ISSUE 11&12 / 2012

CONDITIONS

INDEPENDENT SCANDINAVIAN MAGAZINE ON ARCHITECTURE AND URBANISM

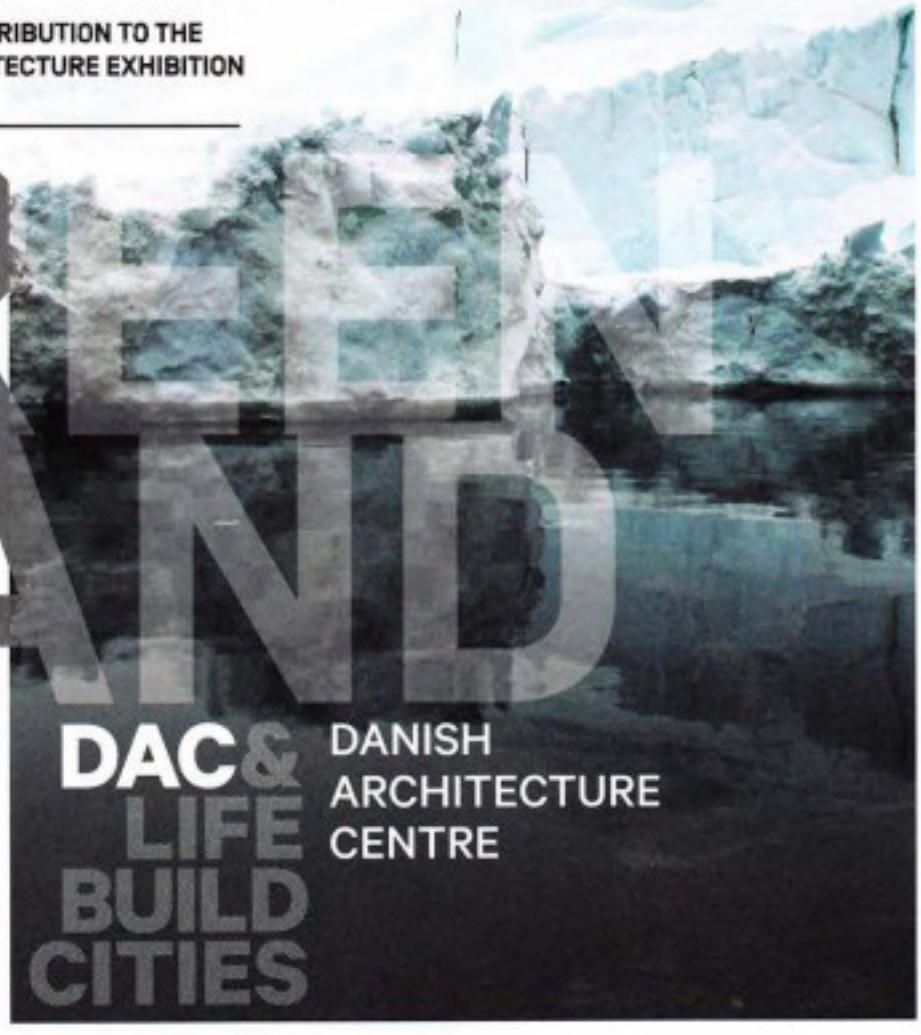
la Biennale di Venezia

13. Mostra Internazionale di Architettura

Partecipazioni nazionali

POSSIBLE GREENLAND

THE OFFICIAL DANISH CONTRIBUTION TO THE 13TH INTERNATIONAL ARCHITECTURE EXHIBITION LA BIENNALE DI VENEZIA



NORWAY 129 NKR
SWEDEN 149 SEK
DENMARK 89 DKK
EUROPE 15 €
UK 13 £
NORTH AMERICA 20 $
RETURN WEEK 46

11 >
9 771891 267001 >

PHOTO BY JULIE HARDENBERG

CONTENT

PLEASE, READ ON!

COMMISSIONER STATEMENT

THE **GLOBE** AS COMMO – FROM **A** TO **ANTHROPOC**

What is the actual capacity of architecture in a world that has just recently recognized that the behavior of mankind itself is in fact the largest single impact on the climate of the Earth? That in only decades we have moved from the geological period of the Holocene to that of the Anthropocene?

Greenland is among the regions on the Earth's surface that are most affected by climate

N GROUND
NTHROPOCENE
CIETY!

change. As Greenland and Denmark share centuries-old cultural and political ties, the relevance of testing architecture's capacity under the impact of the Anthropocene by creating the scenario Possible Greenland seemed obvious! Thus, on behalf of the Danish Minister for Culture, we have appointed the world renowned Danish and Greenlandic geologist Professor Minik Rosing as the curator of the official Danish contribution to the 13th International Architecture Biennale in collaboration with the young Danish architecture firm NORD Architects Copenhagen, to head mixed teams of Greenlandic and Danish architects and engineers.

I would like to offer a special thank you to the project's participants, our Greenlandic collaborators and of course our sponsors for making Possible Greenland a reality.

Kent Martinussen

CEO, Danish Architecture Centre

CURATOR STATEMENT

GREENLAND **BELONGS** TO ALL **GREENLANDERS** – ALL GROUND IS COMMON **GROUND**

Greenland is moving from the periphery into the center of global attention. The Arctic region is undergoing dramatic changes in response to climate change, globalization and internal demographic forces. The Arctic is heating up faster than any other region. The sea ice cover is diminishing and new seaways are opening between Asia, Europe and America. Biological and mineral resources of the Arctic are attracting increasing international attention in pace with the easier access and the ever-increasing demand for commodities from a world population growing in number and prosperity. Greenland is a gate to these new global opportunities.

Greenland is not merely a treasure chest of commodities. The rocks of Greenland hold a 3,800 million-year-old memory, and tell us the stories about the emergence and evolution of life on Earth, the birth of the continents we live on and the dynamics of our climate. Greenland holds the record of how the world we inhabit was formed. Greenland also has a long and intricate history of cultural interactions between the Inuit and Europeans. Greenland is the first and only autonomous Inuit nation. The example of successful

Minik Rosing

decolonization while maintaining a continued alliance and friendship with the former colonial power Denmark may set standards and serve as inspiration for indigenous peoples worldwide.

Architecture is the art of merging human needs and hopes into visions for the future. Visions that can inspire and guide public debate and help identify the possible avenues of development to build a new viable nation. Avenues that allow exploitation of natural resources causing minimal impact on the Arctic environment and leaving room for harmonious development of Greenland's society. These avenues must be based on a well-functioning infrastructure Connecting Greenland, on Migration to and from Greenland, on Cultivating resources and social and political systems, and on new ways of Inhabiting Greenland. It is my hope that this project, "Possible Greenland," can help build the foundation on which the people of Greenland can make the choices that redeem and illuminate their hopes and dreams for the future.

Minik Rosing
Professor in Geology, University of Copenhagen

PHOTO BY MADS HULSRØD PETERSON, AARCH

29th August to 25th November 2012

THE OFFICIAL DANISH CONTRIBUTION TO THE
13th INTERNATIONAL ARCHITECTURE EXHIBITION
LA BIENNALE DI VENEZIA

POSSIBLE GREENLAND

29th August to 25th November 2012

THE OFFICIAL DANISH CONTRIBUTION TO THE
13th INTERNATIONAL ARCHITECTURE EXHIBITION
LA BIENNALE DI VENEZIA

COMMISSIONER

CURATOR
Henrik Harry, Professor in Geology, University of Copenhagen

CO-CURATOR
BIG Architects Copenhagen

Danish Architecture Centre would like to thank the following collaborators
for making this exhibition possible:

PROJECTS:

"GREENLAND CULTIVATING":

"GREENLAND INHABITING":

"GREENLAND CONNECTING":

"GREENLAND INFORMING":

STUDIES:
Arctic Engineers at Danish Rambøll Engineering A/S, Greenland and the Technical University of Denmark, DTU Management Engineering
Aarhus School of Architecture
CEBRA Architects
Transform Architects

PUBLICATION:

THE DANISH ARTS FOUNDATION

FILM –GREENLANDIC HOME INSTALLATION

EXHIBITION TEAM

GREENLANDIC COLLABORATORS

COORDINATION & LOGISTICS
Architect Trade Mark, H-B Studio

GRAPHIC DESIGN

MAIN SPONSORS

THE DANISH ARTS FOUNDATION

EXCLUSIVE SPONSORS:

SPONSORS

DAC DANISH ARCHITECTURE CENTRE
BUILD CITIES


GREENLAND SEA
NORD
QAANAAQ
DANMARK HAVN
BAFFIN BAY
GREENLAND
ITTOQQORTOORMIIT
QEQERTARSUAQ
ILULISSAT
SISIMIUT
KANGERLUSSUAQ
ARCTIC CIRCLE
DAVIS STRAIT
TASIILAQ
NUUK
KANGERLUARSORUSEQ
DENMARK STRAIT
PAAMIUT
NANORTALIK

Greenland is a new fulcrum of the world.

An interview with Laurence C. Smith

Future North 2050

In forty years, the world will be a very different place than it is now: the population will be about 50% greater, climate change will be in full swing, and the increasing prosperity of Asia and Africa will create voracious markets for natural resources. So, given the turbulence ahead, what kind of world is likely to emerge?

BY JOSHUA SELMA

Dr. Laurence C. Smith is one of the world's most respected climate scientists, whose work envisions the future of a warmed planet. His debut book, *The World in 2050: Four Forces Shaping Civilization's Northern Future*, is a work of enormous scope, cutting across themes of population demographics, globalization, natural resource demand and climate change.

Is there any good news? Some. What Dr. Laurence C. Smith calls the Northern Rim Countries—the northern U.S., Canada, Russia, Greenland and the Scandinavian countries—will experience dramatic and positive economic changes. What does that mean for Possible Greenland?

ORGANIZING/ GOVERNANCE

ISA: *Now partially independent from Denmark, how do you see Greenland and what changes do you predict or envision until 2050?*

LCS: It is hard to predict, because the path to independence is a political one. Politics are certainly hard to predict with any confidence. I will say, Greenland's direction is not new; it has its roots all the way back in the 1970s when it passed its first referendum that began the long term process of a slow divorce from Denmark. There have been a number of these referendums throughout the years, each one becoming more sweeping and powerful. The most recent in 2008 is very significant because it has begun a greater and more visible transfer of power with the official language being changed. Greenland will now conduct its own foreign affairs with other countries.

As for the future, there are two sides to this. If you extrapolate the political trend, Greenland is on an ultimate path for full political independence. I speculate the greatest obstacle to that is an economic one. Greenland remains deeply subsidized by Denmark. There is no way it can be truly autonomous until it is economically independent. The only real way that is likely to happen is by the development of oil and gas resources, which has not happened yet.

The second point I would make before predicting a full divorce is that the Greenlanders are deeply intertwined with the Danes through blood and marriage and name. It's not like Canada, where the Inuit are ethnically separate from the average Canadian. The connections run deep. If you go to Greenland, you will realize that it is not a situation where you have an angry aboriginal group that wants to escape from their white colonial masters. There is much more integration than that.

In order for full independence to take place, we would have to see a huge increase in the economic development of Greenland, which is not feasible in the immediate term—by 2050, who knows? It is certainly not going to happen anytime very soon. Also, as I said, there is a deeper level of connection between Greenlanders and Danes than perhaps many people might realize.

ISA: *If this does happen, how do you think Greenland can restructure politically. If they do find oil, how do they restructure?*

LCS: The political restructuring has already begun. The latest referendum is very significant. Greenlanders are taking over the police force, the courts, the coast guard. They will conduct their own foreign affairs with other countries. But these are still less challenging than the economic hurdle that Greenland must overcome for full independence. It is a small country, only 60,000 people; that's not much more than your standard European town.

ISA: *Would a shareholder system be more effective than a political system?*

LCS: That would be in keeping with the model that was first set up in 1971, in Alaska, by the Alaska Native Claims Settlement Act. It is one that inspired Canadian land claims settlements. It is also what inspired the first referendum in Greenland in 1973. Yes, that would be in

keeping in the way it has been done with other aboriginal groups around the North.

JSA: *How would you see Greenland in relation to the other countries, the main forces in the Arctic? How can it position itself in relation to Canada, Russia, Norway, etc.?*

It is difficult to compare these countries because their populations are so different. Their land masses are different as well. Greenland is a huge country on paper, but there is only a tiny strip of land along the southwest coast where one can live. It has only 60,000 people. In most arenas, it is difficult to compare Greenland with countries like Russia or Canada. In terms of sovereignty, Greenland is very involved and has a lot at stake with the ongoing mapping claims proceeding under Article 76 of UNCLOS (United Nations Convention on the Law of the Sea), owing to the presence of the Lomonsov Ridge. It is a long underwater mountain chain that bisects the Arctic Ocean. This geological feature has the potential to extend Greenland, Canada and Russia's claim very far out into the Arctic Ocean. Only the mapping and geological sampling will tell. Greenland has a great deal at stake.

In regards to oil and gas reserves, the preliminary assessments by the US Geological Survey suggest Greenland has very large hydrocarbon potential. Energy and tourism are the two areas of greatest potential growth in Greenland's economy.

CONNECTING

JSA: *The gradual opening of the Northwest Passage to shipping will have an economic impact well beyond the Arctic Circle as it cuts delivery times and strengthens northern ports at the expense of those that are central nodes today. How will this shape the north?*

LCS: It will always be dangerous. The vision of a great open blue ocean in the Arctic is vastly over imagined. The ice will always return in the winter even if it retreats further in the summer. That said, the sea ice is the greatest single obstacle to summertime shipping. There is no question that when the ice retreats in summer, shipping activity increases.

While there might be a net increase in international shipping activity—in particular north of Russia, but less so in the Northwest Passage—the greater story is not new shipping lanes between Europe and China. The greater story is increased access to the Arctic itself, which is even more profound because is suggests an increase in economic activity, development, human presence and environmental challenges in the region itself. It is one of the last empty places on earth. To me, this is more shocking than the prospect of a new shortcut for a few weeks to months of the year.

By 2050, I imagine oil, gas and mining outfits, fishing boats, community resupply, tourism. Our modeling of this at UCLA has projected some rather stunning increases in human accessibility to the region.

JSA: *And Greenland?*

LCS: In my book, I name Nuuk as one of the top ten Arctic ports of the future. It comes down to energy and tourism; both have enormous growth potential in Greenland. Based on the latest data I have from 2008, already over 400 cruise ship visits take place each year. This is staggering growth. Both of these sectors are enjoying the benefit of a global publicity campaign. All eyes are on the north. You cannot open the newspaper without another story about a breaking ice shelf and unprecedented summer melting. While we won't have a liquid arctic anytime soon, this attention to the region has spurred a great deal of interest.

The climate system is full of non linear feedbacks, tipping points, thresholds and amplifiers. In the last chapter of my book, I argue that this very human, non linear response might be the most significant of all. The pace of interest in the north is rapidly growing in a non linear way, partly driven because of the climatic changes. The infusion of capital and the desire of people to go to the Arctic to "see it before it is gone" has a very dramatic here and now impact on its development. This distinctly human feedback plays significantly to Greenland's advantages in terms of energy and tourism.

MIGRATING

JSA: *You explain how native populations in the Arctic will become more important, just like in Alaska where land and oil rights were given to many native Americans; in Canada, a whole new territory called New Nunavut has been carved out of the Arctic for the Canadian native peoples. It is being developed along a similar pattern to Alaska. What do you think will happen in Greenland?*

LCS: That is a great question. Greenland is a little different. We don't see rapid population growth like in Canada with its rapidly growing Inuit population. Alaska is also growing quickly, as well as Sweden and Iceland before the banking crash.

Greenland is experiencing none of that. The population has been very stable. The fertility rate is around replacement. At the moment, we don't see the high fertility statistics or strong immigration programs that are driving growth in other Northern countries. Based on current data and trends, I don't foresee a massive migration, certainly not to Greenland—and nothing like we are seeing in Canada, for example.

JSA: *If this happens, what will be the major lifestyle shifts?*

LCS: It is hard to answer that question, because I don't see what groups of people would grow the population. It is hard to imagine how this migration might shift Greenland's lifestyle. In Finland, the population is growing slowly, but one of the migrant groups is Somali. When you have an infusion of Somalis in Finnish culture, the change in lifestyle is very different as compared to say, Estonians. Without imagining who these new arrivals might be, it is hard for me to answer the question.

INHABITING

JSA: *In your book, you state that there is no rule saying a city must be a nice place to live in order to expand population and economic growth. Parks, good governance and smoothly flowing traffic are optional, not required. What is required then? How is the city of the future in the extreme climates?*

LCS: From my amateur knowledge of architecture, and what I see being built in these extreme northern climates, architecture is ever more dedicated to its fashions and less to fitting the climate. For example, I just came from Toronto where the skyline is bristling with new condo developments. Toronto is quite cold, yet these are all the new glass skyscrapers of the modern urban city. They are very inefficient for heating in such a cold climate. You see the same thing in places like Fairbanks, Alaska where a lot of the new construction is beautiful and modern, but not very heat efficient. The buildings constructed there in the 1970s and 1980s are much lower, squat, using a lot of concrete, and are much more insulated against the cold. The architectural trends of the north are mimicking the architectural trends of the great modern cities in the warmer parts of the world instead of being adapted well to the unique local climates.

One step to making the northern cities more livable—not enjoyable, because these are difficult places to live—would be to provide enough infrastructure so people

PHOTO BY JULIE HARDENBERG

> "It comes down to energy and tourism; both have enormous growth potential in Greenland."

are willing to move their families there and not just be migrant workers. By migrant workers, I don't just mean foreign workers; I'm talking about workers who actually rotate on shifts, flying out for weeks at a time while their family stays back home.

Fort McMurray in Canada is doing a better job at this. There are still a lot of people who come and go, but it is starting to grow its schools and parks and theaters and its cultural amenities such that people will want to stay there. This is something that will help the northern towns in difficult and extreme climates to become viable and attractive. A fine example of an outpost like this would be Whitehorse in the Yukon Territories. Whitehorse is in the middle of nowhere. It is one of the emptiest landscapes I have ever seen, yet, it is very vibrant. It is a town but it feels like a city. It has farmers markets and theaters and a very progressive cultural life. That's the kind of appeal these northern towns will have to have in the future to become true year round habitations for families and societies.

JSA: *The native people had a certain knowledge of how to live in these kinds of environments and adapt to the conditions, which has somehow been lost. What can we bring back to the architecture from the vernacular?*

LCS: The comparison is difficult to make. The question may be lapsing into a common rhetoric of the traditional ways of aboriginal people that may be inappropriate to recall. Aboriginal people were nomadic. They had an amazing adaptability. They were able to eke out an existence under very difficult conditions by moving around, by being mobile, by pursuing the food, by moving to higher or lower elevations, or by moving from the ice to land. In fact, the arrival of the permanent, fixed town is very new for these aboriginal groups. In Canada, some of these people have been permanently settled only since the 1950s or 60s. The kind of adaptive living strategies that worked so well for the nomadic people simply don't apply to these towns. In many ways, the people who live there are at the mercy of the architects from Copenhagen or Oslo or Toronto. The towns are set up based on the knowledge of the southern architects who build and model them. It is not clear to me whether there is a huge wealth of untapped potential that is somehow overlooked.

CULTIVATING

JSA: *Will the melting ice make previously untapped resources within reach? What do you think about new farming opportunities in the North?*

LCS: Farming will never be more than a niche market for some summer vegetables. It is in no way on an economic scale to begin to come close to major sectors such as energy, tourism and mining. It is a novelty. It is more a symbol of the changing climate than an awakening of a new farming boom. It is Greenland after all.

JSA: *If I say "cultivating," what is the image that comes to mind?*

When I hear cultivating, I imagine people with plows and fields, growing and planting crops.

JSA: *In terms of culture, how can the Arctic develop a new identity?*

LCS: Oh, that type of cultivating. We scientists are very literal.

In the North and the Arctic and in Greenland, there is a tremendous new identity being cultivated. It is a mixture of the best of Western style capitalism and traditional values and communal living that many of these Northern societies have embodied for millennia. For example, there is no private land in Greenland. You can build a house, but the land title is for the common good. Yet, there are private industries and commerce.

It is a very unique blend of both ways. They come together in a uniquely Northern way. I admire it very much, especially when we continue to struggle with this global recession. Many of us are wondering about the "growth at all costs" business model that has dominated the past century. Many of us worry about sustainability. Is it really feasible or desirable to have an economic model that demands growth at all costs? That is not the aspiration of many of these northern societies, even if they do have capitalist enterprises. They are cultivating a remarkable and unique hybrid philosophy and way of life. I dream that it could serve as an influence, if not model, for other larger economies of the world.

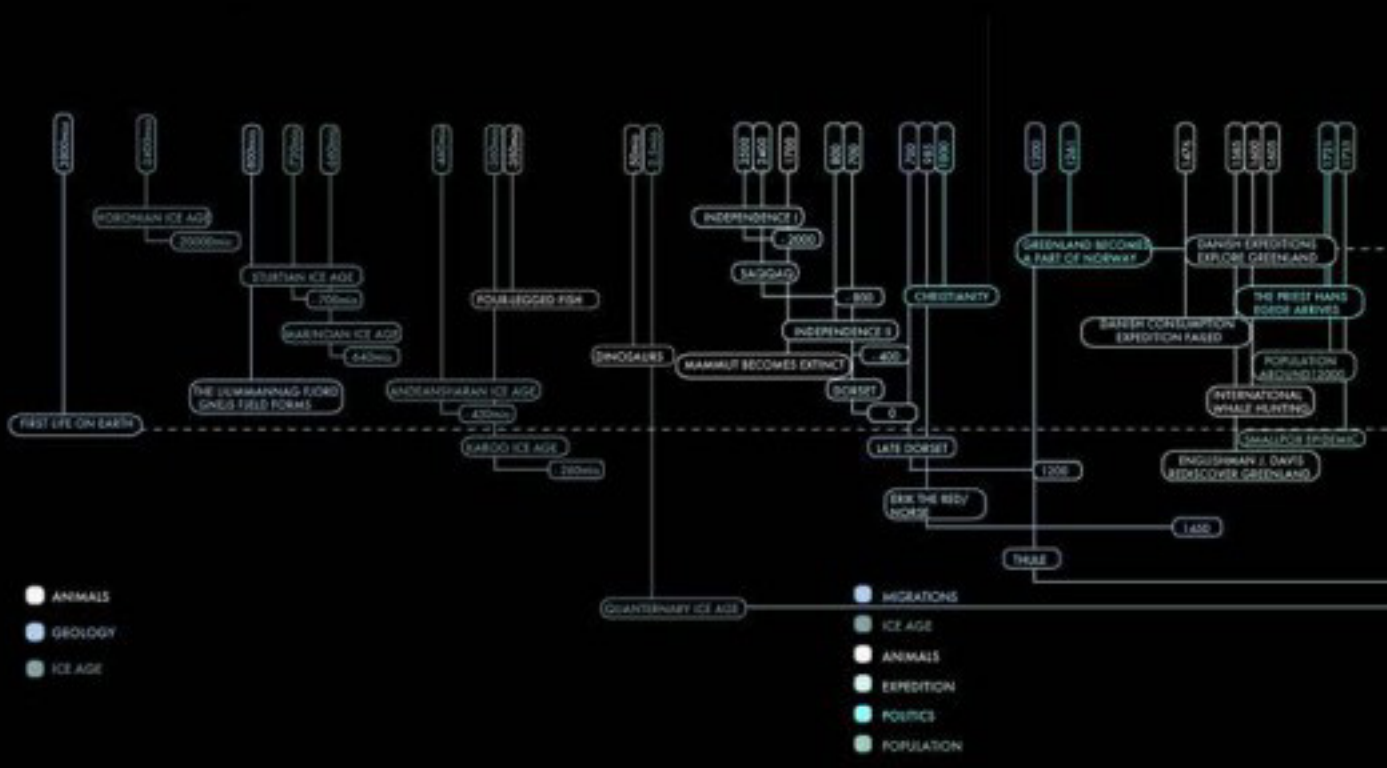
It would be a study, an experiment to apply to larger economies, although it probably wouldn't work. A lot of it is innately cultural. These are societies that have their roots in communal living, and not so many decades ago. I don't know if that would work in the United States where our cultural roots are to win at all costs and every man is for himself. One thing being a geographer has taught me is that local histories and cultures matter. These roots are felt long into the future. They do shape the unfolding of events and our future.

Laurence C. Smith

The infographics presented throughout this magazine are output from a study of global comparatives as part of the Possible Greenland project and are performed by:

Arctic Engineer at Sanaartornermik Ilinniarfik in Sisimiut, Greenland and the Technical University of Denmark, DTU Management Engineering
Aarhus School of Architecture (AARCH)
CEBRA Architects
Transform Architects

STUDY
HISTORICAL TIMELINE



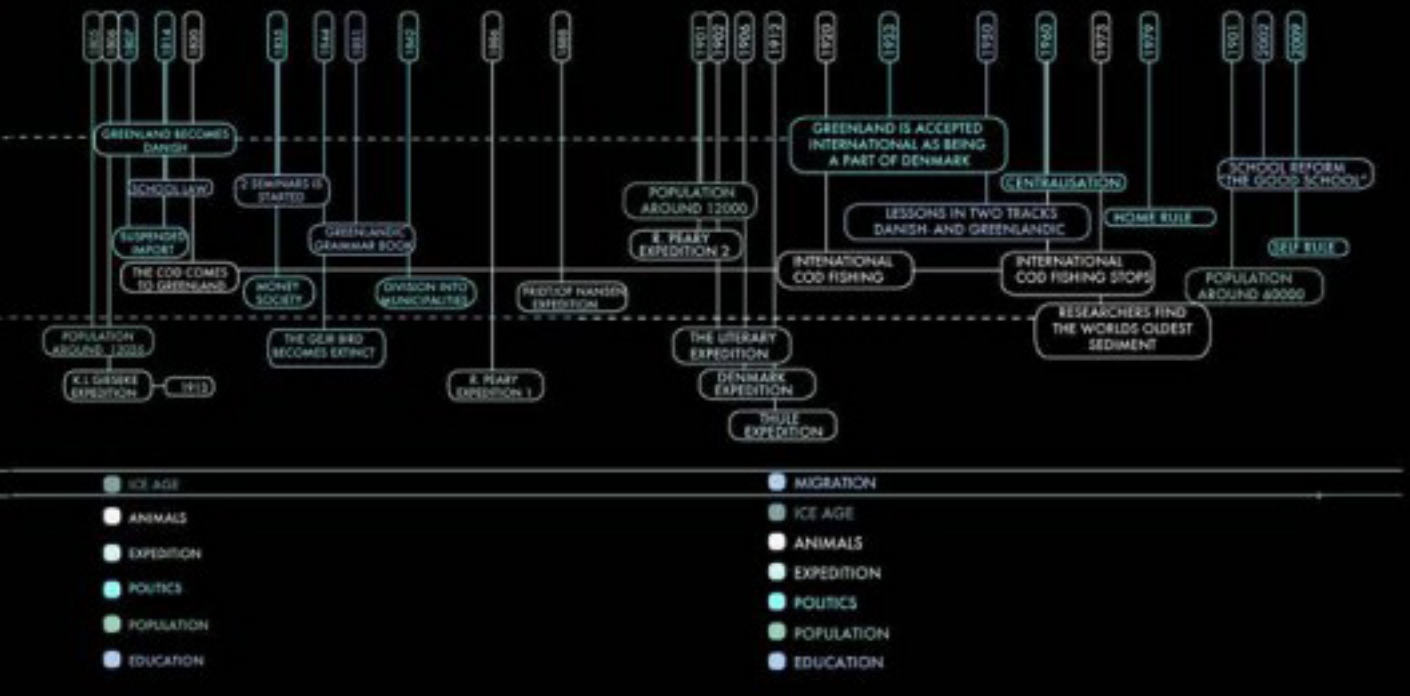

1721
1806
1807
1814
1830
1833
1844
1861
1862
1894
1898
1901
1902
1906
1912
1920
1925
1950
1960
1973
1979
2001
2002
2009
GREENLAND BECOMES DANISH
SCHOOLS ARE STARTED
SUSPENDED IMPORT
THE COD COMES TO GREENLAND
MONEY SOCIETY
GREENLANDIC GRAMMAR BOOK
DIVISION INTO 18 MUNICIPALITIES
FRIDTJOF NANSEN EXPEDITION
POPULATION AROUND 12000
R. PEARY EXPEDITION 2
GREENLAND IS ACCEPTED INTERNATIONAL AS BEING A PART OF DENMARK
INTENATIONAL COD FISHING
INTERNATIONAL COD FISHING STOPS
CENTRALISATION
LESSONS IN TWO TRACKS DANISH AND GREENLANDIC
HOME RULE
SELF RULE
SCHOOL REFORM "THE GOOD SCHOOL"
POPULATION AROUND 60000
RESEARCHERS FIND THE WORLDS OLDEST SEDIMENT
POPULATION AROUND 12000
K.J. GERSIKE EXPEDITION
1913
THE GEIR BIRD BECOMES EXTINCT
R. PEARY EXPEDITION 1
THE LITERARY EXPEDITION
DENMARK EXPEDITION
THULE EXPEDITION
ICE AGE
ANIMALS
EXPEDITION
POLITICS
POPULATION
EDUCATION
MIGRATION
ICE AGE
ANIMALS
EXPEDITION
POLITICS
POPULATION
EDUCATION

PHOTO BY JULIE HARDENBERG

" ... if we had the rare opportunity to build a new nation, what would we choose for ourselves?" – Minik Rosing

When Hernán Cortés landed on Yucatan in 1519, he could immediately understand the structure of the Mayan cities and the structure of the society that built them. He could use his Spanish words to describe tasks and functions. He could recognize peasants, kings and queens, priests, slaves and warriors. Although the Americas had developed complex societies independently of Europe and Asia, they had arrived at more or less the same way of organizing things. Society is an expression of how people organize themselves and others, and we expect some common structures.

Had Cortés landed in Sisimiut in 1519, he would probably have used many fewer words to describe the society he met, but he still would have understood what he saw. He could have identified the shaman, but the spirit world was not a full time occupation and the shaman would have been a hunter, dealing with the spirits of nature when necessary. Cortes would not have been able to identify much in terms of leadership, and any occupational diversity would have been limited to the gender-specific: domestic affairs for the women and hunting for the men. He would have seen little in terms of accumulation of wealth, and not much emphasis on genealogy. Coming from feudal Spain, the flat structure of Inuit society would have been intriguing, but still quite understandable.

Modern Greenland is in many ways a mirror of modern Denmark, it is organized in much in the same way that modern Denmark is organized. Here in this project, we look more closely at Greenland's structure, and ask some threshold questions. Which aspects of society are rooted in our human hardware? And, if we had the rare opportunity to build a new nation, what would we choose for ourselves? We hope this will inspire an open, imaginative and thoroughly human discussion about how Greenland can organize itself in a globalized world, and still be Greenland.

BY MINIK ROSING

ORG AN IZING

ORG AN IZING

Why is Transparency Greenland necessary?

An interview with Anders Meiluang and Anne Mette Christiansen

Greenland is facing significant changes in the composition of its economy, and is moving rapidly in the direction of becoming a commodities economy. Studies conducted by Transparency International in other parts of the world suggest that oil exploration and mining are among the areas of economic activity, which carry the greatest risk of corruption. It is therefore important that Greenlandic society is prepared for the new economic players, and the risks this may entail.

