduction

For centuries, the Arctic regions have been created and invented. People living outside the Arctic have been fascinated by, as well as deterred from, this “exotic” place. For the last 20 years, much has been written about this imagined North and the importance of being critical of dominant discourses about it (e.g., Bjørst 2008; Bravo 2002; Fienup-Riordan 1990; Thisted 2002). While constructing and interlinking natural and social worlds, people make references to imaginary places, metaphors, and symbols (Blok 2010; Latour 1993). Yet it is harder to grasp hybrid phenomena like “climate.” A likely reason is the relatively recent “purification” of nature and culture, dating to the beginning of the Enlightenment when Western philosophy polarised their entities and roles (Latour 2002: 107). This world view, however, has never been valid, as Latour (2007) argues, since humans and non-humans are equally actors. Hence, “history is no longer simply the history of people, it becomes the history of natural things as well” (Latour 2002: 82).

In the international climate debate, various actors are taking positions. Inuit are one among the many human actors but there are also non-human ones: polar bears, mountains, glaciers, etc.<sup>1</sup> In the case of Greenland, the iceberg represents more than its visual image, and ice frames Arctic discourses on climate change in many ways. Most people are fascinated by ice and use strong metaphors like “the tip of the iceberg” or “on thin ice,” that have been reappropriated for the climate debate. Using warm/cold dichotomies, the media talk about “the melting future” and state that agendas are “frozen out” or that politicians are “in a frozen position.” During the 2009 United Nations Climate Change Conference (also known as COP15<sup>2</sup>) held in Copenhagen, all sorts of meanings and representations were attached to ice. Even Naalakkarsuisut (Greenland Self-Government) used this metaphor for its own parallel event, “In the Eye of Climate Change,” by commissioning a piece of artwork called “The tip of the iceberg” (Figure 1). It was an enormous photo of an iceberg enwrapping the front of the Iceland embassy building and the Greenland and Faeroe Islands offices in downtown Copenhagen. In the press releases, the work of art was interpreted in the following way: “Symbolizing the fact that the climatic changes in the Arctic region are only the tip of the iceberg, this grand installation designed by Greenlandic artist Inuk Silis Høegh rises on the harbour front and gives a spectacular reminder of the beauty of the Arctic and the Earth's fragility” (Climate Greenland 2009; Hansen 2009).

How is the ice metaphor affecting the Arctic climate debate? By way of an answer, I have examined narratives about ice as a non-human actor in various forms (e.g., sea ice, land ice, icebergs, the Greenland ice sheet, etc.). The narratives were gathered from July 2009 to December 2009 as part of my doctoral research. The fieldwork involved 22 interviews and observations in Ilulissat (Greenland) and in Copenhagen during

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<sup>1</sup> Latour defines “actor” as something that acts, but does not have to be human. An “actant” can literally be anything as long as it has the ability to act (Latour 2006: 214).

<sup>2</sup> COP15 is the acronym for “15th Conference of the Parties.”

COP15 activities.<sup>3</sup> For analysis and discussion, I used a multi-sited ethnographic approach (see Marcus 1995). I was also inspired by the work of Latour, one of the founding fathers of Actor-Network-Theory, since ice is *acting* and taking strong positions in the climate change debate. According to Latour (2007: 46), to use the word "actor" means that it is never clear who or what is acting since an actor on stage is never alone in acting. The same holds for ice; it is given different voices by different people. Indeed, discourses on ice are characterised by co-existence of several infra-languages<sup>4</sup> that allow it to move, gradually transform, and adapt to new contexts and settings (*cf.* Gad and Jensen 2010: 63; Latour 2007).

## The ice of science

In preparation for the December 2009 COP15, March 10-12 2009, the International Alliance of Research Universities (IARU) hosted an international congress in Copenhagen, "Climate Change: Global Risks, Challenges and Decisions." More than 2,000 scholars, researchers, and business people participated. The program was overwhelming with many sciences represented, and it was a challenge to navigate through the 58 sessions to find relevant presentations about other things than purely natural science. Each conference day started with an opening session presenting some of the most prominent climate experts, NGO representatives, and politicians. All the sessions took place in the biggest conference room, which had the congress logo in the background to the front stage—a piece of scenery shaped like an iceberg.