TEXT AND PHOTO BY BORIS BROMAN JENSEN

BBJ: *Why did you establish Transparency International, Greenland?*
AM: To a large extent because of the whole debate concerning the development of extractive industries in Greenland. If Greenland's economy becomes dependent on raw materials as opposed fishing and tourism, a completely different set of problems will arise. According to Transparency International, the mining, oil and raw material industries are generally the most corrupt industries in the world. We are therefore working to strengthen and develop Greenland's anti corruption mechanisms to avoid corruption in the future. At the moment, people tend to focus on the oil industry, but actually the mining industry is far behind. There have been decision processes that weren't open enough, and that's being discussed at the moment. It's a good thing that the discussion has finally started. Corruption is the greatest obstacle to global development. This is also relevant to Greenland. Many of Greenland's earlier problems were caused by nepotism.
AMC: If we do not address the corruption issue, it will be futile to discuss the environmental or social aspects of development. If corruption takes hold it does not matter what we do about the other areas because it won't have any effect. In many countries, environmental concerns get overruled because someone has been bribed. The absence of corruption is a prerequisite to even looking at others aspects of sustainable development, whether environmental, financial or social. Greenlandic civil society is weak, and there are not many strong non governmental organizations—neither environmental organizations nor social/ human rights organization. Different reports such as the Tax and Welfare Commission points to the fact that the Greenlandic administration is struggling with a high turnover of employees and lack of knowledge transfer. A recent report from the Greenlandic Employers' association points to a lack of transparency in hearing processes. We really need someone to sound the alarm, whistleblowers if you want, and insist that everything is discussed openly and thoroughly.
BBJ: *I've looked at the most recent CPI (corruption perceptions index) from 2011. Denmark comes in at an impressive second after New Zealand, but Greenland isn't included at all. Looking at the map, it seems that Greenland is the only country with no data. Why is that?*
AMC: The CPI draws on thirty three different sources, and at least five need to be available to tell what position a country has. Much of this data doesn't exist for Greenland because it isn't an independent state. I've had several meetings with the international TI secretariat in Berlin to find out whether we should go through the list again to check whether it would be feasible. We would like to include Greenland in the CPI.
BBJ: *If you had to make a qualified guess or make your own measurement based on your perception, what would you then say is Greenland's position?*
AMC: According to our recently published National Integrity Study, there is no large scale corruption, but there might be examples of facilitation payments, gifts and entertainment—small scale corruption if you will similar to Scandinavia. There are stories and examples of small scale things, but not of extensive, general corruption.
BBJ: *How has the Transparency Greenland initiative been received?*
AM: That depends. I'd say that initially we were practically attacked for being in the pocket of GA, the Employer's Association of Greenland. There was an attack from one of the government ministers. I don't know the reason why, but it was very surprising and fierce. Perhaps it was healthy for us because it prompted a discussion of what exactly we were up against. We're up against the power structure in some way, and there are some who are at risk of losing power. Besides this, we have been very well received at the official level. Three ministers attended our launch event, and the Minister of Finance spoke. The government talked about the importance of openness, and there are many who have invited us to discussions and meetings. We were also not met with any criticism in the media—on the contrary, they have backed us up. We have had some concrete suggestions

Anne Mette Christiansen (Board member) and Anders Meilvang (Head of Board) of Transparency Greenland.

" If Greenland's economy becomes dependent on raw materials as opposed to fishing and tourism, a completely different set of problems will arise on the market."

"These are really large companies with a lot of resources. So the question is, what kind of mechanisms do we have that will hold them accountable? Not very many."

for a whistle blower system because it is very difficult to openly criticize public as well as private organizations. It's a small society, and you can lose your job. Many people think it's a very good idea, and it has prompted a fruitful discussion. People say, "We actually all know something or other that we don't dare tell anyone". So I think that the feedback has been all good except for the initial attack.

AMC: Sometimes there's some grumbling about us being a very Danish organization. However, many of the members of the board are Greenlanders. And it is a global movement, not a Danish idea.

BBJ: *Corruption is as good as impossible to detect objectively, which is also why you assemble a perception index. But it's also alluringly close to nepotism and incompetence!*

AMC: We employ the official TI definition, which is "the abuse of entrusted power for personal gain." This applies to public as well as private organizations and businesses. We've pinpointed one issue, conflict of interest, and nepotism, as a potential problem in a small society. It's not necessarily done in bad faith, but merely caused by people being so close. One of the things we try to look at is what you can do to limit conflicts of interests, and become more aware of the problem by working with a set of objective criteria for selection processes, and being open about the choices made when hiring people donating money, offering sponsorships, etc. We generally try to promote a higher degree of transparency.

AM: Hiring a cousin or a sister is practically unavoidable. Our message is that withdrawing in situations of incompetence is a way to protect the individual. We have to establish a set of criteria so that when the cousin gets the job, you can say that it was a transparent selection process and that he was actually the person most qualified. People say that this society is very open because it's so small, but in this specific case I think they're wrong. Many decisions are made by a select few behind closed doors, and there's an awful lot of gossip. The rest of the society are trying to guess why things turn out the way they do. In my view, a lot of nepotism related problems could be avoided through openness.

BBJ: *But you can't maintain free market competition as well as clear cut distinctions between state, market and civil society in a town of 4,500 people with perhaps a single available bulldozer. You can't expect free and open competition because conditions don't allow it. The Greenlandic society does not have the critical mass necessary to divide things into separate, independent entities. There will always be intimate ties between social institutions and private companies. How do you deal with that?*

AM: Well, it just shows that it is even more important to ensure openness and democratic discussion. The free market is an illusion here so you have to agree on how to organize things instead.

AMC: There has been established a forum called Forum for Social Responsibility, which provides the opportunity for businesses and the government to discuss Corporate Social Responsibility issues. One of the thoughts behind it is that unlike in so many other societies, neither the state nor the market alone can manage to solve many of the problems that society faces, so we have to form partnerships. In other words, we need to join forces to bring society forward.

BBJ: *That makes demands on the government but also on the large companies to a large extent. And I guess it also requires some NGOs on the outside of the system to serve as watchdogs?*

AM: Well the 'Law of Jante' is very powerful here, and standing up for something is very hard, also in a critical sense. There is no tradition for it. Perhaps we need to regard NGOs in another way than the traditional Western one. I think it's very important to include the citizens in another way than the association approach of "We're against something or other". Greenland still needs more extensive commitment to community development at a political level. The political debate still needs to develop further.

BBJ: *In small villages of only a couple of hundred people, you naturally have to take care not to become unpopular because that might cause significant problems. But the opposite is true as well. You do see some people who have really put their foot in it, who have been exposed or have lost their jobs, but who are nevertheless*

back in some key position only a short while later.

AM: But that's also due to necessity – you simply cannot throw away your resources here. In principle, that's also why the practice in Denmark of putting children in children's homes and letting them stay within a closed off institutional world, there's no room for that here. You need to get them back into society to function again.

AMC: A fairly small part of the population live in settlements now. When you talk to people in Nuuk and in the other larger towns, they have strong ties to Inuit traditions, but they also look ahead and embrace development.

AM: Greenlanders have been good at taking what was good for them and promoting that, and at keeping those parts of history that did not stand in the way. Greenlanders are generally very pragmatic, thank goodness. After all, it's important that Greenland develops into a country that can function in a globalized world. That whole "back to our roots" discussion is not something you encounter on a political level, only on a cultural one. I think this balance is very good.

BBJ: *Anne Mette, you mentioned earlier that you have to approach the large corporations and work with them on developing Corporate Social Responsibility, or CSR—is that possible?*

AMC: I've worked with CSR in Denmark for ten years, and the development in Greenland over the last two years far surpasses the Danish results. It's just natural here, partly because it is close to the hearts of many of the top executives and partly because it makes a lot of sense. You could say that even though many of these businesses don't need to compete for customers because they have a monopoly, they are competing for the most important and most scarce resource: employees. Let's say that there are twelve to fifteen large corporations in this country; most of these are well underway with their CSR work already. I think the reason why it's happened so fast is that it fit in with something people felt they were actually doing already. It's new in the sense that people haven't dealt with it as a structured or comprehensive concept, but the labor market has always been very flexible and inclusive. Here, you can really talk of companies able to deal with many different kinds of employees. They are very tolerant and active in their local communities. There has been a lot of focus on the development of competence simply because it has been a necessity if you wanted local employees. So companies have needed to develop their resources in a manner entirely different from what they do in Denmark. The environmental agenda was largely non existent when we started out. It has only emerged during the last couple of years, but there is great interest in it. So I think that it'll play a major role in the future.

BBJ: *You don't need to be particularly well read to have noticed that social and environmental responsibility is not doing very well in Nigeria, Kazakhstan, Azerbaijan and numerous other countries where multinational companies extract oil and gas!*

AMC: There's a radical difference between the two, though, because most of the corporations working in this country have their home market here and hire their employees here. If you lose your license to operate here, you no longer exist. There's a clear cut correlation for businesses—if things are going well in Greenland financially and socially, then the companies are doing well too. That correlation does not apply to the international companies. After all, Shell is completely global. They operate in 180 countries or something like that, and the same goes for the other oil companies arriving. There's no direct correlation for them between the country thriving and their business thriving. So you can't compare the two at all.

BBJ: *So the large multinational corporations will be met with a different set of criteria and terms?*

AMC: Yes, entirely.

AM: They all say the right things, but they're here to make money after all; that's what it's all about.

BBJ: *People are waiting for London Mining to move in. It's a Chinese company, and in China you might ultimately be executed for getting on the wrong side of the government. How can you work with such a company and convince them to behave according to principles that they could get jailed for defending in China?*

AM: You need to make the demands you think are necessary—environmentally, in relation to work safety, regarding wages—and then you need to keep an eye on them and take action if they aren't met. I think that's the hard way. Trust is good, but control is twice as good. The problem, for instance, when it comes to work environment, is that the Greenland Health and Safety Authority has two or three employees. How are they supposed to control so many mines all along the coast? That's a big problem, but I think we need to approach the issue with a great deal of mistrust. Make demands and make sure they are met.

AMC: In my view, we're not quite ready for it yet. Even though we've adopted a set of environmental regulations from Norway, we have weak monitoring mechanisms; we have very few people here who possess the expertise required. We have few mechanisms that will in any way hold these companies accountable. Once someone has invested in a mine and made a fifty year contract with the government... then good luck throwing them out. But the government has been very clear on the fact that sustainability is important for them as well, so I think that helps a lot.

BBJ: *Yes. They may have invested two billion dollars in a pipeline. Isn't the power balance completely skewed?*

AM: We lack some political insight or political will to do something about it unfortunately.

AMC: What's going on right now is at once incredibly fascinating and incredibly frightening. These are really large companies with a lot of resources. So the question is, what kind of mechanisms do we have that will hold them accountable? Not very many. What we're trying to do is to reach out to organizations such as TI and the UN Global Compact. Talking to some of the bodies where these companies are also represented and making sure that they keep an eye on Greenland and what is going on here. After all, we can't do anything on our own.

AM: The most recent long discussion we've had centers on the fact that they're still at the exploration stage, but that they apparently want to make some very extensive plants for discharge and that there's no turning back. This was scheduled for a more or less closed hearing with persons specially selected by the authorities. The pressure from the media and various NGOs made them reschedule it as a public hearing, and there has been much debate since then, but that's a brand new phenomenon never seen before in this country, and it bodes well that awareness is increasing.

Artwork by Julie Hardenberg, "Rigsfælleskabsspause"

PHOTOS BY JULIE HARDENBERG


ORG
AN
IZING

Common knowledge

A conversation with Michael Hardt

We talked to literary theorist and political philosopher Michael Hardt about his understanding of "the common" as an organizational alternative to both private and public property, based on open access and self-management, and how that plays in to the emerging issues surrounding the organization of Greenland and the Arctic region.

BY TOR INGE ROMØREN & ANDERS DURMANN MELSOM, 10/5-2012

ANDERS DURMANN MELSOM: *Greenland is undergoing a process of shifting towards home rule and more self government, but the effects of Danish colonialism are strong, and the society is struggling to establish ways to organize themselves. The pressure from global economic forces is today increasing, as it is throughout the Arctic. Great supplies of oil, gas and minerals, combined with climate change makes it possible to exploit the natural resources and attract global companies and other countries to Greenland. How do you think Greenland can meet these challenges of organization, both on the local, regional and global level? And do you see parallels here to similar struggles in other places of the world?*

MICHAEL HARDT: Right. It's clear that Greenland will face an onslaught of pressure because of the resources. My guess is that the resources are a poisoned gift for Greenland, because of the social and economic pressure that will come from their exploitation and development. Certainly there has to be very significant planning for how to withstand the pressure of these oil and mineral resource corporations, but also to resist the effect it will have on the domestic population and social organization. What seems to me a primary question here is how to create and maintain a democratic decision making process among Greenlanders when there is such enormous pressure for hierarchical and centralized decision making from these external sources? One parallel that strikes me is a country like Bolivia, which like Greenland has a major indigenous population that does not have a tradition of private property but rather commonly shared resources, and has community structures that are not immediately compatible for the forms of property relations that are involved in this resource extraction. The advantage, or disadvantage, that Bolivia has with respect to Greenland is that the country has hundreds of years of experience with foreign countries and corporations exploiting the resources of the silver mines and other mineral extractions. Now they have lithium, natural gas and other minerals that foreign corporations are very solicitous towards. And what seems to have been key in the last ten years in Bolivia is trying to find ways to maintain, or create really, democratic rule of the indigenous population. That's what seems to me a great struggle. I can only imagine the kind of pressure in Greenland that will be faced by a small population in the face of offers of great riches.

ADM: *Some people in Greenland say that even if they got their independence from Denmark, major powers in the area like USA and Canada would probably not allow them to stay independent. As an independent nation state, Greenland would still be very dependent on other countries in lots of issues.*

MH: Can you tell me a bit more about current political and social structures

Michael Hardt

"I assume if Greenland were to have independence, they could in a short time become a very wealthy country"

" In general terms, I find it much more appealing, sustainable and just to develop "the common." And I guess how I try to define "the common" is primarily as open access and self-management."

that exist in Greenland? I assume that even under Danish rule there must be longstanding political structures within the country?

ADM: *Definitively, it has always been based on the Danish system, of course. Greenland is now represented in the Danish parliament and they have limited home rule, and the territory has recently been reorganized into four enormous communes each with their own mayor. And there are problems of corruption and nepotism with a few dominant families running the whole country.*

TOR INGE HJEMDAL: *Also, the country is very divided. The east coast does not speak the same language as the west coast, so it's disconnected. The official language is Danish, then they speak English, then they have different Inuit dialects. Also the infrastructure is very underdeveloped. I think there are 120 kilometers of roads in total, so the towns are not well connected. Internet is very expensive and they have to fly by helicopter from town to town, so internally it is very disconnected. There are also some difficult social issues. They have a lot of abuse, alcoholism, some drugs. Because of the former social structure of the hunter/gatherer society, they didn't really have family structure the way we are used to, they were sharing kids and so on. The organizational question is actually on a lot of different levels, also scale wise.*

ADM: *You have a situation where Denmark wants to listen to the Greenlandic voice of opinion, but the relationship is very much an intimate internal relationship, almost like parents with a teenager about to leave home, with all the worries about what will happen when the child leaves the safety of home. This is similar to other postcolonial situations, but the relationship has been especially intimate, and with mutual benefits. A lot of the debate is internalized between Greenland and Denmark, and we very much believe in looking beyond this relationship, making new connections and opening wider perspectives to identify with, creating a broader agenda for the Greenlandic struggle.*

MH: *That's interesting to me, but I assume if Greenland were to have independence, they could in a short time become a very wealthy country because of the possible extraction of resources. Is that correct?*

ADM: *Yes, and this has also been one of the main incentives for seeking more independence.*

MH: *That makes sense. To relate this to the social movements of the last year, it seems to me one of the major results, starting in Tunisia but continuing throughout the year, was to put democracy on the agenda again. And not democracy conceived simply as elections and representative government, but rather democracy as participation and what we could call a horizontal organization of the population. It could certainly be a good thing for this kind of demand. What the Spaniards last year called a demand for real democracy, it's a re-questioning of what counts as real democracy and a valorization or affirmation of participation in government rather than representation. It certainly could be a good thing if this could be part of the agenda in the pursuit of home rule to have the decisions about resources and wealth made collectively rather than, either by foreign corporations—and I am sure there would be a heavy pressure to accept the desires of foreign corporations—or by a small local elite that is potentially corrupt, monopolizes the resources or even decides for everyone. It seems to me it would be an enormous challenge but also an enormous success if Greenlanders were able with home rule to democratically decide on the fate of resource development. When you look at the African independence movements of the 1960s, in many of those countries it happened that the wealth of resources ended up in the hands of foreign corporations working together with corrupt local elites, and structures for democratic decision making were not developed. I do see this as a huge challenge for the Greenlandic population, but to me this would be the most important aspect. One of the things that is worth considering in the present economic and environmental context is that it not be assumed that just because the resources can be exploited that they should be. One option, but this is for Greenlanders to decide, is which resources should be exploited and how much. Sometimes leaving them in the ground is the best decision.*

ADM: *It's actually a paradox. Greenpeace is very unpopular in Greenland. The locals are the ones most eager to exploit the resources, and the warnings or second thoughts are usually coming from the outside, saying Greenland could develop into a sort of post-carbon utopia, while we go on doing business as usual in Europe.*

TIH: *It seems the Greenlanders have a more pragmatic view on nature and resources. Going back to their hunter-gatherer society, they took out what they needed and used the whole animal, leaving no waste. So it seems to me they don't have a nostalgic view on nature and resources. They're way more pragmatic than people from outside.*

MH: *Right. I was thinking there too that the parallel with Bolivia might be interesting. After the climate summit in Copenhagen in 2009, a few months later*

there was a summit in Cochabamba in the center of Bolivia. There, as you said with Greenlanders, the relationship of the indigenous people to the Earth that was emphasized was very different, and they had a very different perspective on ecological relations and climate change. I think there's a parallel between their different perspectives on resources and a parallel to their perspectives on the Earth. Their perspective is of course different than the perspective of Shell and the oil corporations, but it's also different from the ecologists in Europe and North America. This should, I assume, be guiding the decision making.

TBH: *That's why I found it interesting that you questioned which resources should be exploited, because one can look at resources in a wider perspective, not just oil or gas, but also knowledge, for instance, is a resource. The Arctic region is changing, and you see that nations are mobilizing in the Arctic. Over half of Russia's coastline faces the Arctic and they are mobilizing in terms of hard security along with other countries like the US, Canada and the Scandinavian countries. So you have a lot of different nations and societies sharing the same area. How do you think the situation will develop in terms of democracy, but also in terms of sharing, because we see that a lot of the area in the Arctic is not divided. There are areas up there not belonging to anybody, and now nations are coming in to claim territories and resources.*

AØM: *The current regime of international diplomacy and law is very much about settling these claims of sovereignty to acquire stability in the region. If territories don't belong to anybody, it's a potential source of conflict. But again there are other voices saying the Arctic is in need of a kind of union or commonly owned land, that this would be a more sustainable way to approach this nice for the resources of the Arctic.*

MH: Right, that's certainly my view about it, putting it more in a general frame—well this is a super general frame! Many of the most important struggles today are in a triangle between private property (neoliberal strategies), public property (as in state regulations, sovereignty and control) and "the common." For many issues, and with regards to climate change and other ecological questions, it seems to me that solutions proposed in terms of private property or in terms of public property have failed or shown themselves untenable. In general terms, I find it much more appealing, sustainable and just to develop "the common." And I guess how I try to define "the common" is primarily as open access and self management. I don't mean that just anything goes and it's all open territory, but rather to self manage with structures or institutions concerned with preservation and use that are democratic, rather than a contest among nation states.

AØM: *What do you then mean by open access?*

MH: By that I mean that there is a general management strategy for all of us to have equal access to and profit from, not specifically in terms of money but in availability. When one is talking about this in terms of ideas or codes or such immaterial products, it's relatively clear what it means to have open access to it. And that too of course needs structures. There should be ways of managing general development of ideas, of codes, etc. With land, mineral resources, ocean territories, there too needs to be structures to manage the common, but decisions about them should be structured democratically. I am talking in very general terms; it has to be different for different cases. But if I were to have a say in the debate over the development of the Arctic, it would be to try to strive towards that kind of model, rather than the control of private property in the hands of the corporations, or public property in the hands of the sovereign states. That's the general framework I was going to bring to the problem. How it works out of course will be different.

TBH: *Today it seems to me that the idea of "the common" kind of exists, but on a different level. The indigenous people don't care too much about national borders. You see Inuit people living in the north of Canada, in Greenland, etc. Can you look upon this as a different kind of system in a different layer already existing, and how can we eventually tap into it?*

MH: Well, I think you are right, and this again is why I thought Bolivia was an interesting example. (Maybe I just bring it up because I know about it!) There too the notion of community and the relationship to the Earth and its resources are not based on private property, and they have these kinds of structures of common access and common decision making. So, although I know much less about the Inuit, I assume that they too have traditions of organizing for relatively open access to territories and resources. I wouldn't view the past of these traditions as norms to resurrect, but they can sometimes be guiding principles for developing something new. And the fact that there is a parallel between their indigenous traditions and a contemporary political project, it could serve as a helpful example.

Michael Hardt teaches at Duke University. He is author with Antonio Negri of the *Empire* trilogy: *Empire*, *Multitude*, and *Commonwealth*. Their most recent book is *Declaration*. He is also editor of *The South Atlantic Quarterly*.

INDEPENDENT **FROM** WHOM?

BY BORIS BROSMAN JENSEN

When Denmark in 1916 sold the West-Indian Islands to the United States, the Sectary of State, Robert Lansing, also signed a secret and special declaration pronouncing American support for Danish sovereignty over all parts of Greenland. The document is categorized as being of "outstanding national significance" in the Danish national archives. Greenland is on the American continental shelf and the declaration is an exception from the US Monroe Doctrine from 1823 that can be summarized by the phrase "America for the Americans." It was very generous of the US to guarantee Danish sovereignty over Greenland. The document played an important role in the later battle with Norway over the right to rule over East Greenland. Today the tiny document raises the question from whom is Greenland going to be independent.

DECLARATION.

In proceeding this day to the signature of the Convention respecting the cession of the Danish West-Indian Islands to the United States of America, the undersigned Secretary of State of the United States of America, duly authorized by his Government, has the honor to declare that the Government of the United States of America will not object to the Danish Government extending their political and economic interests to the whole of Greenland.

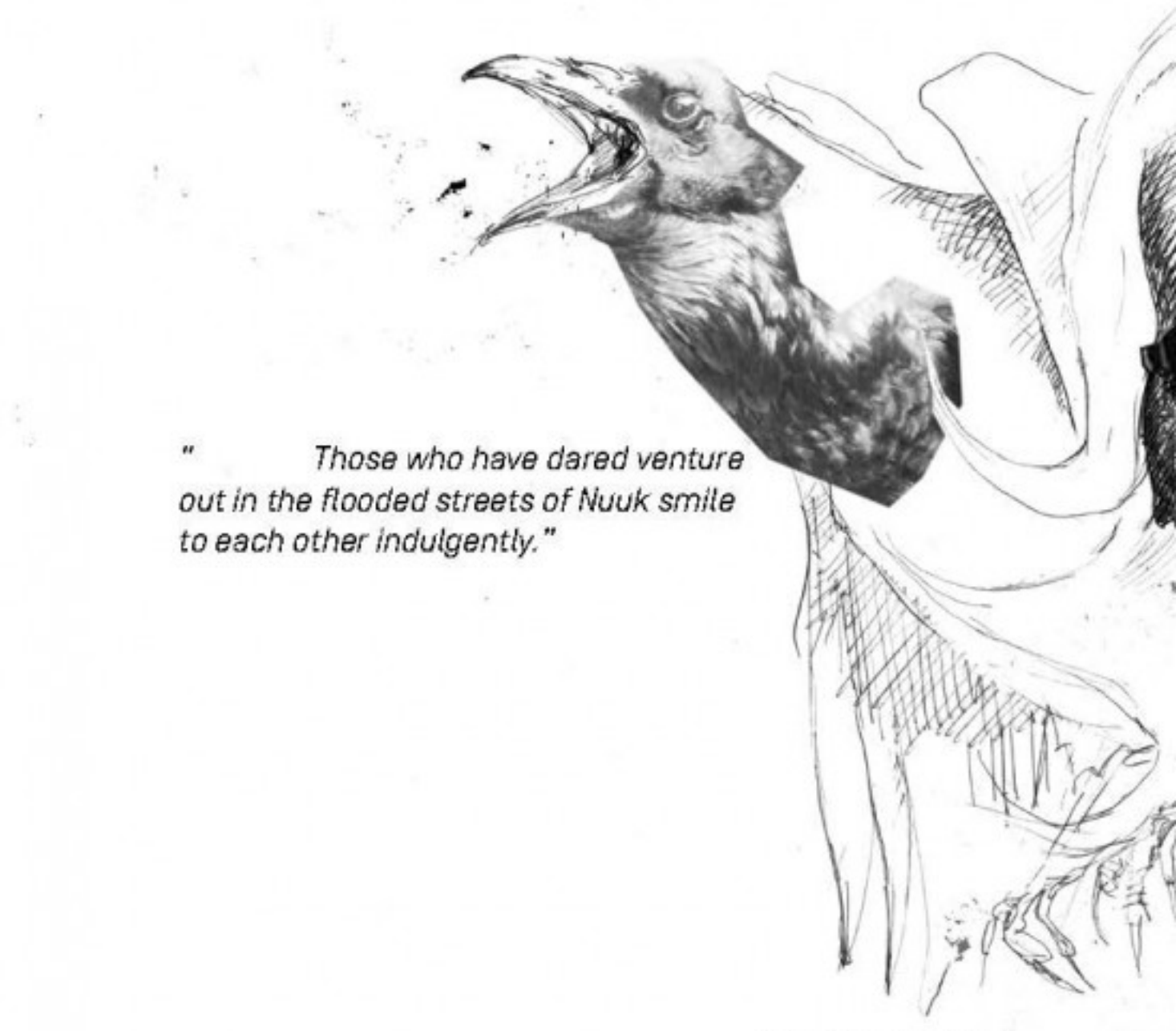
Robert Lansing.

New York, August 4, 1916.

HOW I MET THE PRESIDENT OF INATSISARTUT BY BORIS BRORMAN JENSEN 41 HUMAN RIGHTS

HOW I MET **THE PRESIDENT OF** INATSISARTUT

BY BORIS BRORMAN JENSEN



" Those who have dared venture out in the flooded streets of Nuuk smile to each other indulgently."

ILLUSTRATION BY JOHN MØRSEN, ARCH

NUUK: MONDAY, FEBRUARY 13TH, 2012

My planned day of sightseeing with a local American guide around Nuuk has been cancelled because of bad weather. You don't have to be in Greenland for very long to realize that all activities depend on the weather. It is very unpredictable, and things happen only if they are possible. This is probably why Greenlanders have learned to say "perhaps" (*Immaqa*). "I will come round and pick you up Monday morning and give you a tour of Nuuk, *immaqa*." Maybe that is the reason why Greenlanders are often accused of being fatalistic. This may to some extent be true, but anyone who mistakes a level-headed attitude to life with resignation or a lack of confidence in their own ability to act should take a trip to Greenland with "Immaqa Airlines," in order to put their prejudices to the test. I can understand the pragmatic attitude to life you have to adopt here, but my nervous system tells me that I have difficulties accepting that the forces of nature continually overrule my plans. Being stranded on a deserted island or being lost in the middle of the Greenland ice sheet would be easier to accept. But this is the capital of Greenland, and right next to the hotel you can buy authentic Thai food as well as a freshly brewed cafe latte. Here, culture ought to rule supreme, but it does so only on the surface. Even in the center of the largest town of Greenland, nature always has a strong presence. It is always right there in your face, even when the weather is fine. People here don't tend to complain a lot about the weather. The weather is a shared condition of life.

" Back home in Denmark, all remaining nature is threatened and has been placed under well-ordered systems of management. Here the situation is still the exact opposite."

The changing weather is, nevertheless, frustrating. Yesterday it was an absolutely perfect winter's day. It was snowing, there was next to no wind, and the temperature was minus ten degrees Celsius. Nuuk was wrapped in a thick white powdery blanket of snow that connected the spaces between the houses, and which made the colored buildings stand out in a friendly warm light. But during the night, the direction of the wind changed and the temperature increased by almost fifteen degrees to well above freezing. The attractive snowfall was transformed into heavy rain early in the morning, and the streets were completely flooded. Below the rivers of melt water there is an invisible layer of ice, which makes it very risky to move around on foot. The roadside ditches are full, and it is impossible to see where the pavement ends and where the meters deep canals begin. There is about twenty to thirty centimeters of water right outside the hotel's main entrance—a bit more than my new polar boots can handle. The hotel receptionist apologizes with a smile and talks about the foehn winds. He has got more than enough on his hands. Water is gushing out of the light fittings in the back corridor. Outside, a guy from the hotel is struggling to manage Euro-pallets that provide a kind of gangway leading from the roadway to the hotel. On the steps of the supermarket next door, a group of men are drinking beer. They have clearly been at it for quite some time, and they seem to be welcoming the situation as a distraction. I am only familiar with foehn winds from my holidays in Switzerland, and it is completely unreal to feel the warm wind coming from the ice sheet in the middle of an Arctic winter. It is a bit like experiencing the northern lights. I have a vague understanding of the phenomenon from physics lessons at school, but it has never been embedded in my body as an undisputed experience. It hits you with the full power of surprise every time, just like icebergs, which to me never cease to hold a terrifying beauty. Back home in Denmark, all remaining nature is threatened and has been placed under well-ordered systems of management. Here the situation is still the exact opposite.

It is my last day in Nuuk, and I feel the need for something to happen. The Hotel cable-television system must be affected by the invading masses of water, as it shows nothing but porn movies—no local news, no weather forecasts, no American series, not even CNN. I decide to defy the weather and head down to the tourist office. I would like to see Inatsisartut (the parliament of Greenland) from inside, and I will try to book a guided tour. Those who have dared venture out in the flooded streets of Nuuk smile to each other indulgently. This rainy Monday morning, the tourist office is far from busy. The desk is unmanned, but a man sits at a desk in front of a poster depicting tupilaks while looking at a computer monitor. From the corner of my eye I can see that he is on Facebook. I have brought my camera with me in a bag slung across my shoulder, and I feel an urge to capture the whole scene: a young man surrounded by historic artifacts, but his whole attention directed at a new social reality. My own self-awareness prevents me from taking photos. I am trying to retain my self-esteem by being a discreet tourist. My camera rests in a regular bag, and I am most at ease looking like any man you might encounter on the street, so I make do with inscribing the scene in my mind: the nostalgic and commercial staging of the culture of the past by the tourism industry as a photogenic backdrop for the young Greenlander who is sucked into cyberspace. Some day, I will probably have to buy a tupilak, but I feel just like that man at the desk. In Greenland it is equally exciting, if not more, to look forward towards the future.

After a while, the man looks away from the monitor, catches my eye, and carefully asks me if he can be of any assistance. He turns out to be both friendly and helpful, and he informs me that there is a free, guided tour of the parliament every day at 14:00. He also recommends that I spend some of the waiting time at the National Museum, which is just a little further down the road. They have real mummies; Qivitoq, a Danish romance film featuring Poul Reichhardt on DVD (do not be mistaken, it IS actually interesting); and plenty of literature on life in Greenland today.

When I leave, I am content. I have a new plan for the day, and I fight my way to the National Museum through the town's chaos of melt water. The museum turns out to be closed every Monday. The remaining days of the week the museum does not open until 13:00, so the suggestion from the man at the tourist office would in any case have been impossible to realize. I decide to double-check his information directly at the reception desk in the entrance to Inatsisartut. Here the receptionist tells me that there is a tour every day at 13:00. Obviously, tourist offers are not completely synchronized in Nuuk. When I come back a few hours later, the tour is cancelled because the guide has taken ill in the

meantime, I must have been unable to hide my complete disillusionment, for the receptionist resolutely picks up the phone and speaks a few words in Greenlandic. Shortly after, an employee emerges from a side door to accompany me around the building. He is not a guide, and he does not speak Danish very well, and hardly any English at all, so we communicate using few words and gestures. I have the parliamentary hall all to myself, and I take my time photographing the room.

On the way, my taciturn companion points out various paintings on the walls without providing further comments, and he shows me something that might be a official meeting room. A little later, we stop by a somewhat larger office. The secretary in the front office says something in Greenlandic and an older gentleman comes forward to meet me. He smiles and gives me a very solid handshake. It turns out to be the president of the parliament, Josef Motzfeldt. Cakes and coffee have just been placed on the table, and he asks me to take a seat. The meeting with the president of the Inatsisartut takes place without much ado, and I only gradually realize the rather unusual nature of the situation. A chain of cancellations, coincidence and incorrect information has led me straight into the arms of Tuusi, one of Greenland's most charismatic national father figures. On the walls are pictures of Motzfeldt in company with the world's leading politicians, including the Danish monarch, who, back home in Denmark, is invariably addressed as "Your Royal Highness." In Greenland, Tuusi is just Tuusi. Knowledgeable, friendly and very interested in learning what I am doing in Greenland. I tell him about the Venice exhibition and the project I am involved in. "Why do architects find it so difficult to understand the landscape of Greenland?" he asks me. I promise to think about it and come up with an answer if I can find one. In the course of the conversation he rises a couple of times to print out some pages about the journeys of Erik the Red and the medieval history of Greenland that he thinks I ought to read. It occurs to me that the catalog for the exhibition might be designed as a travel narrative. A narrative about how Greenland has transformed my understanding of landscapes, towns, networks and social spaces, about a world outside the realm of urban planning.

We drink coffee and eat cake for an hour while we talk more about the current situation of Greenland, about the relationship with Denmark and about the time Motzfeldt was a grammar school student in my hometown Aarhus. "You must come by and visit me in my home town next time you are in Greenland. You really have to experience the southern part of the country, which is very different from Nuuk," he says when I am leaving. Being invited to drink coffee with a president twice in less than one hour is a bit overwhelming. The secretary offers to follow me back to the reception. While we are walking down the corridor she draws me into a room with photos of various politicians on the walls. "Tuusi is an amazing human being, don't you think?" she asks in a subdued voice. "Well, yes I do!" Imagine if it were possible to write the openness he personifies into the future constitution of Greenland.

Back at the hotel I remember a text by Finn Lynge, another national father figure of Greenland. It was published as part of an anthology on the topic "Magt og demokrati i Grønland" (Power and Democracy in Greenland), but it can also be found at Naalakkersuisut's web site (the Greenlandic government). Kunuk – op gennem tiden (Kunuk – Through Time) is the title, and it starts like this: "A deep distaste for all kinds of chieftainship. Leading comrades through the power of the example. Taking care of the lowest in this society of equals, and having the best of intentions on their behalf."[1]

I sincerely hope they will succeed.

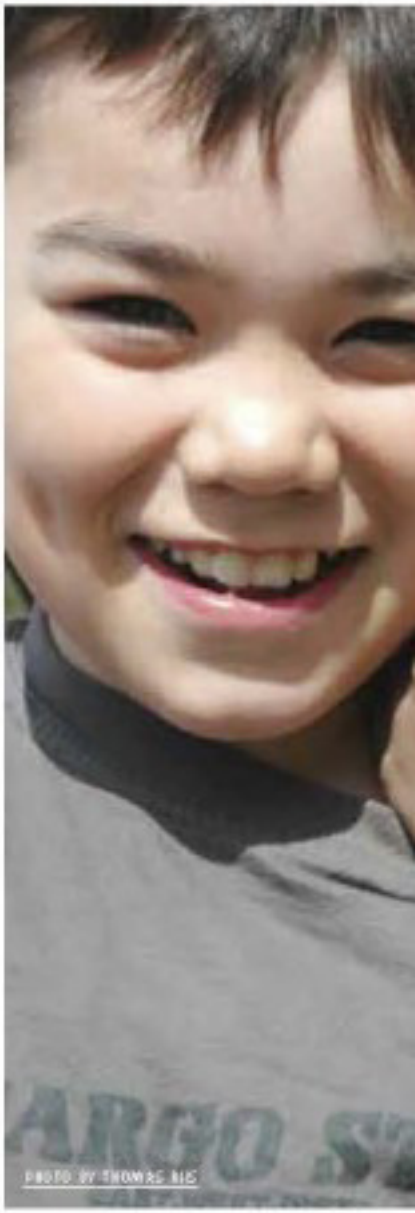
[1] http://www.naalakkersuisut.gl/Naalakkersuisut/Sitemap/Selvstyre/Magt-og-demokrati-i-Groenland/Kunuk_-_op_gennem_tiden_Kunuk_-_Through_Time

ILLUSTRATION BY MARKO VELIC (STUDENT AT AARHUS SCHOOL OF ARCHITECTURE, 2008)

ORG AN IZING

HUMAN **RIGHTS**

BY PETER SUTTON



Whilst my awareness of the details of the Greenland condition are not more than cursory, the editors of this publication have made me aware of many parallels, of a statistical nature at least, between the health of Greenlanders and indigenous Australians. This was bought home most directly by the fact that as the editors visited Illulisat for a Possible Greenland workshop, news came through from Nutaarmiut, a small bygd to the north with only forty-six inhabitants, that a young man had killed three people and injured two others.

In my time with the Wik people of Australia's Cape York Peninsula, out of a population of less than 1,000, eight people known to me had died by their own hand, two of them women, six of them men. Five of them were young people. From the same community in the same period, thirteen people known to me had been victims of homicide, eight of them women, five of them men. Twelve others had committed homicide, nine of them men and three of them women.

Most of these, also, were young people, and most of the homicides occurred in the home settlement of both assailant and victim. Of the eight spousal murders in this list, seven involved a man killing his female partner, only one a woman killing her husband. In almost all cases, assailants and victims were relatives whose families had been linked to each other for generations.

On my return to the city after a double funeral in 2000, and after spending time during 1999–2000 in what had become of the desert settlements within a 200 kilometer radius of Ayers Rock, I felt I could no longer support the view that a non-indigenous person should leave public statements on these questions of sudden and recent social decline to indigenous people alone. I was conscious that there were those who did maintain that view with passion.

For years, I like so many others, I had refrained from much public engagement with indigenous political issues because of the rising indigenous leadership and its increasing capacity to carry the burden, and because whitefellas were increasingly unwelcome in the exposed positions of the Aboriginal political front line. But by 2000, given the critical situation so many people were in, an all-hands-on-deck approach had become necessary. Not long afterwards, Mick Dodson took the same view in a televised address to the National Press Club in Canberra, calling on the then prime minister and national and state governments to join with indigenous Australians to take decisive collaborative action on violence and dysfunction in Aboriginal communities: "This is not just our problem; this is everyone's problem," he told the nation.

The questions are many and include the history of the breakdown of consensus in Aboriginal affairs, the politicization of health and housing issues, the problematic demand for recognition of indigenous customary law, and the role of personal relationships in reconciliation between what we all too casually, myself included, divide into indigenous and settler populations.

Too often, unhappily, these profoundly difficult questions are turned into a compassion contest or a toughness contest—a game of proving that one is less racist or less bleeding-heart than thou. This is at times a subtle performance, masking what is in reality an exercise in the pursuit of one's own virtue at the expense of what one knows. "Ideologuery" paints people into political corners that deafen others to what they say, or them to what their opponents say.

My unqualified position is that a number of the serious problems indigenous people face in Australia today arise from a complex joining together of recent—that is, post-conquest—historical factors of external impact, with a substantial number of ancient, pre-existent social and cultural factors that have continued,

" Too often, unhappily, these profoundly difficult questions are turned into a compassion contest or a toughness contest—a game of proving that one is less racist or less bleeding-heart than thou."

PHOTO BY JULIE RARDENBERG

ORG
AN
IZING

> *"By definition, those who deliver the people from extraordinary levels of rage, fear, anxiety, neglect, malnutrition, infection, diabetes, renal failure, sexual abuse, assault and homicide will thus allegedly be politicians, barristers and political activists."*

transformed or intact, into the lives of people living today. The main way these factors are continued is through child-rearing. This issue is particularly important, and controversial, in the area of violent conflict.

For many, the proposition that all indigenous disadvantage has been caused by external impacts alone has been a sustaining fiction, one perhaps defended at times on the grounds that the masses cannot handle the subtlety of the truth and are inclined to simplicitudes. On the contrary, there has been relative silence about the complexity of the causal factors, not an acknowledgement of it, that has comforted and assisted those with ideological axes to grind at both ends of the political spectrum. Simplistic accounts of the past increasingly misjudge their audience in this field. Traditional liberal support for indigenous causes in Australia proceeded, in the past, on a less knowledgeable basis than it does now. Not long ago there was less debate and less freedom to speak about these things.

From the 1970s on, a relative silence promoted and policed by the Left and by a number of indigenous activists created a vacuum in public discussion on these issues that in the 1990s began to be filled by those pursuing ideologically conservative agendas. The use of racial criticism to exclude non-indigenous voices from debates, on the grounds that one's ancestry determines what topics one is allowed to speak about in public, had in this sense backfired.

From 1999, government reports and media coverage revealed ever more statistically detailed and disturbing accounts of a declining quality of life in many of Australia's indigenous settlements. What had earlier been called, with moral overtones, "degradation," was now increasingly called "dysfunction," with new overtones of medical pathology. Government inquiries repeatedly found high levels of sexual abuse of children in remote places, and some not so remote.

In 2007, the Northern Territory report on child abuse, Little Children are Sacred, was the trigger for a dramatic new development in Aboriginal affairs: the National Emergency Response. More widely known as the Northern Territory Intervention, this dramatic move by the Commonwealth began under the Howard government in 2007. The government moved to take control of a large number of Territory Aboriginal settlements, instituting the following measures: supply of additional police to affected communities; mass health checks for Aboriginal children, initially mandatory, but quickly changed to voluntary; new restrictions on alcohol, kava and pornography; the compulsory acquisition of townships through five-year leases; Commonwealth funding for community services; removal of customary law and cultural practice considerations from bail applications and sentencing in criminal cases; suspension of the system by which visitors to Aboriginal settlements were required to have a permit; quarantining of a proportion of welfare benefits to all recipients in the designated communities and of all benefits of those who neglected their children; and the abolition of the Community Development Employment Projects (CDEP) that paid the unemployed to carry out local forms of work.

Opinion, both indigenous and otherwise, was extremely divided over the Intervention. I thought there were a number of reasons why many of the Intervention's main measures should get support. It is a government's business to protect the vulnerable in a state of crisis. The government also had to make some dramatic impact in an area where it is hard to get results. The abusers of children, women and the elderly in so many of these ghettos had had a long, easy run, and needed some shock-and-awe in their guts, a message that could be

heard in their own lingo, rather than just "consultations and negotiations" about which, predictably, they would not give a damn. They got it. The women and others needed reassurance that the state was on their side. They got it. The supremacy of Australian law had to be brought home with dramatic impact in petty fiefdoms where corruption and abuse could so easily escape scrutiny, detection and prosecution. The army, sent unarmed to accompany the Intervention's new people and services into Northern Territory settlements, was the state incarnate, a particularly apt symbolic statement.

My starting point when thinking about Australia's indigenous policy framework, or specific events like the Intervention, is not narrowly political—in the sense of trying to fix unjust or unequal distributions of power. Nor can I admit to that other common political purpose: the appeasement of vocal sectional interests. Those pathways are geared to creating benefits for politically or bureaucratically active adults, in the first instance. Nor is my starting point the need to preserve what is left of traditional indigenous culture, or to maintain the older forms of connection between people and the land. These heritage matters are arguably serious considerations, but they are not the first considerations. I say this after a lifetime of placing the highest value on indigenous languages, land rights, social organization and the visual arts.

The first consideration, instead, must be to focus on those conditions that are conducive to the emotional and physical wellbeing of the unborn, infants, children, adolescents, the elderly and adult women and men. It is remarkable how many people living in the comfort, affluence and healthy surroundings of Australia's suburbia have, in the debates over Indigenous policy and especially over the Intervention, covertly promoted the view that respect for cultural differences and racially defined political autonomy takes precedence over a child's basic human right to have love, wellbeing and safety. It is as if political feelings and political values are more important than one's emotional feelings and moral values as fellows of those other human beings in the ghettos. Maybe that is harsh. These are harsh questions.

The worst aspects of community dysfunction, as it is styled, occur in the emotional, psychological and bodily relationships between people, and between people and their damaged selves. That is why this approach for which I am arguing here has to be an individual story about feeling, before it is a story about the political morals of governance. I also believe that considerations of care should be put before considerations of strict justice, as a matter of principle. There are times when one of these might have to yield to the other. In general, I am inclined to give priority to care, and to tough out the storm of complaints about flawed justice. Others take a different view. In the case of a conflict between care and appeasement, there should be no argument: appeasement of vested interest groups goes.

One of the costs of an era of social policy that has been dominated by cultural relativism, the rights agenda and the redistribution of power, has been the displacement of care as the primary determinant of special helping measures for citizens in trouble. Care and compassion have lost some of their seemliness. It is easy to blur the picture and identify them with condescending and patronizing attitudes, or with the often unjustly, sometimes justly, discredited missionary past. Unless yoked together with respect, care can indeed be abused in just these ways. But do-goodism can take many forms. One is saccharine sympathy, but another is self-redemptive legal and political crusading on behalf of marginal citizens that proceeds on the assumption that emotional wounds will be healed by laws and documents and covenants signed in Geneva.

The political glamor attracted by those who struggle for rights and justice has long outshone the small glow emitted by those who are in the coalface caring business, the ones who dress the wounds of battered women in remote area clinics at three o'clock on Sunday mornings, or who work to get petrol sniffers back on track out in the Tanami Desert in the ferocious heat of February. But by the mid to late 2000s, this balance was shifting rapidly, especially among younger indigenous people and others not wedded to paradigms lost.

We have long been told that the emotional and physical health of indigenous people will not improve until their social justice and property justice and treaty needs and formal reconciliation needs and compensation needs have been met, and, by implication, that the heart of the people's problems and solutions lies in politics and law. By definition, those who deliver the people from extraordinary levels of rage, fear, anxiety, neglect, malnutrition, infection, diabetes, renal failure, sexual abuse, assault and homicide will thus allegedly be politicians, barristers and political activists.

This unscientific mumbo jumbo beggars belief. It relies on a kind of magical cause-and-effect relationship, as if a treaty between races will keep children safe in their beds at night. It is understandable as a career-enhancing tack taken by those who espouse it. Unfortunately, some such careers can depend functionally as much on the perpetuation of a sense of victimhood in the populace (and on there being victims), as on any evidence of healing, if not more so. Caring measures based on the vital human right of freedom from abuse, the right to adequate nutrition and medical treatment, the right to economic and spatial mobility, rather than documentary measures based on increasingly stratospheric rights and international covenants, lie at the effective end of realistic processes of improvement. More important is the creation of conditions where indigenous people have enough incentive and motivation, and enough capacity to change, to make important improvements in their own lives. Large numbers have done so. But moral pronouncements by outsiders or coercive measures imposed by the state do not have the motivating power of the economic and emotional necessities of small groups and individuals.

I also criticize the way political ideology and political censorship have led to poor policy evolution and to the dissemination of disinformation in Australian indigenous affairs. The most distressing cases of this have been in the areas of social control of violence and abuse, and in the medical health field, but there are others. My objection is not to acting politically. I have done that, here and elsewhere. My objection is to the corrosive effect of ideological politics, or even merely white post-imperial guilt politics, on our ability to respond realistically and truthfully to the enduring crisis state so many indigenous individuals continue to suffer.

STUDY

GREENLAND AND ALCOHOL

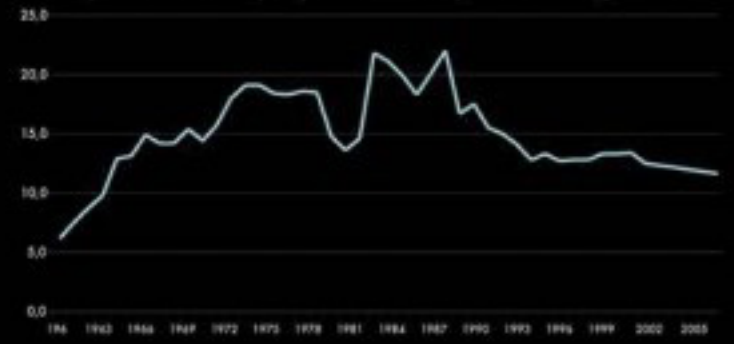
Alcohol consumption

Litres per capita (age 15+)

9.12 New Zealand[4]	8.4 USA[4]	6.70 Sweden[4]
5.91 Iceland[4]	11.7 Greenland[4]	11.37 Denmark[4]

Men between the age of **18-35** without work have the biggest Alcohol consumtion in Greenland[1]

Liter pure alcohol pr. person 15+ years through time[3]



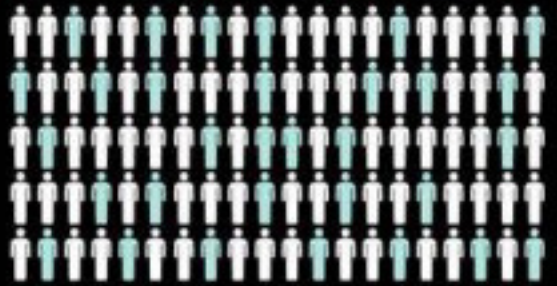
Frequency of alcohol consumption[2]

54%

of the Greenlandic people comes from a home with alcohol problems

1: "Befolkningsundersøgelse i Grønland, 2005-2007" Inuvdlûn (Inuit) og helbred", Statens Institut for Folkesundhed
2: "Folkesundhed i Grønland" 2006, Peter Bjerregaard,Inuuteq, Kirkegi Ilivdrimingajunnaat ?
4: http://en.wikipedia.org/wiki/List_of_countries_by_alcohol_consumption 2011.10.11

Greenland and Sexual assault



31% of the greenlandic people have experienced sexual assault [1]

Sexual assault according to age

21% under 12 years have experienced sexual assault [1]

14% under 13-17 years have experienced sexual assault [1]

9% over 18 years have experienced sexual assault [1]

Sexual assalt according to gender [1]

43%  16% 

Children under 15 years who has experienced sexual assault

1: 4,5% of Danish girls [1] 2: 8% of Finnish girls [1] 3: 28% of greenlandic girls [1] 4: 38% of Hunaviks (Canada) girls [1]

1: 1% of Danish boys [1] 2: 3% of Finnish boys [1] 3: 9% of greenlandic boys [1] 4: 13% of Hunaviks (Canada) Boys [1]

1: "Befolkningsundersøgelse i Grønland, 2005-2007 Seksuelle overgreb (vold og tvilkaar)", Statens Institut for Folkeundhed.
2: "Unges trivsel i Grønland", 2004, Direktoratet for kultur, uddannelse, forskning og Kirke.

Greenland and Suicides

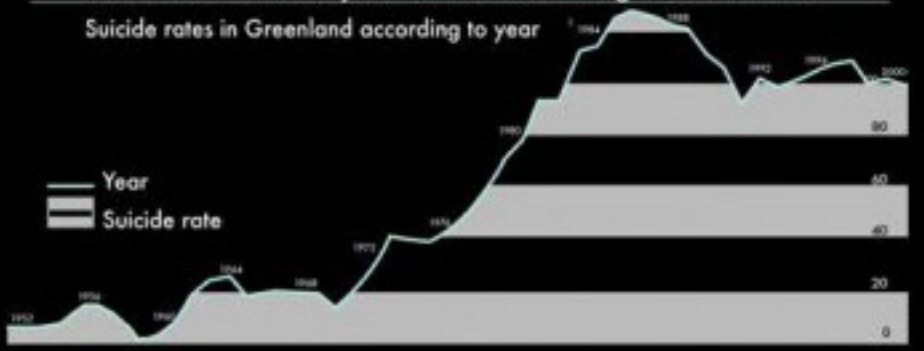
Suicide rates

Denmark [1]	Greenland [2]	Finland [3]	Higst in the world Lithuania [4]
10,6	88	18,3	31,5
in 2006	2001-2005	in 2009	2009

395 pr.100.000

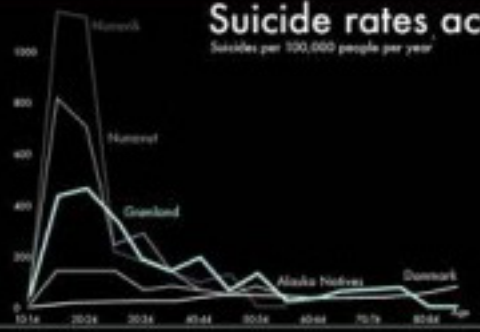
Men from 15 to 24 years old have the higest suicide rate [1]

Suicide rates in Greenland according to year [1]



Suicide rates according to age

Suicides per 100.000 people per year [1]



1: "Befolkningsundersøgelse i Grønland, 2005-2007 Seksuelle overgreb (vold og tvilkaar)", Statens Institut for Folkeundhed.
2: "Folkeundhed i Grønland" 2004, Peter Bjerregaard, Inuit, ÅMMA Tandmannguvut
4: Kilde: http://en.wikipedia.org/wiki/List_of_countries_by_suicide_rate#Kilde_notes:suicide|10.x03.10.11
5: http://www.norsq.gl/Emner/Sundhed/Befolkningsundersøgelser/Befolkningsundersøgelse%20om%20seksuelle%20overgreb%20mod%20børn%20og%20unge%20i%20Grønland.aspx

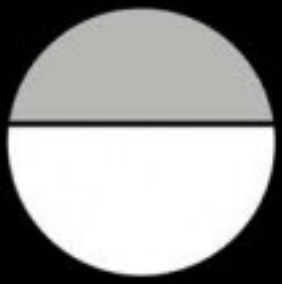
STUDY
DEMOGRAPHIC

GREENLAND POPULATION

56.615

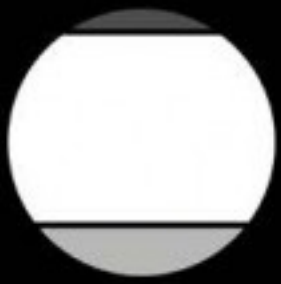
Source: Greenland In Figures 2011

POPULATION BY GENDER



- WOMEN 47 PERCENT
- MEN 53 PERCENT

POPULATION BY AGE



- 60 - YEARS
- 15 - 59 YEARS
- 0 - 14 YEARS

Source: Greenland In Figures 2011

POPULATION GROWTH*

- POPULATION GROWTH RATE 0.29 PERCENT
- POPULATION DEATH RATE 0.89 PERCENT

Source: Greenland In Figures 2011
*2010

MIGRATION 2010

IMMIGRATION
2.491

EMIGRATION
2.651

NET MIGRATION 2010 -160

Source: Greenland In Figures 2011

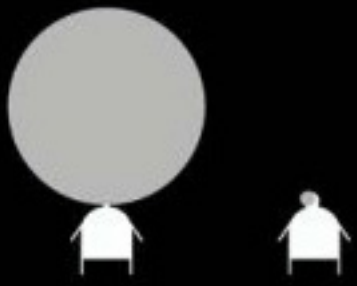
GREENLANDERS PLACE OF LIVING *

GREENLAND 56.615
75 %

DENMARK 18.563
25 %

Source: Grønland Mægtig og Afmægtig/ Greenland In Figures 2011
*2007, three generations

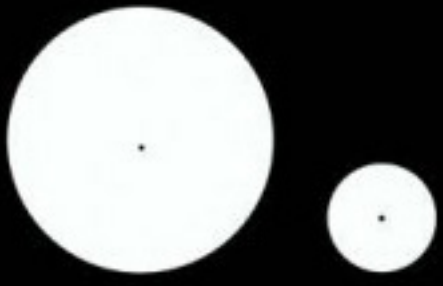
DANISH KINGDOM INHABITANTS



DENMARK5.529.000 GREENLAND 56.615

Source: Greenland In Figures 2011

POPULATION DENSITY

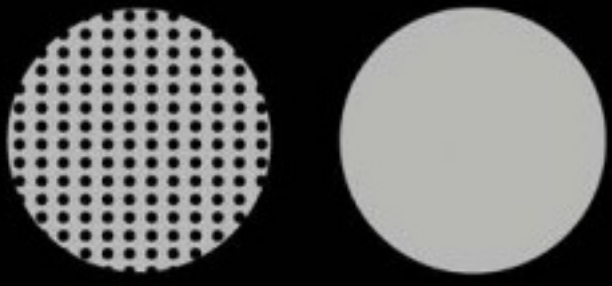


GREENLAND TOTAL
37.7 KM2 PER PERSON

ICE FREE AREA
7.15 KM2 PER PERSON

Source: Greenland In Figures 2011

DENSITY COMPARATIVE



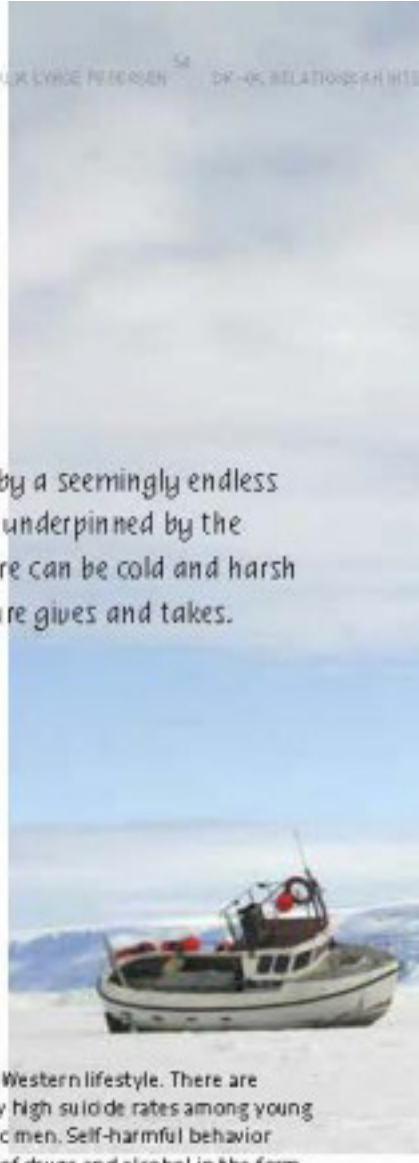
PEOPLE PER KM2
DENMARK
130

PEOPLE PER KM2
GREENLAND
0.03

Source: Greenland In Figures 2011/ Wikipedia

IF GL HAD THE SAME DENSITY AS DK THERE WOULD BE
281.591.180
PEOPLE IN GREENLAND

GREENLAND INNER LANDSCAPES



Greenland is the world's largest island and lies on top of the world, surrounded by a seemingly endless expanse of sea and ice. The nature is truly unique—beautiful, clean, fresh—and underpinned by the blue glow of the ice and the sun sharp against a blue spring sky. The same nature can be cold and harsh with torrential storms, where sky and sea become one. Nature is a pantry. Nature gives and takes. Greenland's Arctic nature dominates everything.

BY ANALIA DYRGE PEDERSEN, TARNIP PISSUSSAARIK INUMIKUUT ILISIMASAQLIK

AUT.CAND.PSYCH. -CERTIFIED MSC IN PSYCHOLOGY

BORN AND RAISED IN SISIMIUT

And yet Greenland is also the land of the people, populated by Inuit for generations. This Inuit culture evolved from the position that each individual is dependent on the community. The individual's health, the community health and the health of the environment combined to ensure survival in the Arctic. Conflict and disharmony, whether in relation to oneself, to the collective, or in relation to nature had to be solved for the sake of everyone's survival.

As Inuit, we have seen huge changes over the past generations from a hunting society to a Western-designed community, both in form and lifestyle. Houses and institutions have been built in a European tradition. Society has been re-created, more or less as a replica of the systems of the former colonizer. Cultural assimilation has in various disguises dominated the political agenda. Lifestyles are now in many respects very Western, with increasing globalization exacerbating this further. These significant changes are largely a result of colonialism.

The impact of colonization has been observed and experienced among indigenous peoples throughout the world. Withdrawal of self-determination and the reduced ability to influence one's own future has very negative effects on self-esteem and health. Indigenous peoples have experienced considerable stress as a result of colonization, and as a result experience high suicide rates, harmful use of alcohol, tobacco and other substances with damaging health effects, both physically and psychosocially. These negative effects impact on subsequent generations as a social legacy. There are also problems with obesity, diabetes, heart disease and other health complications due to the Western lifestyle. There are particularly high suicide rates among young Greenlandic men. Self-harmful behavior and abuse of drugs and alcohol in the form of binge drinking is frequent and leads to violence and other forms of abuse far too often. In addition to generally accepted health factors such as income, education and others, there is thus a definite effect of colonization and de-culturalization. It is absolutely necessity to identify and recognize these elements and problems in order to overcome the trauma and move forward.

However, in contrast to the situation of many other indigenous people, Greenlanders constitute the majority of the population in Greenland, the Greenlandic language has the status of being the official language, and furthermore, Greenlanders have achieved a significant degree of autonomy and self-government. This allows and demands a larger and necessary cultural, economic and psychological independence and can thus provide the potential for overcoming the effects of colonialism that still persist in some areas. There are many challenges in this process. Society, as mentioned, is very much designed as a copy of a Western

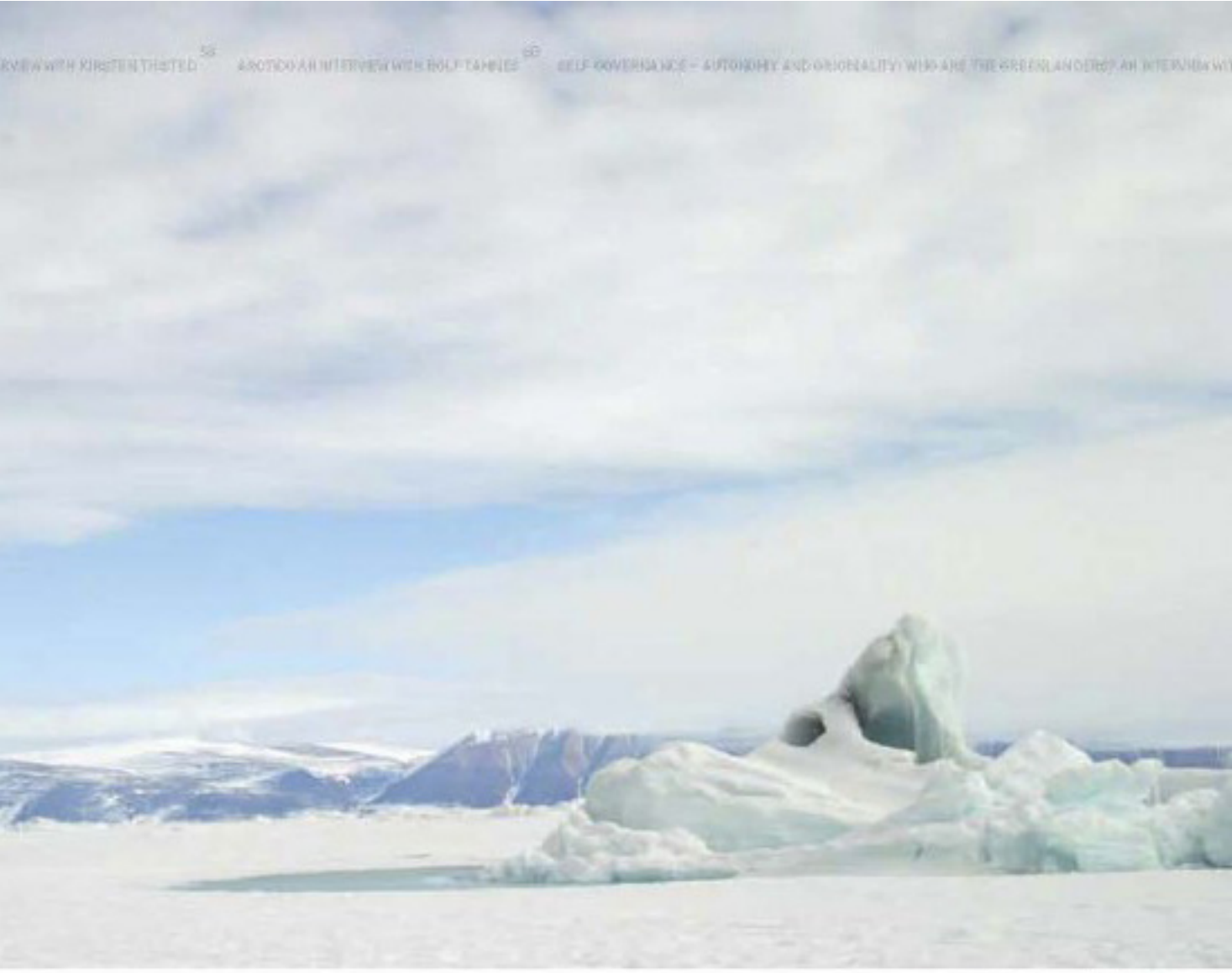


PHOTO BY JULIE HARBERBERG

" Our cultural ballast, our ability to survive, to overcome a colonial trauma and find a Greenlandic way beyond may prove to be a driving force of progress both individually and socially in a world of increasing globalization."