On the first day, participants were welcomed by a screen showing pictures from the Ilulissat Icefjord and glacier. It was a dramatic setting. The glacier is one of the fastest moving ones, producing more than 10% of the total discharge from the Greenland ice sheet (Rosing 2009: 84). In the congress program, Katherine Richardson (2009: 4), the Chair of the Scientific Steering Committee and Vice Dean at the Faculty of Science at the University of Copenhagen, greeted the participants with these words: "Climate change presents probably the greatest challenge that our society has ever faced and knowledge is the strongest weapon we have at hand to face these challenges. Knowledge is created through research."

One of the congress topics was the "two-degree target," i.e., keeping the global mean temperature from rising more than 2 degrees Celsius above pre-industrial levels. It again received attention during the closing session, which featured a debate among six leading climate experts and Anders Fogh Rasmussen (Figure 2), the then Prime Minister of Denmark and upcoming host of COP15. Rasmussen asked the scientists on the panel:

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<sup>3</sup> In this article, quotes without references are from my field notes (Bjørst 2009).

<sup>4</sup> Infra-languages are the vocabulary of the actors, thus making it possible to move from one frame of reference to the next (Latour 2007: 30)



Figure 1. The installation “The tip of the iceberg” by Inuk Silis Høegh at the North Atlantic House, Copenhagen, December 2009. Photo: Nordatlantens Brygge.



Figure 2. Prime Minister of Denmark Anders Fogh Rasmussen, closing session at the Climate Change Congress, Copenhagen, March 12, 2009. Photo: Lizette Kabré.

[...] I need some concrete advice now. Stefan Rahmstorf said the two-degree target is not safe. So, now I need to know from the panel, can we as politicians still rely on the IPCC [Intergovernmental Panel on Climate Change] recommendations or not? What you're telling me is that we should set the bar even higher. I need to know that [...]. We now have nine months left before a very, very important meeting in this room. It will be a real challenge, and now I think the scientific world has to make an agreement with itself, what is the real platform for politicians? (Anders Fogh Rasmussen, March 12, 2009, Climate Change Congress, Copenhagen).

Climate scientist Stefan Rahmstorf (Potsdam Institute for Climate Impact Research) (Figure 3) who studies sea level changes, answered: "I don't think the IPCC anywhere says that two-degree warming is safe. So I don't think I disagree with IPCC on this point. What I was trying to say is the two degrees are really an upper limit [...]." The statement won applause from the audience. The debate went on and the Prime Minister said that it was very complicated for him to operate in a room with moving targets. Then he changed subject by asking the panel other questions. He then summed up his own position: "We must not only focus on obligations, but keep competing for the opportunities. The greener, the better." Referring to the panellists' quest for action, he pressed for urgent decisions to be taken and stressed the need for "closing the deal," especially by addressing the scientists with statements such as "You have delivered the facts, now it's up to others to carry it on." He thus described the grand paradox of isolating the roles of science and politics while hybridising them at the same time (Skrydstrup 2009: 353).

The whole session was closed by Greenland's singer Rasmus Lyberth, who sang in his very strong, beautiful, and emotional voice. He danced and filled the hall with music while the participants left the building. The projectors were on him, and darkness fell over the long table where the panel had sat in front of the big iceberg. His lonesome dance somehow symbolised the absence of Inuit (as well as humans in general) from the climate debate. The iceberg in the background ended up creating the image of an Arctic as a place with no Indigenous peoples and nearly no social scientists, but with complex climate models and a singing Greenlander. During the congress, climate changes were primarily represented by natural scientists talking on behalf of nature on a global scale, and a few politicians talking on behalf of society. This polarisation made it difficult to grasp climate change that afternoon as the hybrid phenomenon that it really is.