PHOTO BY MADS NILSROD PETERSON, ARCH

bureaucratic system—perhaps a copy that is worse than the original. There is a large administration, and Western values are dominant.

Some Greenlanders live today in a schism between two diametrically opposed cultures. The original values of living in respect and direct contact with nature, with each other and with themselves, sharing material goods, work for the community and others are in contrast to a Western culture that dominates over nature, rationalizes emotions, and works for personal gain and in competition with the rest of the community. In this way, some Greenlanders experience themselves culturally alienated in their own country. We, as a society and as individuals, need to find balance again. We need healing, physically and mentally.

There are many prejudices about Greenlanders—that we are drunks and unable to maintain a work life—and these are absolutely necessary to change. It is essential to separate the problem from the subject. Greenland today is experiencing growing polarizations and imbalances in society. The rich get richer and a larger and larger part becomes poorer. The elite are doing well, while a large group is stranded on welfare payments, many of them with no visible opportunities to influence their own situation.

It is not the individual that is the problem, it's not the Greenlanders that are the problem; the problem is the problem. Once the problems have been identified, there is also a solution, and then it is possible to heal.

The social and the health systems have greatly been part of "teaching people helplessness" rather than focusing on the resources available within people in their environment and in the network of people, the collective. The psychological aspects of colonization are complex and profound, which is reflected in the challenges and length of the process. It is obvious that some people do need individually personalized help to overcome the postcolonial pain. However a deeper healing also implies that society undergo a transformation, that people recognize the problems they are experiencing and tell their story in order to find a new Greenlandic way forward.

It is still important that the colonial history is told, listened to and acknowledged both in a past and present perspective. There is a long tradition of telling and listening among Inuit. There is a genuine interest in other people, who they are and where they come from. There is a high degree of openness and willingness to adapt, an openness that seen from the outside might be perceived as almost naive. This can be used in the story and understanding of the different stories that represent the past, both the traumatic and painful as well as the good and successful experiences. There is still opportunity to cultivate and develop the alternative histories and explanations so we do not keep getting stuck in an unresolved and one-sided post-colonial trauma.

These alternative and different stories can help create new inner landscapes, new thinking, new understandings, and redemption of the traumatic stories with opportunities for personal growth. Despite the significant degree of colonial influence, the Greenlandic people are in many ways strong, unified, and it is clear that there is a resurgence of confidence in recent years. The older generation has in many ways paid the price and gone through emotional pain, however, in the process they have managed to start redesigning the society so it is possible to move on.

Young people in particular have shown a way forward with renewed creativity and artistic expression, where one's own beliefs and influences can be used to develop and point out new possibilities. Increased numbers achieve an education or take courses and choose to live in Greenland, thereby contributing to developing the community. They have a Greenlandic cultural understanding and ballast, which enables them to find their own way individually, but also help to strengthen the collective. Independent of the colonial trauma, they create their own stories where self-esteem and confidence builds on pride in being Greenlanders.

Through these processes, our identity and position become clearer. The inner landscapes, our own stories, our perception of ourselves and our own experiences also contain many new and unfamiliar roads. There are still endless opportunities and many challenges in finding new destinations and alternative routes. Our cultural ballast, our ability to survive, to overcome a colonial trauma and find a Greenlandic way beyond may prove to be a driving force of progress both individually and socially in a world of increasing globalization.

" There is a genuine interest in other people, who they are and where they come from. There is a high degree of openness and willingness to adapt, an openness that seen from the outside might be perceived as almost naive."

DK–GL relations

An interview with Kirsten Thisted,

Associate Professor, Department of Cross-Cultural and Regional Studies, University of Copenhagen

BY CAMILLA JENSEN THORUP OF TERROIR

CJT: *Kirsten, we were asked to try and understand how Greenland could be organized. Our view is that in order to organize something, one must also try to understand what the underlying issues are before one would start to organize them.*

KT: Organization is not my expertise, but if I had to point at what the focus is going to be in the near future, it will be on the development of a multicultural society in Greenland.

CJT: *Ethnicity, for example—the question of "The true Greenlander." Who is it? We were talking to Ivalu Søvndal Petersen, who seems to represent the "brain drain": the problem of educated Greenlanders that do not settle in Greenland.[1] Ivalu said she felt "wrong," looked upon as though not really a Greenlander because she didn't speak Greenlandic. What do you do about that?*

KT: Yes, the question about the multicultural society is how much will they open up? How much are they able to open, and how much energy will they continue to spend arguing about who are the real Greenlanders, what is the "true" Greenland?

It's a debate we have had at many times in Greenland, dating back to the beginning of the last century. It tends to be very ethnically focused. But at the same time we look around the world and can see how migration and globalization are forcing everybody to start thinking in new ways. So, on the one hand, it is still very much about language and identity; on the other hand, one begins to realize that Greenland has many stories and many identities. Today's Greenlanders have begun to take more interest in who actually lives in the country and is contributing to the society. And this discussion that is taking place here is extremely important, especially now as Greenland is opening up to the world. All the things they wish for, such as foreign labor, is hopeless from the start if there is an A and a B population: the A population being those who have the right ethnicity, but not necessarily the major academic skills; and the B population being those who have the wrong ethnicity, but the right skills. So it's important to have this discussion now, and I think that is happening.

CJT: *Are there two tracks: an unresolved trauma, and at the same time also a development? People may need to express both in the poems? It sounds like this conflict comes out in the poems, and lies in the Greenlandic internal relations, as when the secretary of the president of the parliament said that the discussions in the room is blocked because people claim "I do not understand what you say because your language is wrong"?*

KT: It is clear that there are a lot of unresolved conflicts left from all the years of colonialism, and Greenland still remains the "little brother" in relation to Denmark. Many say that we should get over it, but the young people are just really tired of hearing about colonialism right now. They really want to move forward, because it is often spoken about in such a narrative where the Greenlanders appear as passive victims. It's a loser's position, or at least not an equal position, and we all need other stories. This is why it was so powerful in 2010 when the Greenlanders participated in and won a Danish music competition for choirs. Nuuk competed against three Danish cities in a popular television program. I have worked with Greenland since 1984, released ancient legends and translated modern literature, and I have often received positive response, but never quite like when I wrote the essay, "Here Come the New Greenlanders," which was about what was at stake for the Greenlanders in the music competition I mentioned. I appeared in the Danish newspaper Politiken, and I received a wall of emails. Suddenly a story that everyone could feel was right was heard. The fact that the choir leader did what she did, and furthermore that the Danes saw it and recognized it, that mattered. Even though they have home rule and self-government and everything, the Danes are still the "significant other" to the Greenlander. But the good stories self-reinforcing; I believe this!

CJT: *Given everything you are saying, what will happen if Greenland increases its population with 2,000 Chinese mine workers next year? What will Greenland get out of this? Will it not become an "us or them" situation?*

KT: It is just for the construction phase, and then they will disappear again. But who knows if they will actually disappear again? Remember, it is Greenland itself that has to take responsibility for these decisions. Right now they are starting to investigate whether the ILO Convention 55 actually applies to Greenland. The fact that an IA Government can seriously consider escaping the ILO Convention, which states that one must treat all workers in the country equally, is simply shocking.[2] How will they retain the definition of the Greenlanders being an indigenous people while doing this? I mean the whole point behind that idea is that indigenous peoples are small and vulnerable and mistreated, and that it should be possible to treat each other with decency on this planet. And no one in Denmark says anything. It's easy to see that there is a huge colonial baggage. Greenlanders have often expressed grief that the Danes did not bother to discuss

the Commonwealth. And it is true, the Danes do not bother, or maybe we dare not, because it quickly becomes "colonial" and is perceived as us Danes just wanting to interfere. But if we have any ambition with the commonwealth, we should discuss this. That would be a more equal partnership than just not bothering. Personally I am not afraid to say that I find it completely unheard of having Chinese, or others, crammed in a sort of labor camp anywhere on commonwealth ground where they would be working in poorer conditions and salaries than the local population. Try to imagine someone placing such a camp on Bornholm!

CJT: *So is there actually a case of Denmark sitting back and thinking they should not say anything because they were the colonial power?*

KT: Yes, someone should speak out. If you want to treat workers like that, then you have to become an independent state.

CJT: *But that Denmark won't do, I suppose. There is obviously something Denmark wants out of this commonwealth relationship?*

KT: Yes that is exactly the case, everybody would like to participate in the great adventure up there and make money, including Denmark, but it is problematic if we cannot openly discuss what is going on. But something is in fact happening at the moment, also in the Greenland newspapers. For example, the newly appointed climate professor of Greenland, Mark Nuttall, did quietly point out that it is useless to see the industrialization exclusively from a national perspective as "something necessary for us to achieve financial independence." You have to see it in a global perspective. What makes a business like Alcoa shut down elsewhere while establishing themselves in the Arctic? Cheap labor and cheap energy, not only because of water power, but because of lower taxes for pollution—something that Greenland might get through only because they are recognized as an indigenous people and has therefore not polluted previously. Will Greenlanders accept this? The discussions are taking place, and I think that this point is really important to get! They are actually discussing. But there is unusually broad support for both mining and oil projects—and for Alcoa—in the population.

CJT: *Is it not because someone has played the independence card?*

KT: Well, of course it is, but still there's a debate. Can we still be an indigenous people if we introduce private property? Is it fair that mining companies can own everything in an area? Is it even compatible with the foundation of our society? In minus 26 degrees cold, forty people came to demonstrate against London Mining, so at least that's something! But people also say and believe that the way decisions are made is similar to North Korea. They had decided to accept the Alcoa process and started the project long before it was approved. But that does not mean that the ordinary Greenlander is without forethought or without protest!

CJT: *But when there are not enough people, you've got to open up. Speaking of ethnicity again, is there a cultural fear about "these foreigners"? There seems to be a dilemma between this and the narrative of the super hospitable Greenland, the "incredibly friendly people." We did not experience this. We actually felt a tremendous skepticism, possibly replaced by a kind of relief that we were not journalists.*

KT: It's because the Greenlanders are so tired of all the Danes who come to talk about them! The Danes and Greenlanders have very fixed images of each other, although both parties can actually be said to work hard to overcome it these days. Apparently it is particularly difficult for Danes to accept that Greenlanders are perhaps not even the least bit different. It is the Danes who need to maintain those cultural differences. Of course it is also an ingrained part of the discourse in Greenland, because the entire generation that stood behind home rule used it as leverage. The main reason for needing to create Greenland as a separate ethnic state was that they should be considered differently. Knud Hertling wrote a book about the issue where he suggested there were just too greater differences between Greenland and Denmark for any common ground.[3] But Knud Hertling was as Danish as anyone and chose to live his entire life in Denmark, and married a Dane, so it was a strategic position—a kind of strategic existentialism that Greenlanders have been experts in. He knew full well that such large differences were not at all true, especially not looking at himself, but it was his argument because it was impossible for the elite to become important in Denmark. Then he realized that the elite could become important in the process of a battle for liberation, fighting to establish an independent Greenland. But in that they had to insist on the crucial differences, then assume to speak for the majority of the population who, after all, lived more traditionally at that time.

The point is that it is a way of thinking of difference that has become part of Greenland's mentality, so you are wrong if you think that there is a distinct Greenlandic discourse and a Danish discourse. We share some discourses that keep the colonial system running. Of course we need decolonization, but if we want it for real, there are some things that we need to talk about, not only these things that are unpleasant for the Danes, but also the things where the shoe pinches for Greenlanders. Only in this way can we avoid ending up with villains and victims—the victim role that the young ones refuse to take on. We owe each other a lot more than that.

1 Inês Sørstrøl Pedersen. Born in Greenland in 1975, has written her master thesis on bilingualism in Greenland. She currently resides in Oslo.

2 Inuit Ataqatigiit (Greenlandic for "community of the people") is a leftist and separatist political party in Greenland[1984] The party was born out of the increased youth radicalism in Denmark during the 1970s. The party strives to make Greenland an independent state. Inuit Ataqatigiit is represented in the Folketing, the Danish parliament, by Sara Olsvig. Its current president is Kuupik Kleist, member of the Parliament of Greenland. Kleist replaced Aleqa Hammond as president in 2008. In the Danish 2007 parliamentary elections, the party retained one of Greenland's two seats in the 179-seat Danish Folketing. (WIKIPEDIA)

3 Knud Louis John Hertling, born January 15th - 1915 in Paamiut (Frederikshaab) was a Danish-Greenlandic politician (Socialdemokraterne) and minister for Greenland in the Danish parliament 1971-73 (WIKIPEDIA)

" ...we look around the world and can see how migration and globalization are forcing everybody to start thinking in new ways."

Arctico

Rolf Tamnes in his office.
PHOTO BY THOR INGE BJERKOL

An interview with Rolf Tamnes

Professor Rolf Tamnes is leader of the research program Geopolitics in the High North and has been working on Arctic questions and politics for a number of years. We asked him how the Arctic cooperation is organized and the possible future of Greenland as part of the Arctic.

BY ANDERS MELSOM AND TOR INGE BJERKOL OF CORDITIONS

We have seen an increased interest in Arctic region. On your website you are calling for a new architecture in the region. Why is there a need for this?
First of all, because of the ice melting, we will witness a considerable increase in activity in the region in the years to come. In the short and medium term, it will primarily involve just the countries in the region. In the long term, we will also see considerable interest from the major Asian countries; the great powers of India and China, in addition to South Korea and Japan. The scope of activity and the number of actors will increase significantly, and this makes it necessary to look around for new ways of governing the region.
Is the entrance of these new actors related to the Northwest Passage and resources as well?
The bottom line is climate change and global warming. This has already led to a strong increase in scientific research in the region. Many countries are today involved in the scientific research in the North, most of all because it is a very interesting laboratory for monitoring the climate change. The many research stations at Svalbard illustrate this point. Here we find countries such as China, India and South Korea, in addition to the "traditional" European and North American countries. Knowledge is very much the key element in what is taking place in the North. It has also a prominent place in Norway's policy for the North.
A key question is the consequences of climate change. There will be global consequences, especially with the ice melting in Greenland. The oceans will rise. There will be regional affects as well, not least a strong increase in activity. Firstly, shipping in and out of the region and between the world's continents via the Arctic will increase because it is the shortest sea route between many destinations. Secondly, there will be a considerable increase in resources extracted from the region; oil and gas, of course, but one should also have in mind that there are huge mineral resources up in the Arctic, in Greenland, Canada and Russia. Thirdly, tourism is on the rise. We will probably see a marked increase in traffic through the region, although this will evolve over time. When we look at the passages from Europe to Asia, the Northern Sea Route along the coast of Russia is the most viable alternative in the short and medium term. Significant transport through Canada and the Northwest Passage will take a longer time to develop.
What are the major challenges in terms of governance in the High North?
In general, the challenges are modest compared to most regions of the world and compared to the global challenges. One important reason for that is that there is a fundamental consensus about the rules of the game. UNCLOS (United Nations Convention on the Law of the Sea) of 1982 regulates the activities in the ocean. It is the "constitution" of the Arctic Ocean. The coastal states in the Arctic confirmed the primacy of UNCLOS at the Ilulissat Meeting of 2008.
You mention the scientific interest in the region. What type of model is used for this? Are they all acting independently of each other? Or is there an international agreement on this?
Many institutions and regimes are involved, with UNCLOS as a platform. The Arctic Council has become the most potent overarching body for cooperation in the Arctic. It has eight full members—Russia, Canada, Norway, USA, Greenland/Denmark, Iceland, Sweden and Finland—and a number of observers.

Is the Arctic Council the one doing the governing?
It is primarily a policy shaping, not a policy making institution. *What is the difference?*
The Arctic Council meetings may take initiatives, but any decisions in the Council will have to be followed up by the nations involved. For example, the Arctic Council took the initiative to instate a search and rescue agreement, which it approved in 2011, but it is up to the countries to decide and follow up.

Is the UN involved in the Arctic?
The Law of the Sea convention is a United Nation convention, but the UN is not directly involved, apart from the role the UN family institutions play in issue specific areas. A great number of institutions that are working with Artic issues also work with issues in other parts of the world. The International Maritime Organization (IMO) is such an example. Then you have a number of institutions that cover only parts of the Arctic—mainly either North America or Northern Europe. In some cases efforts are made to build bridges between or merge some of the sub regional institutions. One of the proposals set forth is to establish a coast guard forum for the whole Arctic based on the existing forums for the North Atlantic and North Pacific. Such cooperation might include a coordination center and a training facility for search and rescue in the region. This illustrates the kind of thinking and type of some of the proposals that are happening. Another idea, as a follow up to the search and rescue agreement, is to develop a similar Arctic

ORG AN IZING

" ...flag planting was what nations did a hundred years ago, not today, so the Russian operation scared many..."

agreement concerning oil spill preparedness and response.

To what extent are there security challenges in the Arctic?
There are a number of "soft security" challenges in the North. We need institutions, helicopters and ships, monitoring and surveillance capacities to handle accidents, shipwrecks and oil spills. The countries in the region are about to engage more heavily in that kind of activity. Russia is about to establish ten rescue stations along the Northern Sea Route. It illustrates how the major countries in the region are about to adapt to new circumstances. The same goes for North America. We are about to see closer cooperation between the US and Canada about many of these activities.
How about the "hard security"?
The "hard security" challenges in the short and medium term are, for all practical purposes, connected to Russia. To the Russians, the North is strategically and militarily important in order to maintain its status as a great power. They have lost very much to the west and to the south, while there is a vast and intriguing opening in the north. Half of the coastline to the Arctic Ocean is Russian. In the future, with the opening of the Arctic Ocean, Russia has a potential because of the resources in the region. Furthermore, the North is important for Russia from a military perspective, especially because the main part of its strategic nuclear submarines are located in the Kola Peninsula and the rest in

Entry doorway of Norwegian Institute for Defence Studies.

PHOTO BY THOR INGE HØIMDAL

the Pacific. Nuclear weapons play an important role in Russian strategy, since it has to compensate for its inferiority in conventional forces.
Two elements in particular constitute Russia's great power status as of today: that it is a major nuclear state, and that it has huge energy resources.
And the nuclear forces are at the top of the pyramid. It also demands a lot of supporting structure.
Russia spends a lot of money on nuclear facilities in general, and the Navy is an important part of it, with submarines, capital ships and supporting vessels, bases and yards, communication, intelligence and early-warning systems, and research and development. Much of the naval package is in the north, and this will shape Russia's image of the region. The systems are important in themselves, and they must be protected, with forward defense lines far away from the shores of Russia. All this has, in turn, an impact on the other countries' reading of the strategic environment in the North.
We have seen in the media that Russia has marked its presence in the region, by planting a flag on the North Pole and by sending bomber aircraft in various directions towards the West. Should this be seen as a conflict escalation in the North? How does it influence other countries?
One should not exaggerate the importance of these steps. The flights have taken place in international waters. The flag planting was symbolic in the sense that it doesn't strengthen Russia's legal right to the continental shelf around the North Pole. Having said that, flag planting was what nations did a hundred years ago, not today, so the Russian operation scared many and led some countries, such as Canada and the United States, to focus more on the Arctic. But again, I would like to emphasis that UNCLOS is the baseline in the North.
And Russia is in full agreement with that?
They are. At the same time, one should remember that Russia has very high ambitions in the North, both economically and militarily. One might raise the question as to whether Russia will be able to reach their goals. They are moving in the right direction, but they have a very long way to go, and one reason for this is that society and politics in Russia are so dysfunctional.
How do you look upon Greenland? What about its future potential?
Greenland is fragile and underdeveloped. It will take very many years until Greenland can become an independent state. It will require a sustainable economy based on more solid incomes, and it needs a far more competent administration and a knowledge hub. However, many in Greenland want the country to become independent, and it might happen, perhaps twenty to thirty years from now, depending on oil and gas resources.
How will an independent Greenland change the development of the region?
Not much from a security perspective at least. Greenland is very much under the US umbrella already, and in the future it will be part of a North American search and rescue cooperation.
Greenland has enormously long borders. It is not so well connected in terms of infrastructure. It will be hard to protect the territory from smuggling etc.
That is part of the soft security challenge in the North, and it is not limited to Greenland. With the opening of the region, it will be far more exposed to smuggling and all sorts of illegal activities.
An independent Greenland will probably have to seek alliances and collaborators?
Greenland will have to take over a number of tasks that are being carried out by Denmark today. It includes maintaining sovereignty and fishery inspection. With some increased income, this will be possible, though in cooperation with good neighbors.
Is this model closer to how Iceland operates today? Or is Greenland closer to the United States?
There will be a difference, since the defense agreement between Iceland and the United States was discontinued by the Americans in 2006, while the defense cooperation between Denmark/Greenland and the United Sates is still in place. The two countries had an extensive and important military cooperation during the Cold War. Today's cooperation is more limited, but it is still seen as important from a US perspective, as the Thule Air Base houses a ballistic missile early warning site designed to detect and track intercontinental ballistic missiles launched against North America.
Does Greenland play a key role in the EU's policy towards the Arctic?
No, Greenland is not a member of the EU, and Denmark is eager not to involve the EU in Greenland's affairs. Greenland is Denmark's gateway to the Arctic and justification for being a member of the Arctic club. It costs Denmark a lot to maintain sovereignty over Greenland, but it also gives much in return, not least the benefits of being an Arctic nation.
Who belongs to the inner core of the Arctic cooperation?
As a starting point, the Arctic Council has eight ordinary members. Among them are the Arctic Five, the five coastal states surrounding the Arctic Ocean: Russia, Canada, Norway, USA and Denmark/Greenland. In addition the Council includes Iceland, Sweden and Finland. The Arctic five have met in full format two times: in Illulissat in 2008 and in Montreal in 2010. Many reacted negatively to the five-nation format meetings, as they could belittle the role of the Arctic Council. The Arctic Five will probably not meet again at ministerial level.
In 2013, the Arctic Council will decide whether it will open up for new observers, including permanent observer status for the European Union and China. Do you think they will get the green light?
Today the Arctic Council has twenty-six accredited observers. It has received ten new applications for observer status. A decision on observer applications will be taken at the ministerial meeting in Kiruna in 2013. As you rightly point out, the EU and China are the key and most challenging cases. Russia in particular stands for a non-inclusive policy in the Arctic, and Canada has been against the EU becoming a permanent observer because of its ban on Canadian seal products. I don't know what will be the outcome, but one should not be surprised if the Council decides *not* to give them permanent observer status. Such a decision will no doubt lead to strong reactions from the applicants and mark a setback in the Arctic cooperation, but non-Arctic players cannot simply demand a place in the sun.

Rolf Tamnes, (b. 1951) Cand. philol. Director of the Norwegian Institute for Defence Studies since 1996 and Adjunct Professor at The Department of History/University of Oslo 1998–2009. His last, major research project, with Jacob Børresen and Gullow Gjesvik Norsk forsvarshistorie, bd. 5, Allianseforsvar i endring, 1970–2000, [The History of Norwegian Defence, Vol. 5, The Changing Character of Alliance Defence 1970–2000]. Eide forlag 2004.

ORG AN IZING

Self governance

Autonomy and Originality: Who are the Greenlanders? An interview with Jens Dahl,

Adjunct Professor, Department of Cross-Cultural and Regional Studies, University of Copenhagen

BY CAMILLA JENSEN THORUP OF TERROIR

CJT: *I know your area of expertise has been politics and self-government processes, ethnicity and indigenous people; how do you look at Greenlanders as an indigenous people?*

JD: There is a historical perspective of the Greenlanders as being an indigenous people that have become more and more autonomous. But we can then ask, the day they become a sovereign state, are they then still an indigenous people? Do they consider themselves an indigenous people? The majority of the population of Greenland does not know what an indigenous person is. It is not part of the daily discourse in Greenland. It is a political discourse, and Greenland has held onto this native approach as a platform. A platform they've used very heavily in the process of getting self-government. These were the arguments that were used against Denmark to gain autonomy; arguments they had learned in the UN system. It is the same discourse, the same phrasing and the same "issue of rights." For Greenland, it has been very useful to attach itself to that discussion.

I think it's less important to have an academic debate about whether one can have status as an indigenous people when they have full autonomy. Normally I would say, "No you are not an indigenous people if you have your own independent state," but then we get to the next issue; "Who are the Greenlanders?" Greenlanders do not have an ethnic government, they have what we call a "Public Government"—that is, a government that does not distinguish between being ethnically Greenlandic or non-ethnically Greenlandic when it comes to the right to vote. When you have lived in Greenland for eighteen months, you have the possibility to vote and enjoy the same rights and responsibilities as everyone else. Therefore, one can say that we have a situation where we need to distinguish between those who are living in Greenland and have self-government, while the "Greenlanders" are still an indigenous people. This approach you can take, but it may become utterly relevant if we get 3,000 Chinese miners into the country, and then suddenly the Greenlanders no longer represent 90 percent of the population but only 30 percent.

CJT: *Is there also a question of who Greenlanders themselves define as being Greenlanders? We have asked many about this!*

JD: That's interesting. How did they respond?

CJT: *There are many who seem to not even feel that they are "real" Greenlanders.*

JD: Well, yes, that they still have to answer. I hear many different points of view: "My Mum and/or Dad were Greenlanders," or, "I speak Greenlandic." There are many variations yet no clear-cut position. Maybe you're born in Greenland and your mother is Greenlandic, you've lived most of your life in Denmark, but then at some point move to Greenland because you are a Greenlander. I do not know if it's an important debate, but it certainly seems to characterize and concern many individually.

And then there's the whole other side, you see—being Greenlandic or being Danish. I mean, if you get an advantage out of being a Dane, then you are a Dane; if you get an advantage out of being a Greenlander, then you are a Greenlander! This is just how it works! The political circumstances and the social circumstances, what you feel in one situation or can afford to feel, you may not feel in another situation. I have an example from northern Siberia. There was a family who since 1921 had been recorded as Chukotic, but it was because it was written in their passports. They had never felt like Chukotic, but to be able to access social services, they needed to be registered as such. But when perestroika came, they suddenly defined themselves in a completely different way. That's it. Everyone does so. It's not something that is just etched into the granite. It has much to do with how you see the future.

And in terms of the politics of language, how do you build a modern development purely in terms of language? I have no answer, but it's an organizational problem. How many resources do you put in to develop a technical Greenlandic language, knowing that you cannot get a manual in Greenlandic, knowing how often you cannot get a manual in Danish? It's all in English, it's global.

CJT: *Yes, the question of language seems to be difficult. It's all about scale. Greenland has such a small population with a very high symbolic value embedded in their language. Language policy becomes identity politics, and brings back the ethnicity issue, doesn't it? We wonder if it becomes a barrier, closing off rather than opening up opportunities. Could the search for identity be thought of in a different way? There is an urge to look back and find something in history that can define them as Greenlanders, yet there is something still so painful left from that colonial ghost, that one must look backway before that time.*

Frank Sejersen for example,

says that identity is not rooted but has feet. This sounds great, but in order to move, you probably need to know what to move from. Tuusi said very precisely that in Denmark one would never equate Danish identity with the farmer, but rather with a sailor, who has the whole world as his frame. That is exemplified by the fact that the king has a "royal ship," not a "royal tractor." What is it you look back and identify with in Greenland?

JD: From the early 70s and through the following twenty-five to thirty years, mostly it was about the idea of looking back, to find a contrast to the Danish people. Danes spoke Danish, and therefore the better you spoke Greenlandic, the better you were. It is a normal process in almost all colonial contexts, that you find the things the other does not have and define yourself with those things in such a way the "other" cannot. You may think it is extreme sometimes, because there was a time back in history where it was probably a very natural thing to do, but now, I think, the need to constantly return to the historical roots is a sign of crisis. For example, I see sometimes the students at the University of Greenland being so overly interested in looking at their past, when they should instead go out and look around. They simply do not dare to take the confrontation with oneself that really needs to be taken, and are thereby stranded in the victim role still. Now I am generalizing of course, but it is an important question of how you define yourself as a Greenlander. Luckily there are more and more young people who will not bother to listen to such an old fool like me. They want internet and they do not want to hear about all the old culture and such. For them it does not have the same value; it's an entirely different Greenlandic reality they are brought up with and want to live in. You're not more Greenlandic because you're a hunter than if you are an IT geek, just like I am no more Danish than you because I have the education and job I have.

CYT: *We met an architect who explained to us that she could not draw or plan anything until she had understood the entire heritage of a location.*
JD: It's developing. The fact that Kuupik Kleist came to power is really a confrontation with the victim role. Kuupik is the epitome of such a person who does not bother to be a victim. And Maliina Abelsen, she speaks better Danish than Greenlandic, but she really does not let that stop her, and she is doing a great job discussing what it means to be living in Greenland. But yes, there are still people who uphold the role of victim, and it has indeed much to do with the development and organization of Greenland.
CYT: *Thisted says that Denmark and Greenland are mentally in two very different spaces, and the debate is quite different in the two places. How do you see this intersection? How do they communicate and coexist?*
JD: Danes simply consider and care less and less for Greenland. When I think of those first days when home rule was introduced, there was a huge amount of articles and interest on Greenland in the Danish press, but it is less and less now and generally restricted to the occasional article about alcohol and crime and things like that. I am afraid that it just matters very little to Danes. You could say that the Greenlanders are closer to Denmark than Danes are to Greenland.

PHOTO BY ANNA HALLOREN, AARCH

STUDY

ECONOMY AND THE GREENLA

AVERAGE INCOME PR. CAPITA

UNSKILLED

168.000 - 180.000 DKK

SKILLED

204.000 - 216.000 DKK

EXPORT

1.923 DKK MILLION

85% OF THE TOTAL EXPORT VALUE IN GR COMES FROM FISHING

IMPORT

3.669 DKK MILLION

ANDIC SHARK AS AN EXPORT

EENLAND

EXPECTED CATCH /MND
1000 SHARKS

CARTILAGE
CAN BE USED AS A ADDITIVE TO THE FOOD INDUSTRY, HEALTH-FOOD PRODUCTS AND AS TREATMENT OF TUMORS

SHARK FINS
SHARK FIN SOUP - A DELICACY IN JAPAN AND CHINA

THE MEAT
CAN BE USED TO EVERY-THING FROM DOG FOOD TO FOOD SPECIALITIES

THE SKIN
BREATHABLE, LIGHT, WATERPROOF, ELASTIC AND 6-7 TIMES STRONGER THAN CALF LEATHER. CAN BE USED TO SHOOES, CLOTHES AND JEWELLERIES.