Although the ice metaphor was the common ground for politicians and scientists during the conference, the expectations were not the same. According to Hulme (2009: 74), people disagree about climate change partly because science is not doing the job they expect or want it to do. At the conference, science was asked for facts and stable targets, but not for criticism. The facts were accompanied by an ice metaphor taken from the very core of Western imagination, while one Greenlander lent an artistic and emotional touch. Science was asked to deliver the "bullets" and the Danish Prime Minister was supposed to decide when to fire them and against whom.



Figure 3. Right to left: Prime Minister of Denmark Anders Fogh Rasmussen, Lord Nicholas Stern (London School of Economics and Political Science), Dan Kammen (University of California, Berkeley), Stefan Rahmstorf (Potsdam Institute for Climate Impact Research), and Will Steffen (Australian National University Climate Change Institute), closing session at the Climate Change Congress, Copenhagen, March 12, 2009. Photo: Lizette Kabré.

### *The awakening of giants*

Especially key to this debate is the Greenland ice sheet, an exclusive, isolated area that has yielded much climate change data. Unlike the case with laboratory research, conditions cannot be controlled or regulated.<sup>5</sup> Ice scientists nonetheless see things through the lenses of a “modern world” where natural factors and human factors are kept apart.

To show how scientists perceive ice, I will discuss a metaphor used by Danish glaciologist Dorte Dahl-Jensen (University of Copenhagen). Known internationally for her significant research contributions to the history of the Earth’s climate, she has several times referred to the Greenland ice sheet as a “sleeping giant.” She took part in a COP15 side event that featured two new scientific reports on ice and climate change (Dahl-Jensen et al. 2009; Tandong et al. 2009). She summed up her impressive presentation with these words: “What has happened with global warming is that we have woken giants. The big ice sheets are contributing and they can really have the potential to change sea levels in the future. That is why it is such an important message

<sup>5</sup> For discussions about field work versus laboratory work, see Kuklick and Kohler (1996).

to convey to you” (Dahl-Jensen, December 14, 2009, COP15 side event “Melting Snow and Ice: A Call for Action,” Copenhagen). As a glaciologist, Dahl-Jensen works with the deepest drilled ice cores from Greenland, where purportedly no social facts exist (Skrydstrup 2009: 106). But the sleeping giant metaphor conveys agency to ice and emphasises that this non-human actor has a fundamental and global role to play in the impacts of climate change.

Bruno Latour has argued that researchers can produce a process and a set-up whereby they talk on behalf of nature in their discourses (Blok and Jensen 2009: 93; Latour 2002). According to Lakoff and Johnson (1980: 3), the way we think, what we experience, and what we do is very much a matter of metaphor. A metaphor can thus allow us to focus on one aspect of discourse (such as ice) and keep us from being distracted by other images that may be inconsistent (*ibid.*: 10). By bringing the sleeping giant metaphor into the discussion, Dahl-Jensen is suggesting how we should think about the ice sheets and act towards them.

### *The beating heart of the Arctic*

Right after Dahl-Jensen’s presentation, Al Gore, the former American Vice-President and Nobel Peace Prize laureate (for his involvement in environmental issues), presented the report “Melting Snow and Ice: A Call for Action” (Figure 4). Gore introduced his presentation with these words:

[...] We are just talking about melting ice. But I want to put it in this larger context. Ice is visible and there is a big difference—that one degree makes between ice and water and that difference leads to a lot of other differences—surface that is highly rejected or surface that is highly absorbed. Concentration of CO<sub>2</sub> and methane that are locked in place and those that are released to the atmosphere. So melting ice is really important not least because the fact that it is visible makes it easy for these scientists to communicate to lay people like me (Al Gore, December 14, 2009, COP15 side event “Melting Snow and Ice: A Call for Action,” Copenhagen).

With a slide, Gore displayed a heart pumping and the blood’s circulation, and from that image he turned to the North Pole ice cap. He played a short film showing the Arctic ice melting over time, and how the area of permanent ice will shrink and disappear while the heart gets smaller and smaller and weaker and weaker. The room was packed with NGOs, political representatives, and journalists. He commented on his slide by saying: “The ice that you see in red as this beating heart [...] It is almost like blood spilling out of a body along the East coast of Greenland and so it is gone in less than 40 years. [...]” (*ibid.*).

Even though ice is a non-human actor, it was given a pumping heart by Gore, and as we have seen earlier, the body of a sleeping giant by Dahl-Jensen. Personification of ice not only offers a specific way of thinking about it, and how it acts upon us, but also

how we should act upon it.<sup>6</sup> These are very strong metaphors. Nobody wants to stop a beating heart or awaken a sleeping giant and face the unknown consequences. Although personification is a common category of metaphor, it takes many forms, with each one picking out different aspects of a person or ways of looking at a person. According to Lakoff and Johnson (1980: 34), what they all have in common is that “they are extensions of ontological metaphors and allow us to make sense of phenomena in the world in human terms—terms that we can understand on the basis of our own motivations, goals, actions, and characteristics.” Hence, personification helps—to use Gore’s words—in “communicating to lay people.” Although Gore was “just talking about melting ice,” he used a powerful metaphor to question the way people live and the kind of choices they make or have made. The symbolism of a beating heart was provoking: are we literally killing ourselves? Concluding that it is “our choice,”<sup>7</sup> Gore linked global climate change to each individual, ascribing responsibility to people and agency to ice. Ice was thus being used to mediate communication among politicians, scientists, and the general public.



Figure 4. Al Gore, United Nations Climate Change Conference side event “Melting Snow and Ice: A Call for Action,” Copenhagen, December 14, 2009. Photo: Lill Rastad Bjørst.

<sup>6</sup> Such a perception of glaciers as sentient beings recalls that of Athapaskan/Tlingit elders who see them as “equipped with senses of smell and hearing, alert to the behavior of humans and quick to respond to human indiscretion” (Cruikshank 2001: 389). For an in-depth comparison of knowledge about glaciers from scientific and Aboriginal perspectives, see also Cruikshank (2005)

<sup>7</sup> *Our Choice* is also the title of his most recent book (Gore 2009).

After his presentation, Gore was criticised by leading scientists<sup>8</sup> and journalists for manipulating the truth, when he estimated at 75% the chances that the North Pole could be completely ice-free during the summer months within five or seven years. The *Times* published the next day: “There are many kinds of truth. Al Gore was poleaxed by an inconvenient one yesterday” (Devlin et al. 2009). Using ice as a way to frame political issues thus brings the risk of confining debate to scientific facts and slowly sliding it away from broader discussions about human values and choices. This being said, such a situation was advantageous for the Danish Prime Minister, who preferred to talk about whether the science was right than about how to stop climate change. Hence, as an overall indicator of climate change, and as a key political argument, ice comes with all kinds of roles and practices. It demands facts and interpretations, be they from glaciology, Earth science, or traditional ecological knowledge.

### **The ice of Indigenous peoples**

COP15 also hosted side and parallel events by Indigenous organisations that had for many years been talking about ice and the human impacts of climate change. Patricia Cochran, the Executive Director of the Alaska Native Science Commission and the Chair of the Indigenous Peoples Global Summit on Climate Change, was a panel speaker at the Tebtebba side event “Indigenous-Sensitive Climate Change Solutions and Implications of the Present State of Negotiations.” She explained how Arctic people were experiencing coastal erosion and melting permafrost because the ice was no longer protecting the coastline. “The sea ice has always been an extension of Inuit land and the sea ice is our highway,” Cochran (2009) emphasised.