THE LIVER
POTENTIAL TO EXTRACT OIL.

CO2 NEUTRAL PRODUCTION METHOD

THE SHARK MEAT MIXED WITH WATER AND MACRO ALGAE BECOME A FISH FARS, THAT WORK AS A BIOMASS

A RESOURCE FOR THE PRODUCTION OF BIOGAS, WHICH COULD HELP THE GREENLANDIC LOCAL SOCIETIES TO BECOME SELF PROVIDED WITH ENERGI AND BE MORE SUSTAINABLE

It is common knowledge among car manufacturers and business jet producers, that people often define themselves by their vehicles. Greenlanders are no different. The Inuit of the past did and modern Greenlanders do it too. We all need mobility, for every social and practical reason. Greenland is mountainous, and travel across land is cumbersome and usually no fun at all. To this day, no two settlements or towns in Greenland are connected by road. The traditional means of transport was across the coastal sea and along the fiords. The slender and elegant kayak made of a skeleton of wood covered with sealskin was the hunting and traveling equipage of men, while women and children followed in the more plump umiaq. During winter, the sea turned into a vast even surface of ice that allowed uninhibited travel in all directions by dogsled.

Modern Greenlanders still value the kayak for sports and the dogsled for sports, as well as for hunting and fishing. However, warming over the past decade has almost rendered dogsledding obsolete, because sea ice rarely forms any more. This is a loss of an important ingredient of Greenlandic cultural identity, and to a lesser extent an impediment to economic activities. But this warming of the Arctic also allows for navigable coastal water during the winter, and even for international trade across the Arctic Ocean. Greenland will soon find itself a new global centrality. Here we ask some interesting questions about how Greenland's infrastructure can be developed to support the dispersed Greenlandic population and at the same time promote economic growth and international exchange.

BY MINIK ROSING

CONNECTING

Language politics

An interview with Ivalu Søvndahl Petersen

BY CAMILLA JENSEN-THORUP OF TERROIR

CJT: Ivalu, *you are an expert on issues and politics surrounding the language of Greenland, having written your Master's thesis on the subject, yet you are also a personification of one of Greenland's dilemmas: the "brain drain."*

IS: Yes, I'm one of "them!" Are you asking me why I live in Oslo?

CJT: *Yes. Is it taboo? It would seem to be problematic for Greenland's development if people with a good education all leave.*

IS: Have you heard about the DR documentary a couple of years ago called *The Escape from Greenland*? I was interviewed in this and talked about the political situation in Greenland at that time. I had lived in Nuuk for half a year in 2006 and decided to move to Denmark. It was mainly because I did not think the political situation was as I wanted it. For me it was a shock to come to Nuuk after not having lived there for fifteen years, to see how the gap between rich and poor had become so extreme. This had not been the case in Greenland before. The difference between rich and poor is enormous, and I ask, why is it so that everyone who works in the public sector is doing really well, and all those who work outside it have to be so poor? I just think the society is completely wrong, totally off track! And yes, it was partly because of this that I felt no desire to continue to live in Greenland. Another angle, for me personally, is the language policy, because there has been a huge process of Greenlandization in the past years, and that has caused a lack of acceptance among Greenlanders for those whose first language is Danish. You often get this question, 'So, why are you not speaking Greenlandic if you are a Greenlander?' There is no understanding of our bilingualism, and especially that it comes in many forms. For example, one can be bilingual in such a way that one might not be able to speak a language, but can still understand it. I understand everything, but struggle with the Greenlandic pronunciation. When I try, I cannot just speak freely, so it's a kind of handicapped language. And I have not met acceptance of this.

Nuuk is very divided, in the sense that there are two separate wings: one being the Danes, the other being the Greenlanders. So there is a great awareness in Nuuk of who the "Greenlanders" and "Danes" are.

CJT: *We can of course appreciate the problem because of the colonial history, but seen from the outside, it seems significant how much trouble it causes internally for the country still.*

IS: Yes, that's why I wrote my thesis about the language policy. I really think that a clear definition of the role of the Danish language in Greenland is missing. Everyone knows that Greenlandic is the official language, it is 90 percent of the population's mother tongue and it is the cultural language, so in that way it is identity bearing for Greenland. But there are also many who live in Greenland who have Danish as their first language. These people might amount to 10 percent of the population, but there are also many more who have Danish as a second language and who are using it in their everyday lives.

Danish is very important, maybe not in all of Greenland, but in the larger cities at least. This is the challenge, because when you talk about Greenland and language policy, the situation is not the same everywhere. When you look at Ittoqqortoormiit, Nuuk, Qaanaaqand and Qaqortoq, there is a big difference with respect to the languages that are spoken and used.

CJT: *But it's not only a Greenland phenomenon. In Denmark, there are many mixed marriages and a high proportion of immigrants, and the related debate on bilingualism. This discussion is indeed very relevant and comprehensive, and meanwhile difficult in many other ways. Yet perhaps it is also easier because it is not linked to a colonial history?*

IS: Yes, what has happened since Greenland gained home-rule and later self-government has been a very strong Greenlandization and de-colonization. With that has come a great awareness that everything should be done in Greenlandic, and that society itself must become more "Greenlandic." Language has become the tool for this. We should not forget that the biggest challenge is to teach the pupils to be bilingual so they can better succeed in the globalized world. You cannot just speak Greenlandic in Greenland and then think everything will be fine.

CJT: *Could you then put less focus on Danish, or even eliminate it, and instead learn English? Would this create an entirely different debate?*

IS: This has been debated now and then, but I have not written about it because it is totally unrealistic. Greenland is still part of the commonwealth, a part of Denmark, and it will be so until one day it decides to gain total independence. Greenland also has a very good agreement to send school pupils and university students to Denmark—about 1,000 people yearly of a population of 56,000, so there are quite a lot who study and live in Denmark.

CJT: *So there is a huge gap between the practical issues and political issues. Is that not what you are dealing with, that there is a political statement that Greenlandic is the official language, but on a daily level there are much more nuanced and complicated practical issues at stake? We were told that even in the parliament they have a difficult debate because of language.*

IS: The majority of politicians are Greenlandic speaking, with the exception of Maliina and Per who are Danish speaking. I just don't think Greenland has recognized or accepted that some Greenlanders do not speak Greenlandic as their first language.

What's worse is that it has also turned into an aversion; one can hardly stand it. Instead of supporting attempts to learn, the tendency is to criticize—"Why don't you speak properly?"

CJT: *This is actually exactly what we heard when we visited the Parliament. So you are saying it should be addressed politically, that Greenland IS a multilingual society?*

IS: I do not think Greenland is ready, sadly. We are maybe still in a kind of Greenlandization stage, and many still feel that Danish is the language of power. Those who do not speak Danish, do less well in primary and higher education; in high schools, teachers are mostly Danish. So the ideal is of course in the long term to get a completely bilingual society, bilingual education and bilingual teachers. Then you can discuss whether one can use the two languages in different domains. For example, Greenland is a home language, but it's not a language you use in foreign policy, or to discuss the economy.

CJT: *You talk a lot about Greenlandization, but Danes must of course also learn English. We know it is necessary to succeed in a global context. Can you see language as a form of communication rather than an identity symbol?*

IS: Yes, and the good side is that it's probably getting better after Kuupik Kleist, as he speaks Greenlandic, Danish and English. It serves as a powerful example to the country that he is so skilled in several languages, and seeing that he is more internationally focused. Previously we were lead by Hans Enoksen, who just looked inward. So it has probably helped. I have not been in Greenland for a while. I follow the discourse from the sideline you could say, from Oslo.

CJT: *But it interested you enough that you have written your master thesis about it?*

IS: What triggered my interest is that when I grew up, the Danish and Greenlandic speakers were divided completely into separate classes, even in kindergarten. Yellow, red, blue, green rooms, maybe as to signal we are all equal, but two of them were Greenlandic, two of them were for Danish speaking. I went with all the Danes. In 1994 they changed it, so my younger brother who is from 1988, speaks both languages very well. I grew up during the time in the 80s when things were totally separate. It was extreme. You could grow up in Nuuk and not learn a single word of Greenlandic!

CJT: *So are you a generation in the middle of changing language politics that therefore ended up fleeing because there was no room for you?*

IS: Fled? It sounds a little drastic. I would say I chose not to live in Greenland. It gets difficult now—as difficult as it possibly can be—not living in Denmark and not living in Greenland. When you live in Denmark, you always get the line, "Oh, but aren't there many alcohol problems in Greenland?" I get really tired of hearing these words again and again.

CJT: *Your thesis discusses a sort of "corporate language responsibility." Has the government handed over the job to private business to solve "the problem"?*

IS: Yes, it is one of the major criticisms I have of Greenland's language policy. In a national language policy they choose to totally leave out the public school system. It's the biggest institution we have, but instead they choose to say that companies with more than ten employees must rise to the task. The Government runs away from their responsibility this way.

CJT: *Is there a lot of research on how it affects children, in a positive direction, to have more than one language? It would make it difficult to argue in another direction if you could point out that it is in fact an advantage.*

IS: I was in a very interesting lecture by a linguist who had researched how children who learn two or more languages experience benefits, both in brain development and they become more reflective and analytical. But the problem is that bilingual children often learn to speak a little later. But it's not a problem if they learn three, four or up to five languages! The attitude that two languages confuse the brain has perhaps hung about in Greenland. It could be really interesting to look at the teacher and teacher education programs. They are the people who work with children with two languages. What do they really know about the topic?

CJT: *What about the problem of the three dialects? Teachers who speak the West Greenlandic cannot teach or be understood in East or North Greenland.*

IS: It is even more complex in areas where they have their own language. It is a debate I do not see anywhere in Greenland, and certainly not in West Greenland—this debate on the "other" languages.

CJT: *But there are many who have said to feel excluded or discriminated against in Nuuk, because they spoke the wrong Greenlandic.*

IS: Yes, they do for sure. It is a well-known phenomenon. They are discriminated against when they travel to West Greenland, and it is probably why they are traveling home again.

CJT: *What should Greenland do, in summary?*

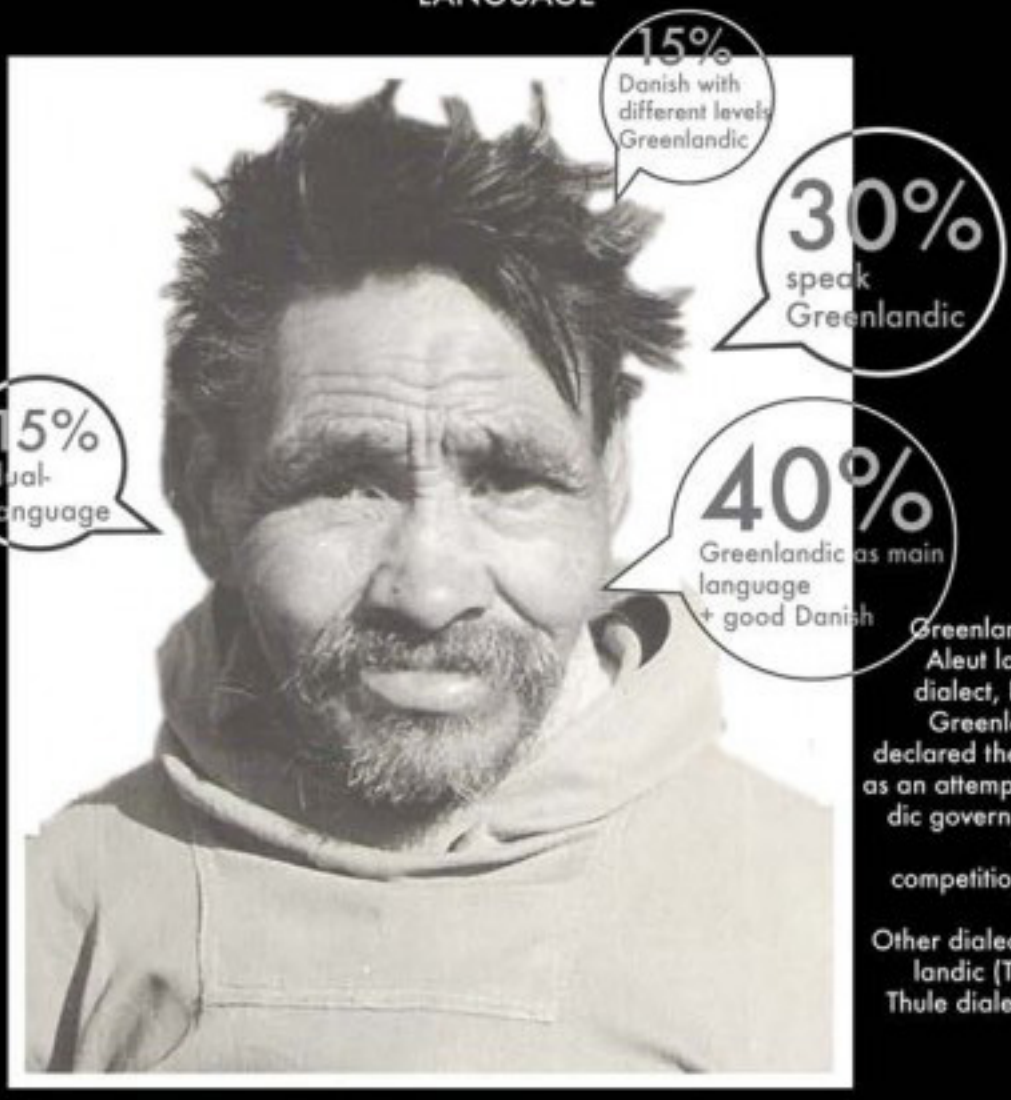
IS: It is important to discuss the role of the Danish Greenland, not just politically but also for ordinary citizens. We need to have a large discussion about languages in school, for more than anything, it is important to learn, and language is a tool!

" ...language is a tool!"

STUDY

GREENLANDIC

LANGUAGE



Greenlandic is an Eskimo-Aleut language. The main dialect, Kalaallisut or West Greenlandic was in 2009 declared the official language as an attempt by the Greenlandic government to strengthen the language in its competition with the colonial language, Danish. Other dialects are East Greenlandic (Tunumiisut) and the Thule dialect Inuktun or Polar Eskimo.

THE ONLY OFFICIAL LANGUAGE FROM 2009 IS GREENLANDIC. **45.000** pe

Samuel Kleinschmidt, linguist. Published the first Greenlandic grammar in

culture. Unlike **Inuit in Canada and Alaska**, Greenlanders preserved t

Association, of the newspaper (Sermitsiaq), in many of the **Home Rule** g

guage Department at Ilimmarfik in Nuuk, monitors the current language developme

than borrowed, e.g. **QARASAASIAQ, computer** which literally mean

new words from existing roots. this means that Greenlandic vocabulary is built on v

root for **tongue** OQAQ is used to derive the following words: OQARPOQ, says

OQALUTTUALIORTOQ, author. OQAASIPILUUPPAA, harangues him. OQALOQAT

pple speak Greenlandic. Greenlandic consists of 14 consonants and 3 vowels.
1851. This way he helped create a consciousness about a common Greenlandic
heir language. Danish is still the dominant language of the Employers
government offices, in businesses, hospitals and in courtrooms. The Lan-
nt. Many modern concepts have Greenlandic names that have been invented rather
artificial brain. Greenlandic has an enourmous potential for the derivation of
ery few roots which combined with affixes come to form large word families. Fx the

s. OQAASEQ, word. OQALUPPOQ, speaks. OQAASILERISOQ, linguist.
TIGIINNEQ, conversation. OQAATIGINERLUPPAA, speaks badly about him.

PHOTO BY BETTINA PLINDUSSEN, AARCH

CON
NECT
ING

So close—so far apart

An interview with Asii Chemnitz Narup, mayor of Nuuk

BY CAMILLA JENSEN THORUP AND GERARD REINMUTH OF TERROIR

> "There are two things I am happy for in having been a Danish colony: democracy and rye bread."

Asii, your municipality is very large, extending from West to East Greenland. You also seem aware of this large area in social terms, particularly with regard to the challenge of getting people connected?

Yes, East and West Greenland are now bound together for the first time in history. It's important, as this is a commitment to something so banal as to get to know each other. For example, anthropologists in France know more about East Greenland than we do here in the West, and that is simply not okay. There should be curiosity about who we all are, and as we get to know each other, we can promote equality so that everyone can be proud to be part of the municipality of Sermiassog.

In relation to the idea of a "physical meeting"—quoting you from your presentation in NUUK—is it more a mental than a physical meeting that is required?

It is very much a mental, physical and cultural distance, and we need to find different ways of harmonization in the services we offer in the municipality so as to create a basis for equality. Cultural policy is an important tool. For example, we made an "East Greenland Week" in Nuuk, and arranged meetings between institutions and people from both sides of the country. In this sense, it is important not to work for sameness or a general identity, but a sense of community, so people can belong to a municipality, and also their town or landscape. It is important that we not stifle special local peculiarities.

How do you define "uniqueness"? Is it embedded in where you come from? Or where you are in the world? Or where you are in Greenland? For example, in comparison, Denmark has such small distances that perhaps it is more important there to identity that you are from the city or country. What does it mean that in your municipality you have the Far East, and the Capital?

I'll start somewhere else: my children are 20 and 26, and when they get asked, "Where are you from, who are your parents, where on the map are you from?" they, and their generation, find it a strange question, a crazy issue, that is not at all relevant to them.

They find new ways to define who they are?

Yes, we are the old generation who still care about these things and have our dialects, while they flourish.

Will the new generation define themselves from whether they are from East or West?

It will probably take another generation. This equivalence I'm speaking of is very important, but there is something to repair. In the East, they have feeling of inferiority, such a hidden anger that we (the West) ran with the growth and development, the progress. "Here we sit back, left behind," they would say. It comes up when you're drunk. They say, "You're a stupid western Greenlander," I say, "No, I'm not a stupid West Greenlander, I speak properly to you so you must also talk properly to me." We must find a way to articulate this so we can get beyond these discussions. I have just not yet found the key, but I am intrigued by the methods which Nelson Mandela and Desmond Tutu and have handled conflict in their country where violence was used as a tool for suppression. I think we can learn much from them.

We have wondered about the presentation of East Greenland as "the friendliest place," but you now talk about violence as suppression. Do you then consider it an "internal" violence? Is it somehow internalized?

Yes, it is definitely more inward; we do not use violence in the streets. Conflicts are running underneath and they come out in relation to family and friends.

How do you understand it then, and how can you use the relation to Mandela and Tutu?

I try to understand one's ability to take responsibility, recognizing issues and problems and putting things in place to support them so they might

stand in a new, more equal relationship.

If equality is the goal, does society then need a form of therapy? How to get on and move past this conflict and tension? The symptoms are there and visible to all, but how to identify the potentials of what it means to get to constructive discussion?

I'm not sure of the shape, but the events we take, the initiatives—like the cultural meeting—have the intention of sowing seeds and creating pride by giving individuals a feeling of value for what they can do and what we all stand for. I'm also participating in a conflict mediation seminar that is structured to develop and find ways to talk about difficult issues.

We saw some of these social tensions described in the Tasiilaq tourist brochure. Does that not normalize the problem?

Perhaps it is surprising for you because it is printed. In many other places you would find similar advice, such as beware of pickpockets, and so on.

But we read it as an acceptance. It's important to say we are not trying to point the finger at anyone, but there is a responsibility for what is normalized in this media. If it is such a part of the story about a place, how can they ever break free from this?

Well, it is a very interesting thought. It is produced by a commerce driven fund, but I have people on the board, and now we will talk about it, and I think I will use the opportunity to discuss this in the municipality. It's an important discussion to have. Maybe we should even hold a public meeting and ask people if that is what we should write? We can ask them, "With so many tourists coming, is this what we want to show?"

You somehow have to challenge people to want to change their own lives, not only from the top.

There is much talk, of course, about us, but you will not find any population in the world that is so willing to look themselves in their eyes and recognize what they are doing to each other. But we also need to take the next step and change our behavior accordingly. The entire inferiority problem actually applies to the whole of Greenland, and we have to work on this.

The issue of the physical distances, what does that mean for your work? Can you manage all this from Nuuk?

It must be anchored locally. I have hired some people who are from East Greenland who are getting training and support so they can start up and hopefully lift up the rest. In addition, we have created a psychological task force, as it is very hard to get people to apply for a job on the east coast. So this is another way of planning our way out of a problem, and finding solutions rather than sitting and waiting!

But I can be honest and say that we are not coherent in the administration and so organizationally we are not there yet. It is a challenge to be a community when we have these great distances. I think a lot about it in these weeks. What do we do? There are good results elsewhere with local radio, both to generate debate and disseminate knowledge, for example.

Speaking of the debate, is there a public debate?

The debate in the public space is at full blast and it has been for many years. We can discuss the tone and how to address the serious issues in a good way, but you should not say to us that we don't discuss; we do! But we need to dare to take this debate into smaller forums where it gets greater commitment, and this is a bigger challenge as here you are easily trapped by conflict avoidance. When these discussions come closer they are harder.

Therefore it is also hard to be social worker, if one should even dare! We are a carrier of the same culture as those we work with, so it's very important that we have worked with our own skeletons in the closet. The smaller the places our employees work, the harder it becomes to do their work because they become part of the local community, and they are threatened. It simply requires so much knowledge and so much courage!

Is the Danish model the right one for Greenland?

There are two things I am happy for in having been a Danish colony: democracy and rye bread. And when I look out into the world and see what I see, I am happy for the democracy! Then, I would say, we can definitely design it a bit differently. What I am not happy with is the apparatus of the administration model we have inherited and the sector thinking that has come along with it. For example, everything is divided—the school administration and social management—such that no area looks beyond their desk, even if it's the same people they work with. The system is not communicating. It is this way of thinking that must change.

Asii, If you should have a message out to everyone, in Greenland, and the world for that matter, what would it be?

It would be that it is all about commitment, a mutual commitment, and also a commitment to debate. This is the core of the democratic process.

SISIMIUT **SEEN FROM** FACEBOOK

TEXT AND ILLUSTRATION BY FRIDA FOERSC AND ANE DINESEN, AARCH

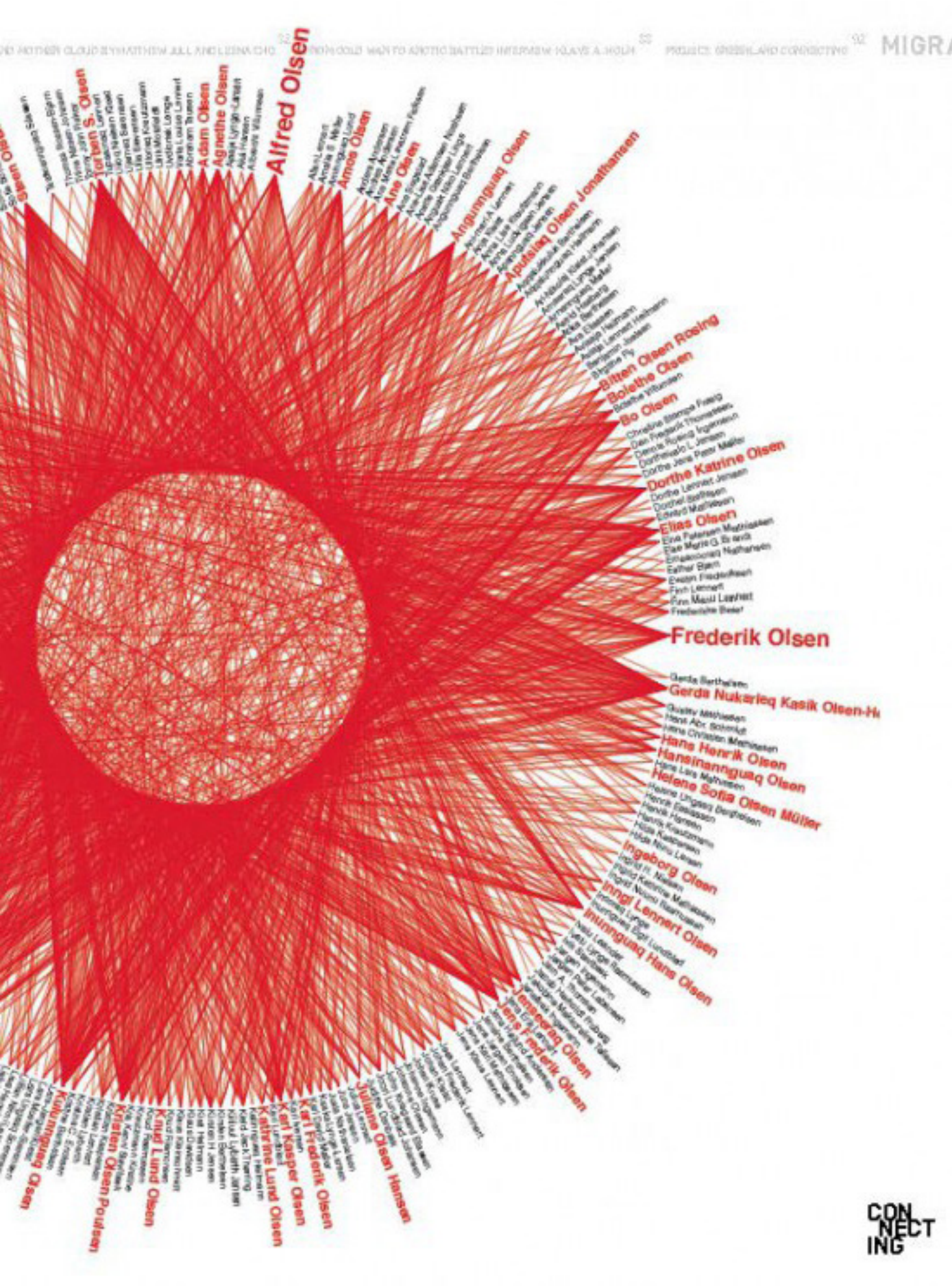
The Norwegian merchant Anders Olsen founded in 1756 a new colony in Greenland called Sisimiut. Anders Olsen was married to the Greenlandic woman Tupaarna. They were the starting point of Greenland's largest and most powerful family, the Olsen's. Today there are 5,600 inhabitants in Sisimiut. Living in a Greenlandic town like Sisimiut is like living in a physical version of Facebook. You live right in the middle of your social network. In the digital world, you can block people from certain aspects of your private life. In Sisimiut, you never log off. Everyone knows everything about everyone. Sisimiut is used as a case study to give a visual picture of how people are connected in a living network. The diagram is based on the Olsen family, the most powerful family in Sisimiut. Through them, everyone in the city is linked together.

Three Olsens are highlighted – each a powerful personality in Sisimiut.

Alfred Olsen
Greenlandic politician and member of the Sisimiut party. He served as a member of the municipal council for the former Sisimiut Municipality.

Frederik Olsen
Chain Director of KNI, Sisimiut. KNI is Greenland's largest trading company with retail stores in twelve cities and fifty-three villages. KNI's headquarters is located in Sisimiut.

Paneeraq Olsen
Deputy Mayor in Sisimiut.


Alfred Olsen
Torben S. Olsen
Adam Olsen
Agnethe Olsen
Arne Olsen
Arnoe Olsen
Angunnguaq Olsen
Apuleleq Olsen Jonathansen
Bitten Olsen Rosing
Bolethe Olsen
Bo Olsen
Dorthe Katrine Olsen
Elias Olsen
Frederik Olsen
Gerda Nukarleq Kasik Olsen-He
Hans Henrik Olsen
Hansinannguaq Olsen
Helene Sofia Olsen Müller
Ingeborg Olsen
Inngi Lennert Olsen
Intunnguaq Hans Olsen
Jens Frederik Olsen
Julianne Olsen Hansen
Karl Frederik Olsen
Karl Kasper Olsen
Katrine Lund Olsen
Knud Lund Olsen
Kristen Olsen Poulsen
Kunnunguaq Olsen

CONNECTING

GREENLAND MOTHER CLOUD

BY MATTHEW JULL AND LEENA CHO (KUTOBOTUK, U.S.A)

" Greenland could adopt this model and become the digital Switzerland of the Arctic."

BIG DATA, BIG DEMAND

There is an explosion in the amount of digital data being created globally, from music files, to blogs, satellite data, family photos—the list goes on. There are 15 million gigabytes generated daily, and 2.7 billion terabytes every year. With the proliferation of mobile, compact computing devices, and an increasing demand for reliability and data security, the storage of data in the "digital cloud" via remote date centers that backup and make available data on-demand from anywhere in the world is now the future.

In 2011, there were 500,000 data centers worldwide, requiring 2,600 hectares of land (24,000 football fields). These data centers consume up to eighty times the energy of traditional office space, with a large portion of this energy being used for cooling of thousands of arrays of computer servers and storage disks running non-stop 365 days a year. To reduce operating costs, countries with favorable climate conditions for natural cooling, plentiful supply of renewable sources of electricity and stable political conditions, such as Finland, Sweden and Switzerland, have begun to attract data centers from global technology companies and governments.

NATURAL COLD POWER HOUSE

Greenland is an arctic island with a vast repository of cold, thick ice covering 80% of its surface and with massive hydropower potential. With an area of 1,710,000 square kilometers and an average thickness of about 2 km, Greenland's frozen fresh water supply is second only to Antarctica, and large enough to raise global sea levels by about 7 meters should it melt. A series of hydropower studies found that below 71° N, large quantities of ice melt every summer, providing favorable conditions for large-scale hydropower development during summer months; the use of reservoirs would provide continuous hydropower generation year-round.

There are currently four small hydropower plants supplying the island's population of 56,000 inhabitants. Twelve to fifteen hydropower sites have been identified for future development with an estimated peak capacity of 60-120 gigawatts. For comparison, the world's largest dam—the Three Gorges in China—produces 21 gigawatts. Greenland's existing untapped hydropower potential could theoretically supply 30% of Europe with electricity, and this has attracted interest from energy intensive industries such as aluminum smelting, as well as power-hungry North American and European markets.