Another side event was the WWF (World Wildlife Fund)’s Arctic tent in downtown Copenhagen. Inuk leader Sheila Watt-Cloutier, a climate change activist, outgoing Chair of the Inuit Circumpolar Conference and nominee for the 2007 Nobel Peace Prize, gave a talk there and made this statement about the ice and snow:

You have to understand that we are the people of the ice and snow. Nowhere else in the world does snow and ice represent mobility as it does for us in the Arctic, so when that starts to go, it becomes a real question of safety and security. When snow falls and ice forms, that’s our highway and that’s the highway which leads us to our environment, which is really our supermarket where we hunt our country food. So there are shorter periods of safe ice now as well around the circumpolar world – together, of course, with less predictable weather [which] means more accidents as well [...] it is not like somewhere in the southern part of Canada or other parts of the world, where when the ice starts to melt, it has no real sense of meaning – but for us it really does on a daily basis [...] (Sheila Watt-Cloutier, December 8, 2009, WWF’s Arctic tent, Copenhagen).

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<sup>8</sup> Wieslaw Maslowski (US Naval Postgraduate School in California) said: “I would never estimate likelihood at anything as exact as this. It’s unclear how this was arrived at” after Al Gore had used his models as references. Gore’s statements were also critiqued by Jim Overland, a leading oceanographer at the US National Oceanic and Atmospheric Administration, and by Richard Lindzen, a climate scientist from the Massachusetts Institute of Technology, among others (Devlin et al. 2009).

Sheila Watt-Cloutier has for many years advocated for the Arctic peoples' "right to be cold" as a basic human right. During her presentation, she confronted everyone in the Arctic tent and encouraged Indigenous peoples to raise their voices as much as possible. As a closing remark she said:

[I]t is a human issue, it's not just politics, it's not about science, [...] it is the ground truthers, the Indigenous peoples who are the most negatively impacted, [who] need to elevate that voice this week. Not [...] when there seems to be a debate [...] on whether or not the science is real, because we are scientists in our own right and we have been signalling the world for many, many years [...] (*ibid.*).

*Vis-à-vis* the ice as the global non-human actor, the Inuit are both local actors and witnesses of climate change in the Arctic. Raising their voices means protecting their lifeways. Yet not all Inuit have the same opinions about climate issues. As described below, positions differ between the Indigenous NGOs and the Greenland Parliament. The former's "highway" does not seem to be the "right way" for the latter's final climate change destination.

### **The ice of the Greenland parliament**

As mentioned earlier, during COP15, Naalakkersuisut (Greenland Self-Government) hosted a parallel event called "In the Eye of Climate Change." It was a living exhibition with art and science presentations, films, and more. The texts at the exhibition and the presentations by politicians, NGOs, and businesses clearly demonstrated that Greenland does not want to be seen as either a victim or a passive witness to climate change. Greenlanders want to be actors in that change and to work towards economic independence through industrial development. In his opening speech at the parallel event, Greenland's Prime Minister Kuupik Kleist revealed the Greenland Parliament's view on the new opportunities that the changing climate is offering:

For Greenland climate change also offers new opportunities in terms of tapping the natural wealth of our country. Less ice means easier access to the sustainable harvesting of oil, gas and minerals. The ice-melt will also provide huge hydro-power resources, giving us a unique opportunity to establish energy-intensive industries based on clean, renewable energy. All of which will be vital in securing our economic self-sufficiency (Kuupik Kleist, December 11, 2009, parallel event of COP15 "In the Eye of Climate Change," Copenhagen).

Since his election in June 2009, Kleist had worked towards a broader perspective on the climate debate, with equal emphasis on development. During an earlier speech at the Nordic Council session in Stockholm, he delivered an important message about the Western world's fascination with Arctic nature: "[...] the Arctic community does not only consist of ice, glaciers, polar bears and other wild animals, but also of people. We are not that many, but the Arctic societies are a part of the international community—we have needs and we have problems to fight with, like all other communities on this shared planet" (Kuupik Kleist, October 26, 2009, Nordic Council,

Stockholm). Kleist's statements imply that Greenlanders do not want to be "ground truthers" or talk on behalf of nature, polar bears, or ice for that matter; they want to be innovators when it comes to industrial development and be part of the international community represented by modern visions.

In the months up to COP15, there was uncertainty as to whether or not Greenland would reach an agreement with Denmark on its climate targets. There were even disagreements about the interpretation of its responsibilities under the 2001 Kyoto Protocol. At that time Greenland had agreed to reduce its CO<sub>2</sub> emissions by 8% during the period 2008-2012 (Miljø- og Energiministeriet og Grønlands Hjemmestyre 2001). As Premier Kleist admitted, Greenland had not done enough to meet the targets (Sommer 2009), but at the same time he and his staff interpreted the text as a declaration of intent to make an "active effort" to cut CO<sub>2</sub> emissions, as part of the Danish reduction strategy (Grønlands Selvstyre 2009: 12). This status quo and a new proposed reduction strategy from the Greenland Government were immediately called "unambitious" by the Danish Energy and Climate Minister Lykke Friis (Ejsing 2009: 16). But with the slipping away of a binding deal for the world at COP15, agreement was reached on December 17, 2009 between Denmark and Greenland on the latter's climate targets. There was also acceptance by all parties involved that Greenland did not have to cut emissions to the same extent as Denmark because it was not part of the European Union (Kalaallit Nunaanni Namminersorluta Oqartussat 2009). Not everybody in Greenland appreciated their country's position at COP15. A journalist from *Sermitsiaq* wrote the following critical commentary: "Greenland got a Christmas present deal from the Danish State: now we can CO<sub>2</sub>-pollute as much as we have ever dreamt of doing [...]" (Chemnitz 2009: 15, my translation).

Although ice may not seem relevant to Greenland politicians, it is very present in discourses on Greenland's economic development. One key aspect is water power from melting ice. The Greenland Parliament is aware that melting ice is creating problems for hunters and fishers and that it is a general problem for nature and wildlife. But development and economic independence are without question top priorities these days. I had thought Greenland and the Arctic regions would make representations to COP15 on other issues, but events proved otherwise. One possible reason: when the Arctic case is based almost exclusively on melting ice, some actors can only be present by their absence.

### **The icebergs of Ilulissat**

Another hot spot in the climate debate has been Kangia (the Ilulissat Icefjord) near the town of Ilulissat on the West Coast of Greenland. It is a UNESCO park (Figure 5). I visited Ilulissat in the summer of 2009, and interviewed local citizens, politicians, and leaders of institutions who were contributing to discussion about nature and climate.<sup>9</sup> For Connie Hedegaard (2008: 84), former Danish Minister of Climate and Energy, the

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<sup>9</sup> The qualitative interviews were in Danish, on location, and translated by myself for this article.

Ilulissat Icefjord serves as an icon of what she called “one of the biggest challenges our generation have faced.” On several occasions she invited the world’s top leaders to Ilulissat as a preparation for COP15, for “informal dialog meetings.” Journalists, tourists, and politicians thus came from all over the world. When I talked to the local UNESCO site manager at the Ilulissat Icefjord, she commented on how it had received intense attention during the last five years with the international focus on climate change: “The phone is ringing all the time. ‘Can we talk with a fisherman or a hunter who has climate-related problems?’ That is the ultimate, and preferably one who drives a dogsled [...]” (Naja Habermann, August 2009, Ilulissat).

Many of my informants had already been interviewed by media and other researchers and some recommended to me scientific reports and local scientists, who they thought could answer my questions. Many journalistic reports from Ilulissat have been about sea ice disappearing and icebergs getting smaller, and no one in Ilulissat really doubts such changes, but their own discourse and interests are somehow different. I asked the local UNESCO park ranger, who had hunted and fished there for many years, what he thought of the talk about a climate catastrophe. He said, shaking his head: “No, it is not hysterical. We take it as it comes. For us, it is not a catastrophe. An Ice Age would be” (Aron E. Petersen, August 2009, Ilulissat).

On the plane to Ilulissat, I had read Air Greenland’s in-flight magazine *Suluk*, which featured a section about the Ilulissat Icefjord and characterised it as an ice paradise (Schultz-Lorentzen 2009: 15). I asked Aron E. Petersen whether he too thought likewise. Pointing at the icebergs in the fjord, he answered: “This ice gives the fishermen a lot of problems [...] It is not exactly an ice paradise to you when you have just lost over 1.000 kr. [of fishing gear] under a giant iceberg. They don’t know the problems related to ice. But apparently it sells” (Aron E. Petersen, August 2009, Ilulissat).