DIGITAL SWITZERLAND OF THE NORTH

We propose a much broader mandate for Greenland than simply a supplier of energy, one that re-calibrates the island as a central player in the future of the digital age: a global digital hub of sustainable data storage. This future digital "Switzerland of the North" has all the right ingredients to become the new global digital Mother Cloud, because it has:

1. nearly unlimited zero-carbon hydropower for electricity
2. cold, dry, pure arctic air and proximity to a "turbo cooling" ice sheet for natural cooling

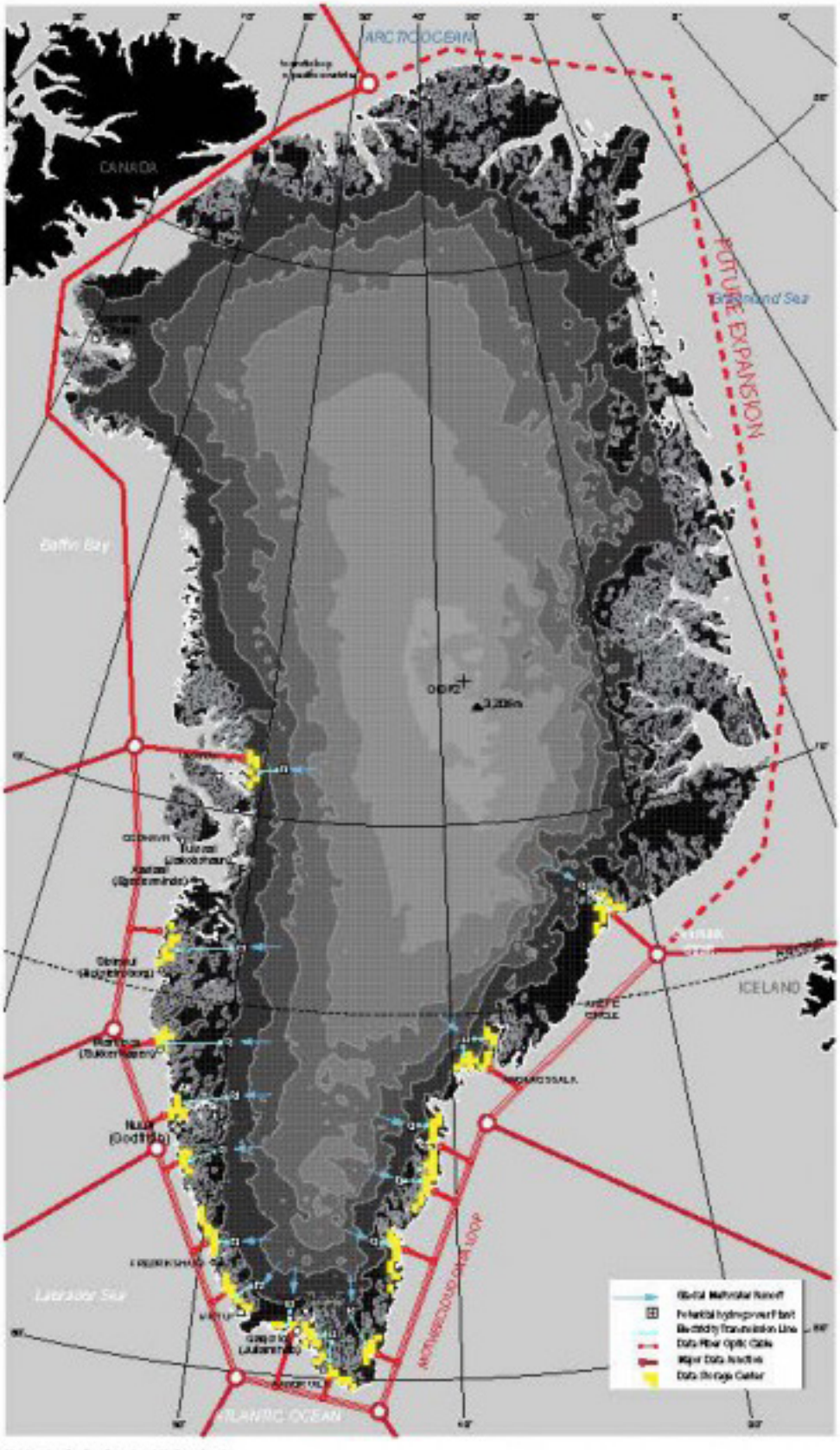
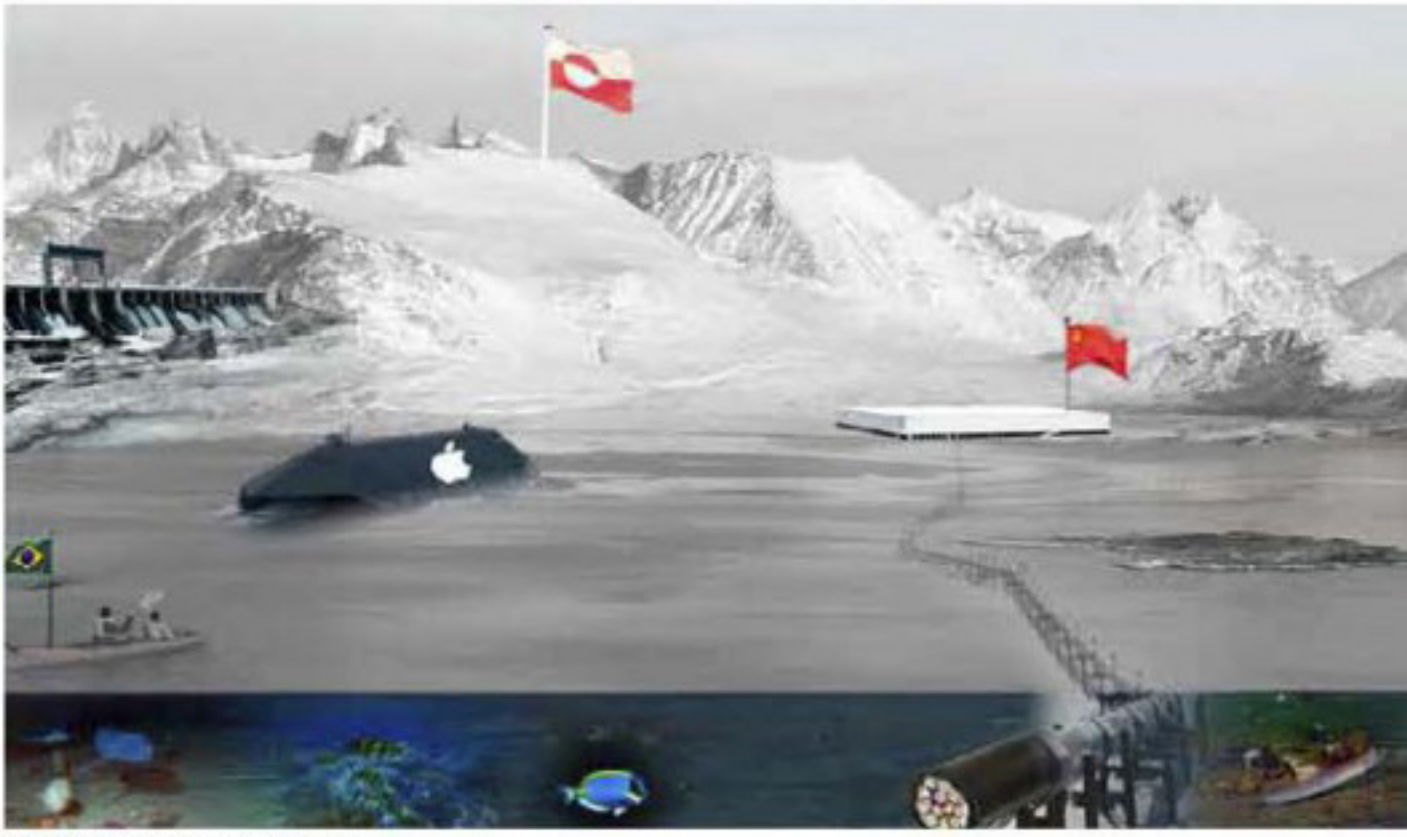
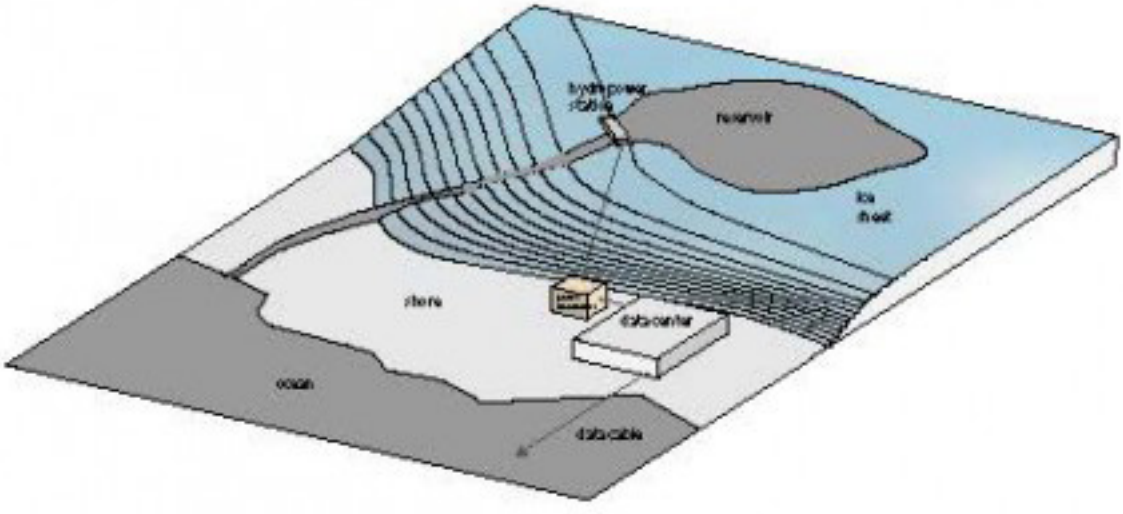


Illustration for the Greenland Mothercloud

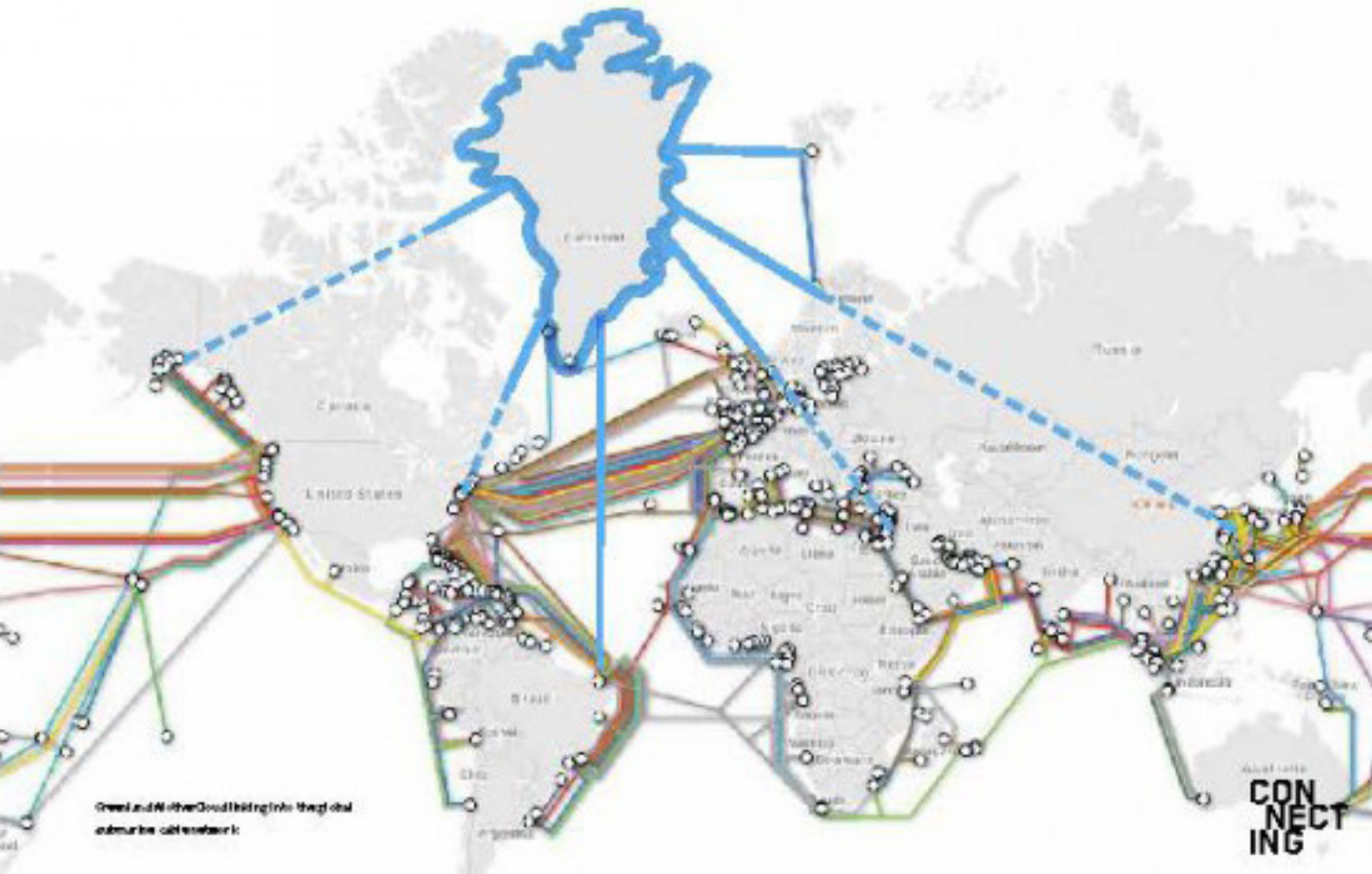
Matthew Jull and Leena Cho are co-principals of Kutunetuk, an award-winning research and design practice based in Rotterdam, NL and Charlottesville, VA. Their work investigates spatial typologies that emerge from a broad array of interrelated forces – scientific, ecological, economic, political, cultural, and technological – that influence and shape the built and natural environment. Currently they teach in the Architecture and Landscape Architecture departments at the University of Virginia School of Architecture, and have been featured in major international magazines such as Domus, ELA, Topos, Shinkenchiku.



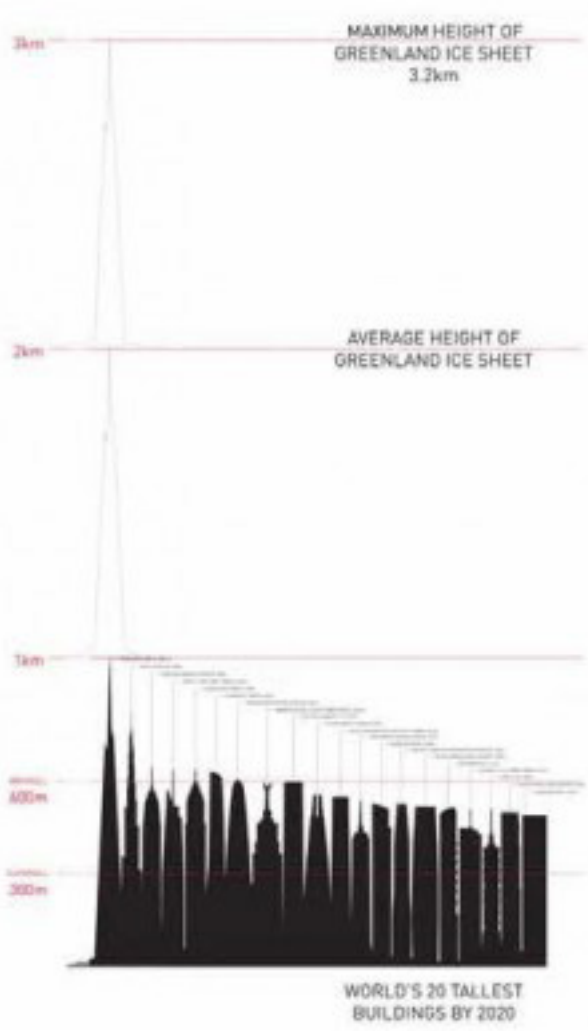
Greenland Mother Cloud. The future of global data storage.



Proposed relationship between data centers, hydropower stations, and data transmission on Greenland.

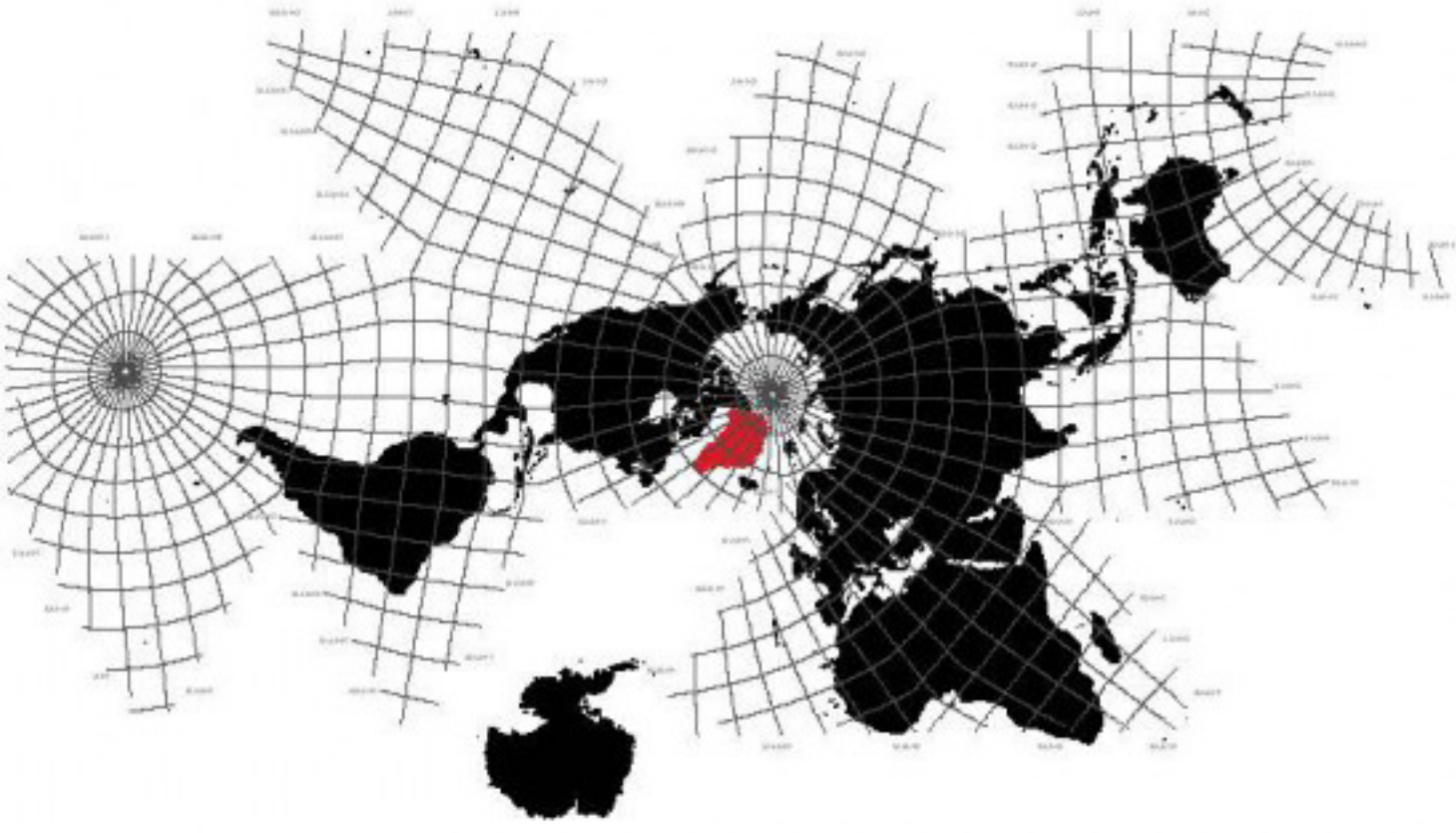

CON
NECT
ING

Greenland Ice Sheet Extent and Thickness. Arrows show potential hydropower sites.



Ice Sheet Thickness Scale Comparison

Greenland Cloud Storage extends the idea of Global Archive of climate to the full of Human culture



Greenland's Central Global Position.

3. central geographic position between Europe, North America, and Asia (via the arctic route)

4. stable, secure environment

5. neutral government with constitutional laws guaranteeing data storage centers (yet to be enacted).

Utilizing its abundant natural resources, the future of Greenland lies in a wide spectrum of economically sustainable and globally responsible scenarios as a worldwide repository of digital information. Requiring only energy to run (from hydropower), and little to no environment impact, these data centers will be low cost and energy efficient, connecting to existing and future trans-Atlantic and trans-Arctic undersea fiber optic cables. The work of building and maintaining these facilities will benefit local Greenland communities with employment and revenue. It will provide an alternative to natural resource extraction and pollution of the fragile Arctic ecosystem, while driving the future growth of the Greenland economy, allowing it to become a key player in the international IT industry of over 600 billion euro in revenue, as well as establish independence from Denmark.

The Greenland coast, with its countless fjords, also has potential to provide private harbors and ports to allow individual nations or companies to "plug in" and maintain their own private data centers. Much like the ideas behind charter cities, (e.g. Shenzhen or Hong Kong), Greenland has all the right ingredients and ambitions to transform itself as a magnet for global digital data traffic and to spur an explosion of local economic growth and international presence, but with minimal environmental impact.

One of the major risks of cloud computing is in fact its security. At the heart of cloud infrastructure exists an idea of multi-tenancy. Migrating workloads to a shared infrastructure increases the potential for unauthorized access and exposure. Many cloud data centers are migrating to Switzerland, for instance, to share the highest levels of security for data housing with financial institutions. Greenland could adopt this model and become the digital Switzerland of the Arctic. Aside from the enormous potential for renewable energy resource, Greenland's political stability and independence within the European continent can offer an extra buffer for security strategy, topped with its geographic and climatic extremities.

Alternatively, the Greenlandic government could provide sovereign status to individual micro data archives and charter "digital embassies" for interested countries and companies along the coastlines directly linking to the major trans-Atlantic fiber optic cable systems. Rogue data will be safe, and sustainably powered and maintained. Just as the Svalbard seed vault preserves the global biodiversity of plants, and the Greenland ice sheet preserves the record of our climate, the Greenland Mother Cloud will become the de facto record of our digital age, discretely storing the information, memories, news and nonsense of our present day.

Acknowledgements:
The authors wish to thank Kate Rastor and Soo Jung Koo with their help in the creation of this work.

From Cold War to Arctic Battle?

Interview with Arctic Ambassador Klaus A. Holm (The Foreign Ministry, Copenhagen, May 1st, 2012)

Greenland and the whole Arctic region is becoming a geopolitical hot spot. The opening of new potential sail routes to Asia and the possible exploitation of oil, gas and other natural resources like rare earth minerals are creating a window of opportunity for Greenland. What are the risks and who are the best strategic partners?

TEXT AND PHOTO BY BORIS BRORMANN JENSEN

BBJ: *Why does Denmark have an Arctic Ambassador?*

KAH: Denmark does not have an Arctic Ambassador; the Kingdom of Denmark does, because we operate as a national community with three constituent parts. What goes on in the Arctic region is of shared national interest, so that's obvious. I'm the Arctic Ambassador of the entire kingdom. The problems we face in the Arctic region do not merely concern Greenland or the Faeroe Islands or the Arctic Ocean, they concern the whole world because these problems are global by nature. They are inextricably linked to other countries. If you find vast amounts of oil in Greenland, it will influence our dependency on oil from the Middle East. It may upset the entire global geopolitical balance. If you find a serviceable North East Passage, it's important news for Singapore, Thailand and other countries as well. If you find gold or other minerals, it influences the African countries that produce them today. If you find strategic minerals, it will challenge China's de facto monopoly within this field. So there isn't a single one of the areas emerging, not a single one of the challenges we face or potentials we find in Greenland that does not have an international aspect. And then we haven't even mentioned the strategic importance of the entire area. This is why the Kingdom of Denmark has an Arctic Ambassador to efficiently defend the interests of the kingdom.

BBJ: *Has the Danish Ministry of Foreign Affairs formulated an overall political vision for the Arctic region, or has the EU?*

KAH: These are challenges that are so great—the size of the area alone is ten million square kilometers—that no country can "go it alone," so to speak. Everyone—countries, as well as private stakeholders, organizations, oil companies—has to join forces and do these things together. We don't look at it like now we have to stick to the European angle. We have noted with great satisfaction that there are many similarities between the approaches of the different countries to the area. First of all, everything must be solved through peaceful means. All the countries involved have pledged this from the very beginning. Now they will try to solve any disagreements as peacefully as possible through processes agreed on by everybody, through established forums, through clearly defined procedures that lead to negotiations between countries. For instance, concerns regarding the territorial borders across the Polar Sea according to the stipulations of the UN Convention on the Law of the Sea (UNCLOS); or the Arctic Council, if we're talking about discussing what to do in case of an oil spill or the like. Even countries whose rhetoric used to be quite fierce have now said, "We're doing this together peacefully." That's very encouraging.

BBJ: *Is it naïve to imagine that the*

Denmark's first Arctic ambassador Klavs A. Holm

Arctic might follow the example of Antarctica? That the entire area could be demilitarized and declared to be international territory? Or are the financial, geopolitical and military interests in the North Atlantic and the Arctic Ocean too great and too diverse for a "pacifist model" to make any sense?

KAH: The Antarctica is a huge inhabited area whereas the Arctic is the home for many people – among those also indigenous people. They have hopes and expectations regarding their future economic development. But that's not the same as saying that there is a confrontation underway. In fact, I'd caution people against thinking so. Many things suggest that the countries actually do have an interest in doing this together, because there isn't any country that can really do it alone.

BBJ: *Well, that sounds like a sensible and pragmatic solution, but is it possible to separate political ambitions and interests from military power?*

KAH: Well, you could say that there are certain places in which it is easier to use military force than others. A military presence is difficult to uphold in the Arctic because the area is so large. It is ten times as big as India. The distances are inconceivable. You cannot move around the same way as elsewhere in the world. Such a vast area is difficult to control. But that's not the same as saying that there are no strategic interests involved; there are—for instance in connection with the some of the rare earth. We have to acknowledge that. Those are materials used in computer screens, radar systems, fiber optic cables and a lot of other electronic products. Of course there will be interests involved. The same applies to navigation and the safety measures involved, and oil of course. So there are extensive interests involved, but to engage in a war you have to be able to see a clear benefit in it, and then you need the military capacity to do it. Following much of the rhetoric used by Russia, Canada and the USA, where you might sense a certain tension perhaps and presuppose some kind of confrontation looming—well, there isn't one. Of course, you can choose not to believe that. All I can say is that the rhetoric about future Arctic cooperation is very constructive and forthcoming compared to the Cold War rhetoric we've been used to. I'm very optimistic regarding the possibility of a comprehensive, pragmatic development. After all, we have made a Search and Rescue Agreement. We cooperate on scientific issues and cooperate with the oil industry and have joint access to research results. So there's a certain sense of team spirit about it all. The nations involved have also agreed to submit their petitions and territorial claims regarding the partition of the continental shelf beneath the Arctic Ocean. The deadline is in 2014, and then the case will develop a life of its own in the UN Law of the Sea Commission. It's going to be a long negotiation process. We even have some mechanisms in place to deal with it, like the International Court of Justice in The Hague. It will be a very long time before the resources of diplomacy are exhausted, if ever.

BBJ: *When I latch on to the connection between political influence, the ability to carry out a certain political agenda, and raw military power, it's because I know that China is a significant player here. It's no use looking at a globe in order to understand China's presence in the Arctic and their attempts to gain influence in the Arctic Council. It's a geopolitical demonstration really. They are there to make their political influence felt—which is backed by extensive military strength!*

KAH: I said initially that this is a global problem we're dealing with. Let's take these minerals, the strategic minerals, in which China has an interest. They have an extensive domestic production

> *" Many things suggest that the countries actually do have an interest in doing this together, because there isn't any country that can really do it alone."*

of such minerals. I actually don't think that the situation is all that strange. China is interested in doing business in Greenland. Denmark is very interested in doing business in China. When our companies do business in China and make money for Denmark, that's just fine, and something our government will appreciate. So it would be strange to say that China's interest in Greenland is illegitimate. They too have an interest in entering the Arctic market. We are a free trade country, and we accept this mutual interest of course. It's the basis of free trade and the advantage of free trade. That's the first reason. The second is that when we're talking multilateral diplomacy, Denmark has always been a proponent of extensive transparency and less secrecy. We don't think that the rich countries should be left to decide how things should be done on their own and then tell the developing countries, "This is how it's going to be." We have continually argued that the developing countries should be part of this, and we have provided development assistance in order to include them in the negotiation process. In short, transparency, openness, co-involvement and knowledge of what's going on—these are the kinds of things we advocate. So why wouldn't we do the same thing in the Arctic Council? If the member countries of the Arctic Council would like to talk without observers, they can just have an informal meeting —there's no harm in that. We can have dinner together and discuss some things among the eight delegations, without the various parties who would like to observe. I regard it as a completely natural thing, which shouldn't be overdramatized.

BBJ: *How big a role does the Arctic Council and the ICC play concerning the geopolitical questions?*

KAH: The discussions are grounded in the Arctic Council so to speak. That's an important organization, but also a young one. It's no more than eight or nine years old, and it is continually developing. It's establishing its secretariat in Tromsø, which will professionalize the organization and make decision processes easier. I think that it will soon be a streamlined organization. It's unusual because it has permanent observers and permanent representatives, i.e. the indigenous people in the area. That's an incredibly positive thing. Actually, it's a historical chance to do something right for once. I mean, to mine an area respecting the people who live there instead of just—as we saw during colonization and after it for that matter—letting big interests rush into a country and destroy it physically and socially. Plundering it and taking all the profit away, and all those ugly things we see. Here, we have the opportunity to create something decent from the beginning with the people living there, and that's why they are represented in the Arctic Council. A nice thought, I think.

BBJ: *I'd venture to say that Danish sovereignty over Greenland is guaranteed by the Americans, who have made it clear through the so-called Monroe Doctrine that no foreign power can make territorial claims on the American continental shelf through former colonies. To me, that raises the interesting question: What actually guarantees Greenland's independence and how can Greenland pursue an autonomous foreign policy without prior US consent? Would an independent Greenland not just become an American puppet state—the 51st US state as Colin Powell once put it by accident?*

KAH: I can only answer that all countries, independent and less independent, are subject to existing geopolitical conditions. Some will interpret this as being strongly influenced by the USA and others will say, "But we still retain a large degree of freedom to act; we can do as we see fit," etc. At any rate, no country can exist in a vacuum, particularly not if the development of the area continues. If everything is actually realized—the oil, the sea routes, the fishing, the raw materials and the strategic minerals—there is a very real, reality to wake up to. And of course there will be some power relations to consider, just as Denmark and Sweden and other countries do.

BBJ: *What do you consider to be the greatest threat against Greenland?*

KAH: What are you thinking of?

BBJ: *I'm probably thinking mainly of environmental disasters like the one in the Gulf of Mexico!*

KAH: I don't like to set up lists of likely horror scenarios, but I'll give it to you that that could easily become a very serious affair if there's an oil spill in Greenlandic waters. The Deepwater Horizon leaked 760million liters of crude oil into the Gulf of Mexico. They had every opportunity of containing it. It took a long time, I'll grant you, but they had so-called "skimmer ships"; they had people dredging up the oil; they had chemicals to sprinkle on the oil and plenty of people to help. The weather was tolerable, and part the oil evaporated. If the same thing happens in the ice-filled waters of the Arctic, you will then know that there's been an oil spill, but you won't be able to reach it because of the ice. The worst-case scenario is an oil spill taking place just as the sea has frozen over. If you had to wait five months for the ice to melt, the disaster would have spread horribly in a very, very vulnerable environment under circumstances that prevent vaporization. Manpower would be very far away, and no single country, neither Greenland nor Canada, would have the resources to remedy the situation on its own. You depend on the capacities that ensure search and rescue agreements and other oil spill agreements. There will be so many factors multiplying the negative consequences of such a disaster and making it much worse than the Gulf of Mexico spill. So that will undeniably be a horrific scenario, especially in an intermediate position between the current situation and Greenland one day having an oil-based economy. If the spill happens here in the middle [points to a map], then it'll destroy all the fishing and sealing along the west coast of Greenland and have serous consequences on the economy . That would be a problem of immense proportions.

BBJ: *Greenland has not benefited from the interference of NGO organizations in the past. The classic example is Greenpeace who, with the best of intentions, stepped in and problematized sealing. Greenland is still traumatized by the result of this intervention. Today, they have a quarter of a million sealskins they can't sell. How do the representatives of the Kingdom of Denmark handle that problem?*

KAH: First of all, it was the EU who proposed such a ban back then. Denmark intervened and negotiated the so-called "Inuit exemption": that Greenlandic seal products will be exempt. And when consumers and importers do not realize this, or do not dare buy them anyway, we help inform people about this. And finally, we are helping Greenland sell their skins on other markets, particularly in Asia where we have approached Japan and China and are currently making various efforts to increase their import of sealskins—with some success. We also engage with a number of NGOs, including Greenpeace. I think that Greenpeace owes Greenland a little goodwill, and they seem forthcoming. Let's see how it goes from here.

PROJECT
GREENLAND CONNECTING
INTRODUCING
GLOBAL HUB

CONNECTING

When given the brief of "Connecting Greenland" a series of questions surfaced.
A country with an immense paradox—centrally located on a global scale, yet remote and disconnected on a national scale—how can Greenland connect globally as well as locally?

If Greenland becomes well connected on a global scale, how can the country benefit from this nationally? How can Greenland become a global hub for various modes of transportation? Can an upgraded airport and harbor benefit the country as a whole? How?

Global hub

– Connecting continents and modalities

TEAM GREENLAND CONNECTING:
Tegnestuen Nuuk
BIG - Bjarke Ingels Group
Julie Edel Hardenberg
Inuk Silis Høegh

The project is supported by:
The Danish Arts Foundation

AIR + PORT

The project spins off the Greenlandic discussion on the need for an international airport in Nuuk and the imminent upgrade of Nuuk's industrial harbor. From the lack of an efficient aviation system, rapidly growing industry potentials and an inevitable climate change, the potentials of an upgraded airport and harbor become evident. Nuuk also holds the potential of becoming a central aviation link between North America and Europe which potentially could increase the number of travelers through Greenland and as a side effect increase the number of passengers on domestic routes.

01: THE LOCATION OF GREENLAND
Greenland is located between the Arctic and the North Atlantic oceans. Politically and historically, Greenland has strong ties to Europe. However, geographically and ethnically, it is more closely related to North America.

02: DYMAXION MAP – GREENLAND AT THE CENTER OF THE WORLD
The country is geographically located at the center of the world! It's newly gained independence, vast natural resources, and its potential as a transit point for new maritime shipping routes has quickly garnered the country global attention.

03: TRANSPORT HUB
Its geographic location makes it an ideal aviation and marine transit hub that could efficiently service most parts of the world.

07: EXISTING AVIATION ROUTES
Meanwhile, the domestic and international route system of Greenland struggles with the absence of passengers resulting in high ticket prices.

08: THE INEFFICIENT LINK
Every year 135,000 passengers travel through the Kangerlussuaq International Airport.

09: THE 100 PERCENT
However, nearly 100% of passengers continue to another final destination other than Kangerlussuaq.

Rather than seeing these major infrastructural investments as two separate activities the project elaborates on the idea of merging the two into one coherent symbiosis of transport systems.

The island Angisunnguaq located south of Nuuk has been pointed out by the Greenland Transport Commission as a potential site for a future airport. The location off shore from the city and with its flat topography makes it plausible to construct an efficient system for air traffic and port industry: transforming the archipelago into the new epicenter for connecting Greenland.

By merging air traffic and port industry, a new programmatic breed emerges. The pragmatic shape of a plus containing air traffic north – south and port industry east – west defines the envelope for a series of new transport symbiosis. A reductant infrastructural system eliminating the third part creates new efficient relationships between maritime and aviation industries.

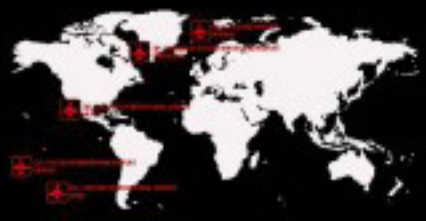
Instead of creating a new mono programmatic piece of public infrastructure the project explores the potential mix of programmatic molecules creating a new DNA for transportation and public programs...

"Rather than waiting for the past infrastructure to get decommissioned and reborn with a new social program, could we conceive of our public infrastructures to come with intended social side-effects from day one?" – Bjarke Ingels, founder of BIG.

Using a hedonistic approach the space under the runway, normally reserved for excavation dirt, is programd with public content. A programmatic cross breed of airport and cruise ship terminals, office space, hotels and parking facilities plus a mix of public cultural programs... Instead of bringing the airport to the city, the project brings the city to the airport.

In the future, through hedonism, pragmatic transportation becomes the new social infrastructure. By adding social values to the infrastructural investment, Greenland connects to the world through the future Air + Port.

04: INTERNATIONAL CONNECTION
Although Greenland is strategically well-situated, Air Greenland only has one international flight: Kangerlussuaq to Copenhagen, Denmark...



05: REMOTE INTERNATIONAL PASSENGER AIRPORTS
And the existing international airport in Kangerlussuaq holds an interesting connectivity paradox: on a global scale it is centrally located; on national scale it is remote! Actually, the airport is one of the most remote airports in the world!

06: INFRASTRUCTURAL CHALLENGES
Due to Greenland's vast size and climate change's impact on its geology, flying is the main means of transport between Greenland's towns and settlements.

10: THE 40 PERCENT
Travel data show that approximately 54,000 travelers, or 40%, continue to Greenland's capital, Nuuk.

11: LACK OF CAPACITY USE
Current low demand means that Air Greenland's Airbus A-330 which flies between Kangerlussuaq and Copenhagen uses only one third of its potential capacity. The result: higher ticket prices are required to cover the last two thirds of the unused capacity.

12: A NEW AVIATION HUB IN NUUK?
For a long time, there has been a persistent political debate about a potential relocation of the international airport to Nuuk. A report from the Greenland Transport Commission states that Nuuk is the only financially feasible location for such a venture.

13: LEARNING FROM ICELAND
Today, Iceland Air provides a successful stopover program benefitting not only Iceland Air but also Iceland's greater economy. In fact, stopover tourism accounts for over 16% of the tourism industry into Iceland!

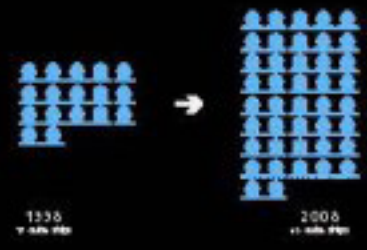
14: GREENLAND - A FUTURE STOPOVER NATION?
Geographically, a new international airport in Nuuk could be a hub for travellers between North America and Europe. An increase in travellers on these routes would likewise mean that airplanes would be used at their full capacity, thereby lowering ticket prices. These routes would also create more direct access to Nuuk.

15: GREENLAND AT THE CENTER OF NEW MARITIME POTENTIALS
Climate change has also caused ice caps at the North Pole to melt exponentially quicker...

16: THE NORTHWEST PASSAGE
...thirdly opening up sailing and shipping routes such as the Northwest Passage to potentially pass through Nuuk..

17: MARITIME SHORTCUT
This new passage allows for a shorter shipping route between Asia and Europe, cutting out almost 4,000 kilometres.

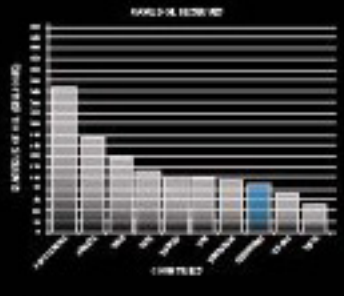
18: ENGINEERS VS. CLIMATE CHANGE
Historically, maritime cargo shortcuts were constructed by engineers; now they're created by climate change!



18: BENEFITS
A new maritime passage with low human interaction.
A passage both cheap and piracy-free!

20: CRUISE SHIPS
Also, cruise ship tourism in Greenland is gaining significant popularity, with a 250% increase from 1998 to 2008 in the number of cruise ships visiting the country.

21: OIL DRILLING IN GREENLAND
Today, a large number of big companies such as Cairn Energy, Shell and Greenland's national oil company, Nunaoil, are searching for oil beneath the sea bed around Greenland.



INUITOIL

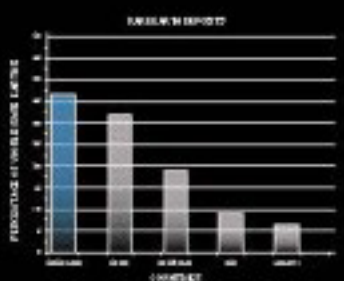
22: POTENTIAL OIL AREAS
The oil drilling areas and areas planned for oil drilling are located mainly in the waters off the west coast of Greenland.

23: THE OIL RESERVES
With an estimated oil reserve of 30.000.000.000 barrels, Greenland is on the list of the 10 biggest oil reserves in the world!

24: INUIT OIL
Potentially skyrocketing Greenland into an exclusive league of high oil-export economies...

25: RARE EARTH
Nevertheless, Greenland's rich natural resources include more than just oil. The country is also suspected to have large amounts of rare earth deposits.

26: KVANEFJELD RARE EARTH AREA
The search for rare earth is on, today focusing mainly on Kvanefjeld in southern Greenland.



27: THE 36 PERCENT
It is determined that Greenland potentially holds around 36% of the world's rare earth deposits which are important in the production of modern technology products such as smartphones, LED-screens and electric cars!

28: NUUK ON THE MARITIME CARGO MAP
Increasing cruise ship tourism, oil and rare earth developments and the possibility of new maritime shipping routes all point to and necessitate the need for an improved modern and sophisticated harbor.

29: A GLOBAL CONNECTIVITY LINK
With its strategic location and future industry potential, Greenland may, if prepared, become a significant hub for the aviation and maritime industry.

30: AIR + PORT
Rather than approaching these major infrastructural investments as two individual projects, the two can be merged into one coherent symbiosis of transport systems.

01: SUSTAINABLE SYNERGIES
By eliminating the need for trucks and trains to transport cargo and passengers, we create a perfectly efficient and direct relationship between the maritime and aviation industries.

02: LOCATION ON ANGISUNNGUAQ ISLAND
The Greenland Transport Commission points to this island as a potential site for an international airport. The project involves placing the structure on the southeast (or potentially southwest) corner of the island.

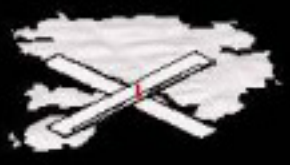
03: AIR TRAFFIC AND PORT INDUSTRY
The north - south airport program and east - west harbor program define the overall programmatic configuration.

04: FOOTPRINT
The footprint of the "+" is superimposed on the Hetsopography of the island.

05 : THE HARBOR
A flat surface carved out along the water's edge defines the harbor area, making it an ideal docking area for ships.

06 : THE AIRPORT
The airport volume is extruded creating a roof surface free of landscape obstacles, allowing airplanes to land.

07 : BRIDGE
A bridge structure creates an on-ground connection under the airport volume.



08 : TAXIWAY AND APRON
In order to allow for smooth boarding, a taxiway is
depressed to level with the apron.

39: CRUISE SHIP AND AIRPLAIN GATES
Small punch-in movie distrik the gates for cruise ships and airplanes.

40: INFRASTRUCTURA LOCNNECTION TO NUUK
An 18 km connection defined by roads, tunnels and bridges constitutes the connection to Nuuk.

41: AIR TRAFFIC CONTROL TOWER
A pole with a spherical top crowns the Air Traffic Control Tower overlooking the area.

42: HARBOR PROGRAM
The harbor is divided into two zones, a cargo port and a general maritime industry zone.

40: AIRPORT PROGRAM
Thanks to a hadonizio approach, space underneath the runway, which would normally contain only excavation dirt, is utilized and, accommodates various airport programs.

44: AIR + PORT
By fusing an airport and a harbor in the same typology, we introduce a new programmatic breed.

45: QAASUITSUP
How would Greenland as a nation benefit from a new, ethnic international airport in Nuuk? By analyzing the existing values of the four growth centers of Greenland, a series of diverse values and identities emerge.

46: QEQQATA
Each growth center emphasizes its own specific strengths to attract tourists...

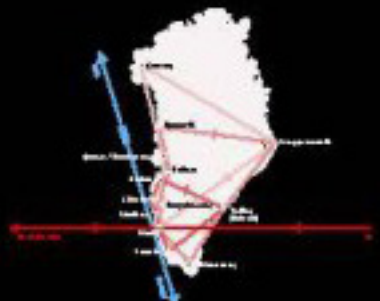
47: SERMERSOOQ
...And more tourists mean greater passenger demand...

48: KUAALLEQ
...Benefiting not only Nuuk's international airport, but also the country as a whole.

49: KANGERLUSSUAQ - EXPEDITION HUB
And even though the international airport is relocated to Nuuk, Kangerlussuaq will still playe central role as a hub for Arctic exhibitions.

30: VALUES AND INHABITANTS
So by mixing the information on values with the number of inhabitants of each airport town, a framework for defining the future domestic flight network appears.

31: LOOPS OF CONNECTIVITY
Three new flight loops connect towns of various sizes and diverse qualities. This rational system secures steady passenger flow to less populated destinations and keeps ticket costs low for people living in remote areas.



32: SOCIAL INFRASTRUCTURE – A CATALYST FOR A GLOBAL LINK
One of the trickle-down effects of increased stopover tourism is an increase in demand for domestic routes, thus consolidating the country and its people, creating a new kind of infrastructure – a social infrastructure!

KALAALLIT NUNAAT
PERIARFISSALIK

People have always moved across the globe in constant search of new resources and better opportunities. Since we migrated out of the African plains and into all corners of the Earth, we have become culturally and racially diverse. Humanity ended up segregated into discrete groupings, each with its own, interesting peculiarities. Along with this diversification came the possibility for cross-fertilizing encounters between cultures with advantages for both parties. Equally, if the exchange were unfriendly, it could lead to death and destruction.

Curiously, this diversification, this segregation, is now in reverse. For the first time in the history of humanity we can now travel between all corners of the Earth. Technological inventions allow global migration within the lifetime of an individual. Ease of migration, or globalization, has reversed the diversification of humanity. For those who are watching, we are witnessing wholesale back-mixing of all the genetic and cultural ingredients of humankind that have been segregated for millennia. A modern city, just an ordinary city, not a megacity, now holds more inhabitants than the total Stone Age world population. A person can go by foot from one end of Manhattan to the other in one day, and meet more people than lived on the entire planet when agriculture was invented. Today, cultural diversification takes place along with genetic homogenization within the modern city. Urbanization is the new driver for human evolution.

Greenland is not a special case. Greenland is a part of the modern world, and like everywhere else, its people need to balance the gains of new cultural and economic opportunities against loss of cultural identity and sovereignty. In this project, we have focused on the challenges of being a small nation in an enormous landmass. We have asked questions about how to develop this land and benefit from its resources, while maintaining a Greenlandic identity, as well as the political control.

BY MINIK ROSING

MI
GRA
TING

POINTS **OF** VIEW

Debate surrounding the extraction of Greenland's natural resources is passionate, convoluted and compelling. In the press, across family dinner tables, locally and globally, the pros and cons, the weighing of socio-economic development against enviro-ethical logic continues. In the wake of news of failed drilling attempts and an imminent influx of overseas workers, this debate shows no sign of abating with the rhetoric of "if" fast becoming the certainty of "when" and "how."

BY SUSAN CARRUTH

The landscape is central to the debate. It is the very object of change—tangible, empirical evidence of a changing culture and industrial revolution. But the landscape is also a symbol of Greenland, and of the larger Arctic zone, much imagined and depicted, saturated with meaning and magic, a last bastion of the wild, a monument to our collective history. Both of these landscapes, the spatial and the symbolic, will be reshaped and remade by the advancing wave of industrial actions to extract Greenland's natural resources from the land. Aluminum, iron ore, oil, gemstone—the land will be drilled, excavated, cut, crushed and transposed. The image and identity of Greenland will be similarly bent, refolded and repackaged. Many developed countries are dealing with deindustrialization and are now faced with the question of what to do with decaying landscapes that are redundant in a service driven economy. But Greenland is on a different time schedule, at the beginning of a period of industrialization. Climatic shift may be the most visible and infamous of changes but it is triggering and directing an industrial revolution.

All landscapes are powerful and provocative, frequently fraught with tension between progression and conservation. Landscape can be seen from varying viewpoints and orientations. It is both a picture and a tool, reflecting and creating meaning and identity, grouping and dividing people. It is simultaneously deeply personal—subjectively perceived, colored by our own background—and public property—part of our collective imagination and identity. I visited Greenland a few years ago as a tourist; my Danish parents-in-law lived in Illulisat for many years. I have also followed the unfolding narrative of Greenlandic geopolitics in the British and Danish media. It is from these dual viewpoints—as a tourist and as a consumer of global media—that I write. Rather than merely cataloging typologies, topographies and statistics, this essay will look at altering perceptions and experiences of the changing landscape. Founded, necessarily, on my own personal viewpoints I will explore through the lens of opposing narrative modes: internally—the phenomenological experience from the first person point of view; and externally—the shifting symbolic landscape seen, from a distance, in the third person. There is overlap and a reciprocal relationship between the first and the third person viewpoints, and it is this mutuality that this essay hopes to map.

FIRST PERSON POV

A landscape can be defined by geometry, dimensions, materials and quantities—numbers of tourists, degrees of temperature, thickness of ice, tons of minerals extracted—however these cannot express the first-hand experience of a place, the character, the genius loci. A phenomenologist reading views the people and the environment as an indivisible whole that together form a sense of place. It's a spatio-temporal experience, perceived sensorially and qualitatively rather than just by a shift in quantities of geometry, capital and material, or through a static view. Crucially it is as much a mental, intellectually deduced construct as it is physical object. The first person experience of a landscape is colored by our whole person.

My first hand experience in Greenland was in winter, while the sun was still below the horizon. Constrained by padded clothing, I spent time in the town of Illulisat, in houses, planes, barracks, in the snow and ice, on a sleigh, at the harbor. I found it a seductive landscape, with creaking ice, the crunch and muffle of snow, no traffic noise, no sirens, no roadwork. Howling dogs, drying fish, drying laundry. The shock of colored walls against white. Big grand views that allow you to self-forecast the weather, contrasted with zoomed in crystalline close-ups—but no middle distance views. Endless expanses where human presence seemed irrelevant, barely registered. There was a very clear separation of human space and "other" space, a real polarization between culture and nature. I saw almost no cultivated, designed landscape, and the knowledge that outside the town the road stopped and beyond was such a hostile, sublime landscape was exhilarating. The light was hyper-clear, which, combined with the lack of human markers in the open landscapes, made it very difficult to judge distance.

scale and pace. Despite the mountains, one's eye instantly registered the lack of vertical structures—trees, towers, masts or cranes. My choice of viewpoint was unfamiliarly proscribed—the closed circuit road system, no trains, no motorways—and all my experience was from the air, the sea or slowly on foot. All, to my European-city-girl eyes, seemed foreign and dazzling, except, that is, for the utilitarian residential blocks, which, alongside the local Chinese take-away, was almost uncannily and incongruously familiar. Greenland is highly seasonal, so my winter experience would have been very different than in summer when the ice recedes and shrubs bloom.

Industrialization will change these landscapes—the natural, the cultural and the infrastructure that connects them. The open, natural landscape will be invaded with overlaying maps of planned mines and plants. What is remarkable is not so much their individual characteristics but their extensive spread. The true impact of this revolution seems not so much about each individual industrial site, but the accumulative effect. The repetition of mines and plants creates a new geographical feature, a new typology. Industrial estates will appear, characterized by other-worldly structures and machines oblivious to human scale and aesthetics, alien colonies within the natural landscape. (ill.1) Looking into the future when Greenland is, inevitably, deindustrializing, the scars that excavation will leave behind will be more visible as ice melts and indigenous vegetation is slow to re-establish and camouflage.

The urban centers, currently self-contained and hard to reach, will be opened up, reached by new airports, roads and infrastructure. Whole new towns, new centers and satellites will be built for the influx of workers. Populations will suddenly and dramatically increase in density and dispersion and different patterns of movement and habitation will emerge. Accommodation will have to be built rapidly and economically, most likely with little regard to the continuity of the vernacular and instead capitalizing on newly available imported materials and labor. High-rise buildings, already seen in towns, will probably be the closest template for these new worker residences, reiterating and strengthening this typology in Greenland. Choice locations close to industrial sites will shape the definition of premium land and the increased density of buildings may mask the visual connection to the natural landscape. Public space, necessarily shaped and shaping the way of life, will emerge ad hoc, reorganized around new subcultures.

The introduction of permanent infrastructure will also rescale and domesticate the landscape, marking distance, sectioning and parceling. Climate driven changes will lessen seasonal shifts and thereby impact infrastructure; where now some routes are only accessible at certain times of year, many will become perennially available. But this will be exacerbated by the need to transport large volumes of people and goods around the country and from town to plant, necessitating new networks of reliable and efficient roads and potentially rail. Permanent and unchanging, this infrastructural network will not only be a new geographical feature but it will alter the rhythms of the land, changing what sort of views are available—high speed, linear and penetrating into the land.

The culmination of all this is that the distinction between "culture" and "nature" landscapes will be eroded as the Greenlandic landscape becomes cultivated, de-sublimated and domesticated. The loss of uninterrupted views and the introduction of modulation, verticality and parceling will transform the experienced landscape, advertising human intervention and industrial progress. New topographies and typologies will infiltrate the land and there will be a creeping towards a middle ground, a blurring of distinction between what used to be discrete, isolated towns and open wilderness. But this industrialization also means that great tracts of land are in fact passing into private hands, counter to Greenland's traditions of land ownership by the community. Symbolically and ontologically, Greenland will become less wild, tamed by industry, and this will be evident to all the senses.

THIRD PERSON POV

Counter to sensorial, intimate, first-hand experience, the third person point of view—from the outside, from abroad—of Greenland is constructed of metaphors, dreams and images. All countries and regions are characterized and stereotyped. My home country of Scotland instantly triggers images of lochs, mountains, heather and rain for most. These fantasy landscapes of the collective imagination are subjectively drawn based on incomplete and often inaccurate information. And they are not innocent; imagined physical landscapes symbolize the perceived values and culture of the land and, whether flattering or disparaging, have real sway and status. The symbolic landscape is built slowly overtime via many sources, but the two main architects are tourism and the global media. Together these two industries have the power to radically make-over, break-down or reinforce global perceptions.

Greenland is promoted as one of the last frontiers of tourism. As tourists seek out ever more "exotic" and "authentic" experiences, the more inaccessible and wild a region is, the higher its value. The scale, perceived emptiness and rawness of Greenland is far removed from the manicured and cultivated homelands of most, and therefore it is becoming a trophy destination for the intrepid. Images are at the heart of tourism: postcards, glossy brochures, carefully staged tours and Kodak moments.(ill. 2) Indeed Greenland's very name is a sort of image-based tourist trap. It is said that Erik the Red named the land in the hope that the evocative name would attract settlers. The spectacle of majestic, awe-inspiring wilderness is Greenland's central lure.

But Greenland has also become the poster child for climate change and an endangered Arctic lifestyle. Images of mournful polar bears and barren glaciers solemnly announce that Greenland, the epitome of an untouched culture, is under threat from "Big Business" and human carelessness. (ill. 3) The media has long employed these images to provoke our sympathy and outrage and this trend will explode in parallel with industrialization. Not-In-My-Back-Yard-ism, so intrinsic to discussions in Europe, exists inversely in Greenland. The indigenous population is reportedly largely in favor of capitalizing on their natural resources, understandably in an attempt to increase standards of living, independence and modernization. However, seemingly the further you are from Greenland, the easier it seems to be to say "no" to any sort of progress and want to ring-fence this supposedly pristine ecology and mythical, exotic culture from modernity.

Hypocrisy, romanticism and paternalism color our views, egged on by carefully constructed, edited and stage-managed images from the tourist and media industries. Just as Romantic picturesque landscape paintings often tell us more about the painter than the land, so postcards, brochures and newsreels are more than a conduit for remotely experiencing Greenland. They make technicolor our contemporary values and desires. The global community seems to feel a sense of connection with Greenland: our collective memory

and identity written in the oldest rock in the world, the "last wilderness." We find metaphors and parallels with our own modern lives in this hostile yet beautiful environment and the contemporary pressures it faces.

Inevitably then the excavation of natural resources will reshape Greenland's image. This most contemporary, brutal and pragmatic of industrial action will forever alter the world's perception of Greenland, rewrite the brand and the myth. Tourism founded on perceived remoteness and relative obscurity is always a paradox: the more successful the tourism campaign, the less the destination matches the alluring images. However in Greenland's case, this paradox is furthered. The joint economic diversification strategies of tourism and industrialization are directly competing with each other, the changing priorities and consequences of each antagonizing the other. (Curiously, one area where tourism and industry do compliment each other is the creation of infrastructure.) Perhaps this clash of images might trigger the rise of "witness" tourism, where visitors come to see for themselves the changes, to support the cause and educate themselves, as the notion of wilderness has long been bound to the ecological movement. Much like people have flocked to Cuba over recent years, anticipating a cultural shift on the horizon, people want to see Greenland before the ice recedes, before flagship species reduce or even become extinct. Of course this too has its contradictions and ironies. The symbolic landscape, the landscape of crafted images and embedded meaning is hard to reconcile with contemporary realities. Emotionally bound up with bigger issues of sustainability and developed world guilt, whoever authors and authorizes images holds power.

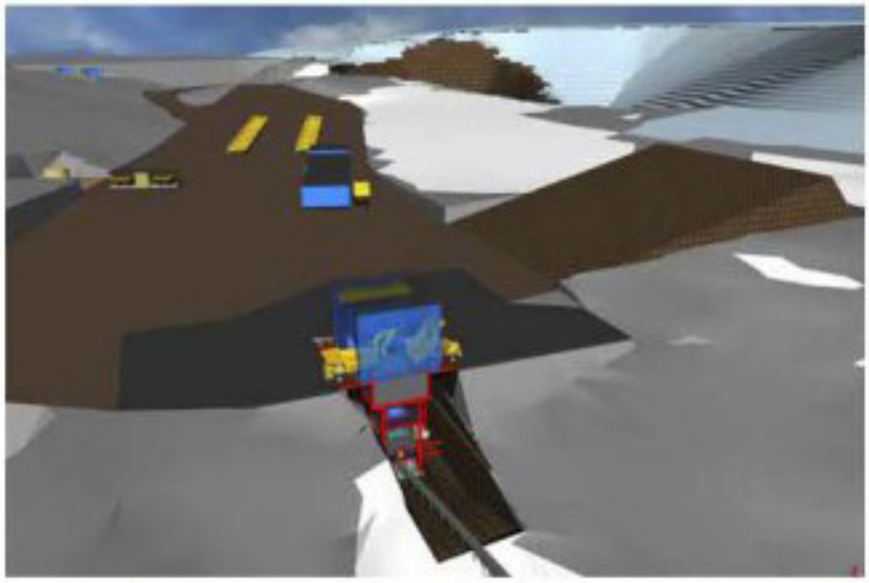
HOMOGENEITY AND CONTRADICTION

Two central concepts are emerging for the landscapes of contemporary Greenland. The first person experience of Greenland is increasingly subject to the erosion of distinction, of discreteness, between cultural and natural landscapes. The third person point of view is becoming progressively more contradictory, pulled between tourism-promoted images of Greenland as a majestic wilderness and graphic media reportage documenting industrialization and modernization.

The threat of homogeneity, the blurring of the wild and the cultivated, demands management in the form of policy, politics and regulatory mechanisms. In order to prevent unfettered development and long-lasting damage, Greenland must recognize, educate and legislate to avoid a very primary version of urban sprawl. Condensing and ring-fencing areas of heavy industry and the introduction of comprehensive planning mechanisms is crucial to both short and long-term conservation. The threat of privatization of land, infrastructure and the creation of "company towns" must be kept in check and countered with investment into public spaces to help guard the indigenous way of life in the context of such a huge influx of immigrants. It is significant that although Greenland has protected areas in the form of national parks, most of the current and future industrialization takes place in zones that are least protected. Broader and finer-grade protection that considers the Greenlandic landscape holistically, including urban and infrastructural Greenland, is needed. It is true that the very act of managing and policing wilderness renders it "cultural," and is therefore at odds with supposed authenticity, however this irony is the key to protecting the genius loci of a special and sublime landscape.

The contradictions and paradoxes between the romantic vision of a last majestic, virginal wilderness and the rise of Greenland's status as an abused and suffering victim of unsustainable contemporary life has the power to heavily impact the country's future. Landscape doesn't simply reflect an economy; it reflects a whole host of motivations and impacts the desire to promote oneself in a particular way, reinforcing power, status and national priorities—in short, geopolitics. There is, undeniably, economic capital embedded in Greenland's landscape, but there is also cultural capital. The actions of a people and the land they live on cannot be separated. The reconciliation of these two forms of capital is the cornerstone of ensuring that the indigenous people can prosper, and images—symbolic, international and vested—are central to this. Greenland is not a commodity for our consumption, or a museum to house our "otherness," or a theater scrim onto which we can project our scenic desires. There is a danger of paternalism, a "do-what-I-say-not-what-I-do" attitude that echoes bigger discussions of sustainable development whereby the developed world attempts to curtail the expansion of the developing. We cannot force Greenland to become an open-air museum to balance our hyper-cultivated states.

Genre de Vie is the notion that the lifestyle of a particular region reflects economic, social, ideological and psychological identities. Landscape is not an object, a thing or a static image, but a process. Change is not only inevitable but necessary. Globally, many deindustrialized sites are now protected. This longer-term view of evolving values with regards to landscapes, and the ability of landscapes to adapt, cannot be underestimated or undervalued. The continuing narrative of Greenland is a remarkable story, writ large in the landscape, resonant and relevant to all of us. The global community hasn't the right to proscribe what Greenlanders do with their country, but it does have a responsibility. The raw materials that Greenland is excavating will be exported to us, we are providing the demand, and so we must respect progress while supporting preservation. Landscapes must produce and provide for a population, and a way of reconciling contemporary desires for progress with preservation needs to be found. The two concepts need not be exclusive.



Susan Carruth (b. 1980) is a Scottish Architect currently practising in London. She is an Associate at Piercy&Company working with urban regeneration and contextually sensitive sites. She studied at the University of Strathclyde in Glasgow as well as periods at Universita Degli Studi Roma Tre, Aarhus School of Architecture and The University of Cincinnati. She has lectured extensively including at Cambridge University and The Mackintosh School of Architecture and has been a guest critic at the UCL Bartlett School of Architecture. The central theme of her work is that landscape is not merely a picturesque backdrop but a cultural and political tool with the capacity to shape and be shaped by geopolitics and ideology.

Ill. 1 London Mining's Oil of the Primary Crusher Facility at ISUA. Credit: London Mining.

Ill. 2 Greenland's official tourist board website extolling the virtues of the welcome, "silent" landscape and encouraging us to be pioneers. Credit: www.greenland.com, the official tourism site of Greenland

Ill. 3 Recent media footage of Greenpeace protesting the Cairn Oil Rig are at odds with tourist imagery of Greenland. Credit: Greenpeace.