A good hunter or fisher must know the ice in Ilulissat. Ships and boats caught between icebergs, horrible weather conditions, and gear disappearing in the ocean were some of the stories I heard from my informants. Ice can hinder some activities as much as lack of ice can hinder others. Some people I talked with were more concerned about fish prices, the hunting restrictions of the Self-Government and the European Union, the future of the small villages, the possibility of greater economic independence for Greenland, and their children’s education and future. In all respects, climate change is only one more challenge to many Arctic communities (Sejersen 2009: 230).

I also talked to Jess Svane, the mayor of the municipality of Qaasuitsup Kommunia, to find out how the discussions about the environment and the changing climate were affecting their priorities in Ilulissat. He could confirm that they had begun talking about climate change and there were concerns about the future of the fish plants and hunters’ incomes. They did not have a climate strategy to cut back emissions, but he thought the idea sounded interesting. He said quite honestly:

There are many Greenlanders who don't know what CO<sub>2</sub> is. You can't ask the general public, you have to ask the experts, all the professionals. That's what I think, and then they can tell the society that CO<sub>2</sub> means that and that. Are there CO<sub>2</sub> emissions in Greenland? If you ask the people in the street, they will say: "I don't know." We do not know much about CO<sub>2</sub> emissions here. We have to use the professionals to tell us what it means for the climate (Jess Svane, August 2009, Ilulissat).

In contrast to many of my other examples, ice as a global actor in Ilulissat is not the main concern locally. It is not given a human face, a body, or a bleeding heart. Ice is something you have to pass by or move on to get to the wildlife. Here ice is not an icon or a metaphor; it is part of everyday life. Discourses on ice in Ilulissat contrast sharply with the image of ice as a global actor. Here it is local; it is not polarised as if nature and society were apart. It is not a photo or a background picture. Here ice is concrete, not a hybrid phenomenon. It is cold and wet and present in all endeavours. Yet it is probably at Ilulissat that it acts the most and on its own.



Figure 5. Ilulissat Icefjord, September 2009. Photo: Lill Rastad Bjørst.

## Conclusion

Ice does not act alone in the climate debate. It also acts through the imagery that people create, be it on the bottom of the Greenland ice sheet, in front of a fishing boat,

in scientific reports, on films and photographs, compared to pumping hearts in heated conference rooms, related to the rights of Indigenous peoples, evoked in political statements, or turned into a renewable resource for modern Greenland society. Ice does not only symbolise “the Earth’s fragility.” It also shapes metaphors, creates narratives, and leads actions.

Scientific discourses on climate change are often confusing in terms of human impact as they move from local to global impacts over time scales ranging from 40 years to a million years. By focusing on ice, scientists, politicians, NGOs, and artists create narratives about Arctic climate change more than Greenland’s local population and politicians do. Unfortunately, these narratives also construct a world without people or social facts, ice being the Arctic’s primary informant in various settings. My point here is that these narratives and metaphors adapt ice to new contexts and situations. Ice is accompanied by a cacophony of voices that let it act and speak in various ways. Such is the paradox of non-human ice: it acts like a person and is never without the company of other actors in the climate debate. Hence, it is not only something about to melt. It is a giant, a heart, a highway, a field site, an obstacle, an icon, a symbol, a tourist attraction, a background picture in conference halls, a piece of artwork, and something that is hard to live with and without.

Icebergs are acting in the climate debate in a way that not only creates narratives for themselves, but also for the Inuit. Such narratives may be critical. Ice represents the Arctic and dominates the climate debate but also silences many relevant and important messages from the Inuit, in particular, their quest for development. It is an irony that the Greenland Inuit used ice to represent themselves during their parallel event at COP15. Visually, one could only see the tip of the iceberg. This image likewise symbolised just how little the other participants knew about the life and challenges of Inuit in a changing Arctic.

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**148/L.R. BJØRST**

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