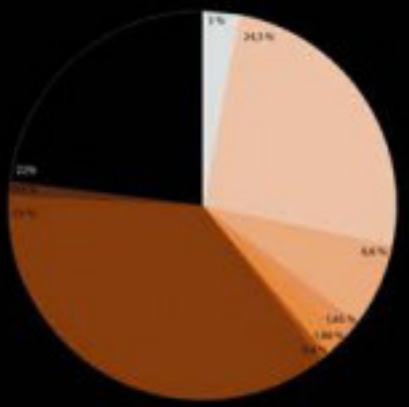
STUDY

OCCUPATION IN GREENLAND

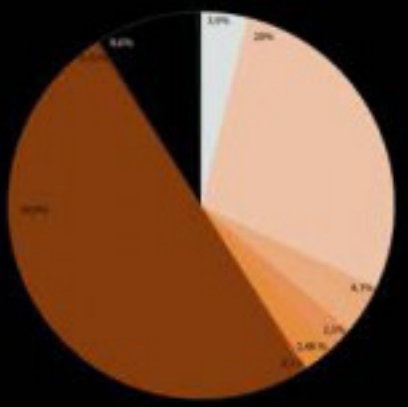
IMMIGRANTS/LOCAL POPULATION

Source: www.stat.gl

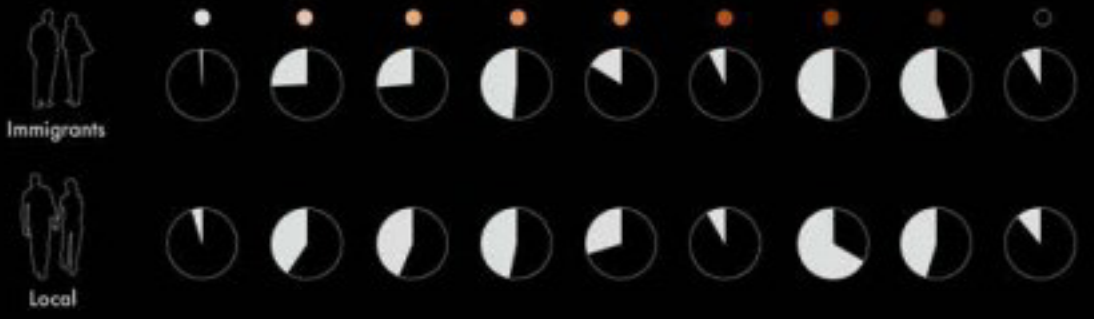
- Agriculture, fishing
- Trade and transportation
- Buisness, economy, real estate, insurance
- Service and social welfare
- Industry
- Mineral extraction, mining and quarrying
- Public administration
- Education
- Building and Civil Engineering



6226 Immigrant in Greenland. Employment 96,9 %

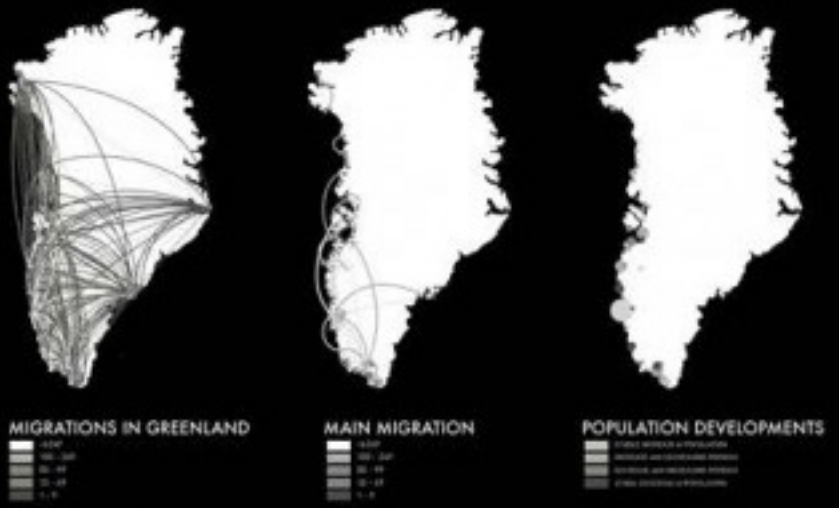


50.226 Local People. Employment 46,6 %



STUDY

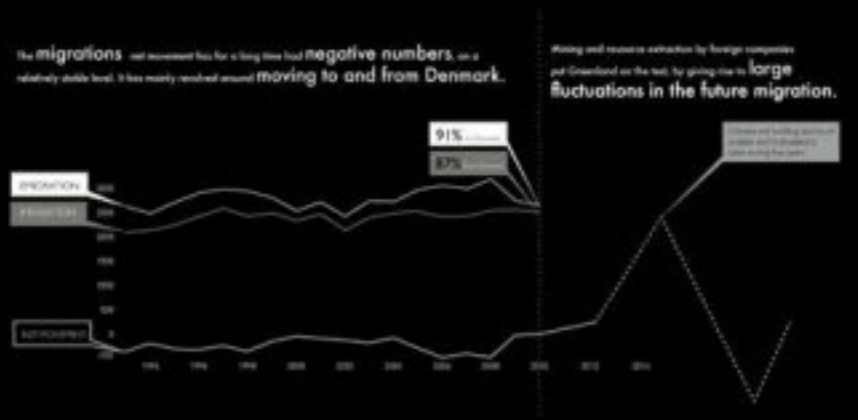
MIGRATION in GREENLAND



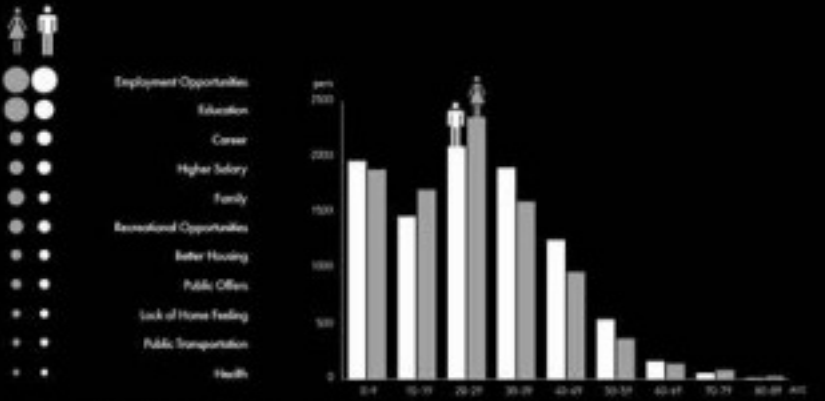
source: Mobilitet i Grønland, NordRegio 2010

source: Mobilitet i Grønland, NordRegio 2010

source: Grønlands Statistik



source: Grønlands Statistik



source: status for bosteder i Grønland, Nordregio 2010

HUMAN PERFORMANCE, COMFORT AND SAFETY **IN THE COLD**

BY ØYSTEIN NORDRUM WIGGEN, MSC AND HILDE FARDAL, PHD
SINTEF TECHNOLOGY AND SOCIETY, DEPARTMENT OF HEALTH RESEARCH

The past decade has witnessed a dramatic growth in activity in the High North and thus under cold-climate conditions. The ever-increasing need for energy has led the petroleum industry to search for oil and gas deposits in these harsh regions of the world. Recent explorations have revealed possible petroleum provinces in the Arctic, and it is believed that some 30% of the world's undiscovered gas and 13% of its undiscovered oil lie in these regions (Gautier et al. 2009). This has aroused the interest of the oil industry, and major growth in petroleum activity on both coasts is expected in the near future. Besides offshore petroleum, Greenland may well experience new onshore mining ventures as well as a growing number of vessel movements through the Northwest Passage as sea and glacial ice retreat. All of the above demonstrates the importance of these areas in the far north, which present new challenges to the protective clothing and shelter that are essential to maintain the safety, comfort and performance of workers and local populations under adverse environmental conditions (Reinertsen 1997).

Progress in the development of materials and textiles with integrated instrumentation have significant potential for being used in new types of clothing that will bring increases in performance and operating safety in the Artic. The ColdWear project, which runs from 2008 until 2012, has adopted a multidisciplinary scientific approach to investigating how performance and comfort can be improved by new textile materials that adapt thermal and moisture properties to changing environments and levels of exertion. It is possible to improve safety and efficiency by integrating sensors into clothing to monitor the wearer's vital physiological parameters (www.sintef.no/coldwear).

Humans are essentially tropical animals, which means that without clothing we require an ambient temperature of around 30°C. We therefore use clothing and shelters for protection, and to enable us to function and survive under a wide range of conditions. In the Arctic, we are likely to experience low ambient temperatures and wind. Inhabitants of these regions have gained experience and knowledge of how to dress and protect themselves against the climate. However, a growth in industrial activities will bring a large number of newcomers to the Arctic, people who are unaware how to cope with such environments. Cold exposure has negative effects on human performance, comfort and safety (Sandsund et al. 2012; Wiggen et al. 2011). In order to minimize the effect of the environment, humans use their thermoregulatory systems to maintain core temperature within an acceptable range. The body regulates temperature through several mechanisms, such as sweating, shivering and alterations in blood flow. The latter mechanism limits heat loss by reducing blood flow to the skin and peripheral parts of the body, such as the hands and feet. Most people have experienced cold fingers and toes, and realize that low hand and finger temperatures reduce manual performance (Heus et al. 1995). Manual performance is a vital component of most industrial activities. A recent study, with special focus on the petroleum industry, demonstrated that when petroleum workers are exposed to ambient temperatures of -5°C or lower, the protective clothing in current use in the petroleum industry cannot maintain body and skin temperatures during low-intensity work, with the result that manual performance deteriorates (Wiggen

Øystein N.Wiggen is a scientist in the Work Physiology group in SINTEF Technology and Society, Department of Health Research, Norway. His field of expertise is on optimal human performance in extreme environments, with special focus on occupational and sports performance, comfort and safety in cold conditions.

" The body regulates temperature through several mechanisms, such as sweating, shivering and alterations in blood flow."

et al. 2011). The combination of lower skin and body temperatures with diminished manual performance reduces comfort, task performance and safety. Better knowledge and understanding of how these harsh and cold conditions affect human performance and even how to effectively use clothing and shelter for protection are crucial to the expansion of the petroleum industry in the High North.

The additional loads caused by heavy and bulky clothing, and even the frictional forces between all the layers of clothing can also have negative effects by restricting movement (Teitlebaum and Goldman 1972). Every additional kilo of clothing increases the effort of moving by approximately 3%. Typical outdoor working days consist of moderate variations in work intensities, and particularly in cold environments may involve several donning and doffing sessions in the course of the day. It is therefore important to focus not only on improving protective clothing, but also on effective and functional architectural solutions when planning industrial activity in the Arctic. In addition to the cold, the Arctic also experiences several months with polar night. The combined effects of cold and dark may also influence mental and cognitive performance (Palinkas 2001).

Although industrial activities in harsh and challenging environments are often paid a great deal of attention, we are likely to see a general increase in outdoor activities as the arctic population grows. It is therefore worth mentioning that skin and muscle cooling affect not only manual performance, but all factors that influence human performance. Endurance, strength, power, speed and co-ordination may all deteriorate in the cold (Oksa et al. 1995; Sandsund et al. 2012).

In both occupational and leisure activities humans strive to achieve optimal performance. Whether we are talking about a complex industrial assembly-task or training for an important race, we need to remember that extreme environments, no matter how good our protective clothing and shelter might be, are likely to limit human performance at one or more levels. However, through a multidisciplinary approach like the ColdWear project, scientist from a wide range of disciplines can come together to generate the scientific knowledge needed to develop types of clothing and protection from the harsh arctic environment. Such knowledge will expand the range of environmental conditions under which we can improve the safety, comfort and performance of the people of the High North

References

Gautier DL, Bird KJ, Charpentier RR, Grantz A, Houseknecht DW, Klett TR, Moore TE, Pitman JK, Schenk CJ, Schuenemeyer JH, Sørensen K, Tennyson ME, Valin ZC, Wandrey CJ (2009) Assessment of undiscovered oil and gas in the Arctic. Science 324(5931):1175–1179. doi:10.1126/science.1169467 pmid:19478178

Heus R, Daanen HA, Havenith G (1995) Physiological criteria for functioning of hands in the cold: a review. Appl Ergon 26:5–15. doi:0003-6870(94)00004-J pmid

Oksa J, Rintamaki H, Rissanen T, Rusko H (1995) Cooling-induced changes in muscular performance and EMG activity of agonist and antagonist muscles. Aviat Space Environ Med 66:1026–31

Palinkas LA (2001) Mental and cognitive performance in the cold. Int J Circumpolar Health 60(3):430–439

Reinertsen RE Occupational cold exposure in the offshore environment. In: Kuklane K, Holmer I, Ekelberg C (eds) International Symposium on Problems with Cold Work, Stockholm, Sweden, 1997. Arbete och Hälsa, pp 91–95

Sandsund M, Saursaunet V, Wiggen Ø, Reinertsen RE, Faerevik H, van Beaumont MC (2013) Effect of ambient temperature on endurance performance while wearing cross-country skiing clothing. Eur J Appl Physiol. doi:10.1007/s00421-013-2733-1

Teitlebaum A, Goldman RF (1972) Increased energy cost with multiple clothing layers. J Appl Physiol 32(6):743–744

Wiggen ØN, Heen S, Faerevik H, Reinertsen RE (2013) Effect of Cold Conditions on Manual Performance while Wearing Petroleum Industry Protective Clothing. Ind Health 51:436–443. doi:10.2486/indhealth.MS1363 pmid:23676536

PHOTOS: BIG/INGELS GROUP

When you need to turn visions into reality in Greenland

Contact the Employers' Association of Greenland, which represents more than 90% of industrial revenue in Greenland.

The Employers' Association of Greenland is a partner of Possible Greenland.

The Employers' Association of Greenland
P.O.Box 73 . 3900 Nuuk . Tel. +299 32 15 00

The winning project proposal for the National Gallery of Greenland in Nuuk was designed by BIG – Bjarke Ingels Group.

www.ga.gl

At the edge of the world

An interview with Børge Ousland on extreme tourism

Børge Ousland has built a name for himself as a celebrity explorer of the Arctic and Antarctic. He has been on multiple solo and group exhibitions, and also does guided tours for thrill-seeking "extreme tourists." We wanted to ask him about his view on extreme tourism and its impact on the polar regions.

BY JOANA SA LIMA AND TOR INGE KVAMSDAL OF CONDITIONS

You were mentioned last week in Aftenposten (national Norwegian newspaper) in the article about extreme tourism. It has become increasingly popular, bringing tourists to previously untouched areas of the Earth. Greenland and the Arctic are the next destinations for this new type of tourism. Are the Himalayas yesterday's news?

I'm not sure if the Himalayas are yesterday's news, but if you look at the distance and hassle of traveling, Greenland and Spitsbergen are actually super close. I was in Spitsbergen yesterday. I did a trip there with a group. It's very easy to go there. They have all the facilities you need. Most Westerners will want quality hotels and the comforts of their everyday lives. You can also find it in Greenland. Yes I think Greenland and the Arctic will be one of the key destinations for on land tourism. You still have the cruise ships going up there packed with people, but I think people now want to be inside the adventure, not just as outsiders looking from the other side of the fence. They want to walk across that bridge, they want to paddle that stream, not just look upon it from the cruise ships. It will increase in the future, and we see that very rapidly now. Over the past ten to fifteen years, peoples' mindsets have changed. In the early 90s, it was really not possible to think that you could take a group to the North Pole and ski 100 kilometers. To do that within two weeks, without one year planning before, was unthinkable. Peoples' mindsets are changing. Now people think they can go to the North Pole and the South Pole, and they do it. Their minds are broadening. It is not really the elderly, wealthy people either. It is younger people who have adventurous souls. It's actually a career builder to cross Greenland. You are showing you are pushing and have the ability to set high goals. It's younger people, adventurous people, entrepreneurs that have used their life building their career, studying and working. And they see now it's possible to buy the logistics from the experts—for instance, me. They can get this trip and have everything more or less laid out, but they need to work on the way to get there.

Tourism can have upsides and downsides—thinking about the south of Europe in the 90s. Is it more regulated today?

It's more controlled. Everyone crossing Greenland must fill out lots of papers. You have to take care of the environment. The environment is on the agenda much more now than before. It can be a problem in the future if there are lots and lots of people who want to go there and do these kinds of trips, but I don't really see it as a huge problem today. You have it on Spitsbergen. It's a very popular tourist destination and the season starts from right now. Every day there are full planes. It's very strictly regulated. If you have something that's strictly regulated, everyone must follow the same rules. It has to be handled. If it's not handled, it is up to the government to put their foot down to stop it. For Greenland, tourism is already an important part of their income and I think it will increase in the future. At the same time, you must keep some areas pristine and protected, like national parks, for the wildlife.

Why do people do it? You mention career building, but is there also a kind of self realization for some?

The North Pole has a lot to do with the point itself. It's the North Pole! It's also history driven, with all the books that have been written about the races to the poles 100 years ago, so there's all the drama connected with that. Also, there is a coffee table hero story behind it. You have something to tell when you get back home. You have been to the North Pole—wow! Because the North Pole itself is just drifting ice, it looks the same 100 kilometers away. But 100 kilometers away is not the point itself. The feeling of being at the North Pole, you can sell it because it's the point of the Earth where the axes go through and the longitude meet. It's a magic point, even if it looks the same as everything else out there. For Greenland, it's more the physical challenge behind it. It's a feat like running a marathon, or climbing Kilimanjaro. You measure yourself against other people. And of course there's the adventure too, and to be inside nature. That's actually very important, to get away from city life, stress, phones. You are just there with yourself and the eternal sun circling above you with your teammates and nature. You need a balance if you live a very stressful life. To jump onto a trip like that is a good way to do something else, zero yourself and relax.

We find the country extreme in a lot of ways, and you have seen a lot of extremes. What is extreme to you? Do you find Greenland extreme?

For me, where you find the settlements in Greenland is not that extreme—quite friendly actually because you can live there. But when you enter the ice cap, it can be extreme. That's the same if you go to the mountains in Norway in mid winter; it can also be extreme. Northern parts of Greenland are probably quite hard. It's a very long island. If you look upon the southern part of Greenland, it's the same latitude as Oslo, so it's the same amount of light as here. It's just a bit colder because you don't have the same effect of the Gulf Stream. Extreme just depends on the perspective.

The prediction is that in ten years, the Northern Passages will be open all year.

No, it won't happen. It's only a few months in summer you can sail up there. In the winter, when the sun goes below the horizon, it will still be super cold in these areas and the ice will freeze. But there will be longer and longer stretches open in the summer season. You might be able to sail there for up to five months. In most cases you will need assistance by icebreakers. I don't think the Northeast Passage will have a huge effect on the world's transportation system. Also, in most of Europe, it doesn't

PHOTO BY THOMAS RUS

MI
GRA
TING

make a big difference to go to China through the Northeast Passage—if you are situated in Spain, for instance. But, if you are in Norway, it's half the distance. Norway is actually the country in Europe that is furthest from China, but if you look at the Northeast Passage we are the closest to China. For some industrial nations it will be possible, but maybe just for retrieving resources in the Arctic like mineral deposits and oil. Greenland probably has huge amounts of mineral deposits and oil that can be exploited more easily because the ice is retreating. Of course, the ice retreating is not a very positive thing. It will eventually affect the whole world because you cannot look at the climate in the Arctic separately; you have to look at it in a global perspective. When you know that the temperature in the Arctic is rising twice as fast as the global average, that's a really bad sign that should concern everyone. The test lab for the climate of the world is the Arctic. You see the changes first and most rapidly in the Arctic, which is a little bit strange for the coldest place on Earth to see the fastest changes. That is in connection to the sea ice. You mention the Northeast Passage that is opening because the sea ice is melting; when the sea ice is melting, this white surface, which is normally covering the North Pole and reflecting light, becomes open water. The open water absorbs energy and the temperature rises, which contributes to more ice melting. This doesn't really affect the rising sea levels because that ice is already in the ocean, but due to the higher air temperature, huge glaciers on land, like in Greenland, melt faster. We have also seen that summer melts in Greenland have rapidly increased.

You have a special relationship to nature. When you are up there, how do experience the place? Is it spiritual?

It's very spiritual. In one way, it's kind of a meditation to be up there, especially on the solo trips I did in the 90s. When you go solo, you don't relate to anyone else but yourself and nature. You get a much deeper dialog within yourself and with nature that you don't get when you are with other people. You are always leaning towards another, asking what they think. If you have a bad day, you always have a friend that can help you get back on your feet. When you are solo, you don't have that. It's a stronger emotion to be solo, it's harder. The greatest moments come from my solo expeditions where I really get into the inner core of myself. I feel attached to nature. It's live or die in a totally different way than in Oslo.

Do you usually bring local people on your expedition?

No. The locals don't understand *at all* why someone would want to go to the North Pole. "Why do you do that when it is so nice here?" they say. Mostly they are happy in their area. They have their tales and adventures. They don't really need the self-realization. It's a good way of thinking. Why do this? In one way it's meaningless to go to the North Pole solo and unsupported when you could be home making your garden grow. My urge to do these trips, to go out and cross Antarctica, to go to the North Pole, it's the same mentality as these huge companies. They want to push on. There is nothing to stop them. It is the same philosophy with me. You see it in science, you see it in space; man always wants to move forward, beyond what is known. It's a kind of curiosity.

You have traveled a lot in the North Pole and Greenland and know the local people, their attitudes and the difficulties they face now. What should be the strategy for the future?

Which difficulties? One of the reasons they have social problems is because of this practice of implementing Western thinking on people that have come from, more or less, the Stone Age, within a few generations. If you do that, it will create problems. It's not that we should reverse everything. It's not possible. I think Greenlanders are doing good things by having certain limits on where they can hunt and not use snowmobiles, so there are some sorts of rules implemented to carry on the traditional way of life.

Greenland wants independence from Denmark. How should they become independent? What should be the focus?

Sustainable tourism could be one solution. State owned mines or limited use of resources could be another solution. But if you let all the large multinational corporations in, they will take what they can and leave. They will dish out money to the local governments. But I don't think money will help the social problems at all. On the contrary, it could make it worse.

We see some interesting potential in Greenland. It is one of the biggest countries in the world. It is one of the least densely populated places in the world. They have 10% of the world's fresh water in the ice. They are full of resources. The way they are organized as hunters and gatherers involves sharing resources. Maybe that's the way we should be living. Maybe their original culture has the potential, and we should take notes from them rather than try and adapt them to our standards of living by imposing our ideals.

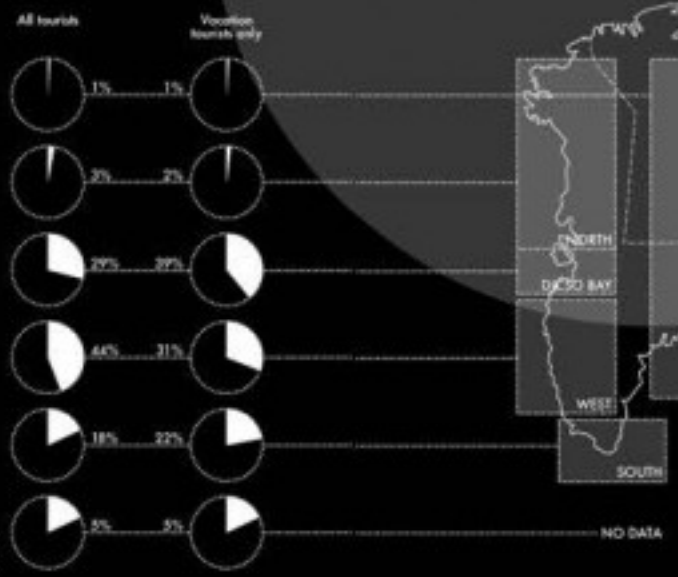
They deal with the reality just as it is—now, and maybe tomorrow, but not next year. I think you must ask the Greenlanders themselves what they want for the future.

Børge Ousland has more than 20 years experience with record-breaking Arctic and Antarctic expeditions. He was the first person to complete a solo expedition to the North Pole without re-supplying, and the first to cross the Antarctic continent alone. He is still the only person to have accomplished both feats. Børge is an accomplished author, and a renowned photographer and filmmaker who has received several international awards for his expeditions and films.

TOURISM STUDY

ACCOMMODATIONS BY MONTHS IN THOUSANDS, 2010

Source: Overnatningsstatistikken 2010



TOURISTS BY DESTINATION

Source: Nature and Tourism in Greenland, Berit C. Kone, 2002

ACTIVITIES BY SEASON AND REGION

Source: www.greenland.com
+ Nature and Tourism in Greenland, Berit C. Kone, 2002

TOURISTS BY SEX, 2009

Source: http://www.stat.gl/publ/da/TR/200901/pdf/Turisme%202006-2009.pdf

AVERAGE AGE BY SEX, 2006-2009

Source: http://www.stat.gl/publ/da/TR/200901/pdf/Turisme%202006-2009.pdf

TOURISTS BY COUNTRY (TOP 10), 2009

Source: http://www.stat.gl/publ/da/TR/200901/pdf/Turisme%202006-2009.pdf

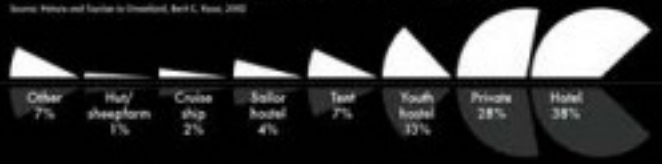
TOURISTS BY AGE, 2009

Source: http://www.stat.gl/publ/da/TR/200901/pdf/Turisme%202006-2009.pdf

TOURISTS BY PURPOSE OF THE TRAVEL, 2009

Source: http://www.stat.gl/publ/da/TR/200901/pdf/Turisme%202006-2009.pdf

ACCOMMODATION TYPES USED BY TOURISTS, 2000



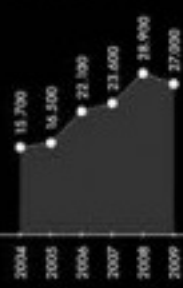
TOURISTS BY LENGHT OF THE TRAVEL

DEFINITION OF A TOURIST BASED ON WORLD TOURISM ORGANISATION (WTO)

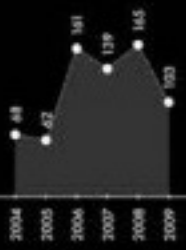
A tourist is a person who travels to and stays in places outside his usual environment for not more than one consecutive year for leisure, business and other purposes.

ACCOMMODATIONS BY NATIONALITY, 2010

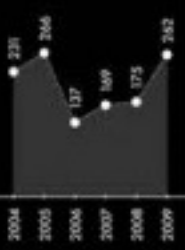
PASSENGERS ARRIVING BY CRUISE SHIPS



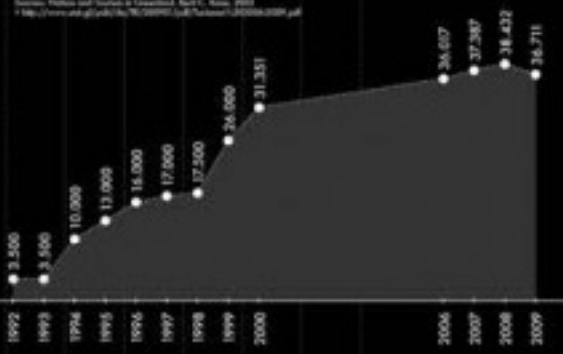
CRUISE SHIPS ARRIVALS



AVERAGE PASSENGERS PER CRUISE SHIP ARRIVAL



NUMBER OF TOURISTS BY YEAR



SOME RECENT STRATA OF SERMERSUAQ: LIFE ON THE WORLD'S SECOND LARGEST ICE SHEET

BY MASON WHITE OF LATERAL OFFICE

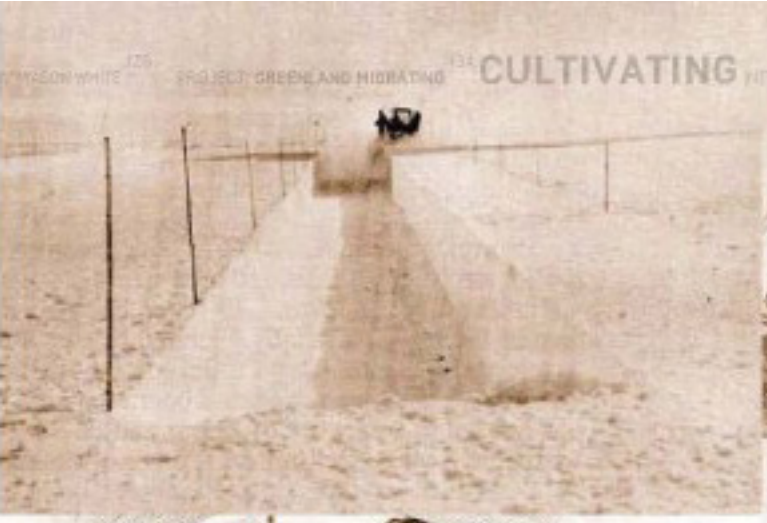
On September 15th, 2011, the *Times Comprehensive Atlas of the World* released its 13th edition (2011) with a map of Greenland representing a loss of 15% ice cover as compared to the 10th edition (1999). This claim launched a public debate led by noted glaciologists about the status of the contemporary ice sheet, which ultimately led to a retraction by the publisher. Subsequently, a revised map of Greenland with a scientifically corrected portrayal of ice cover was made openly available. Although primarily used as evidence for climate change debates, this error did make public the mysterious and shifting nature of Greenland's massive ice sheet. At 1,710,000 square kilometers, or 80% of the total landmass of Greenland, it is the Earth's second largest ice mass after the Antarctic ice sheet. Throughout recent history the massive ice body has been the venue for the collective psyche, oscillating between fear and desire of survival within remote and extreme geography—expeditions, military radar stations, weather data towers, and ice core drilling stations, among others.

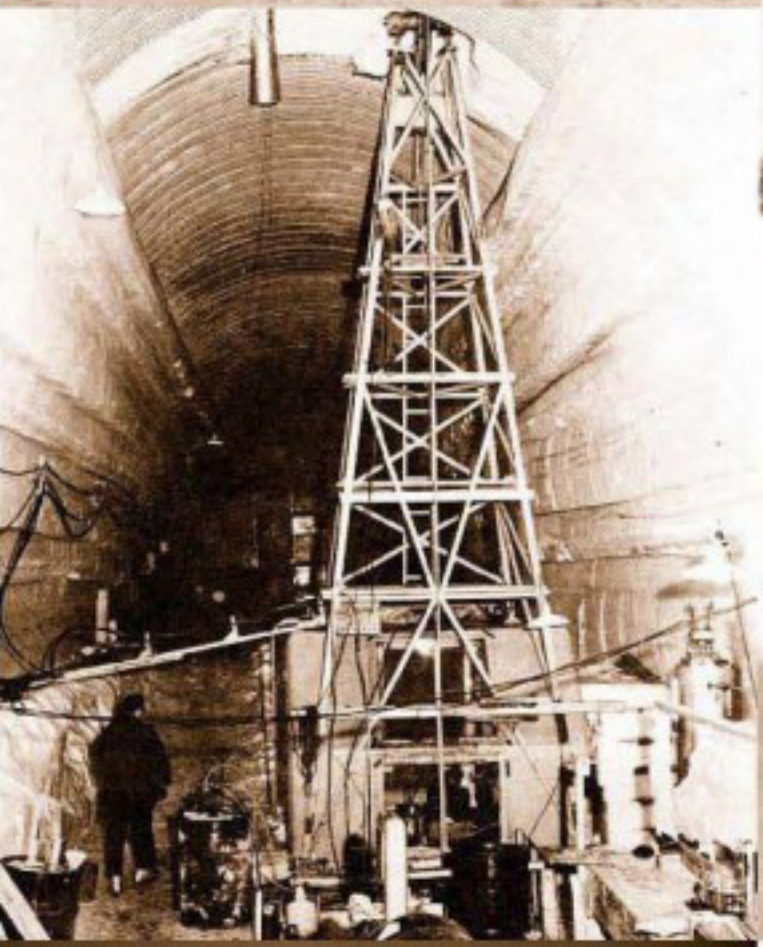
With thicknesses between two to three kilometers, Sermersuaq, as the ice sheet is known, is a slow-flowing super-lake contained by steep alpine mountains and fjords. As Greenland experienced a dramatic and rapid social transformation from scattered hunting and gathering settlements to an urbanizing post-industrial economy in the 20th century, the ice sheet remained a mysterious and extreme territory. As the Earth's largest island, it is its interior that has served as a venue for urban and architectural experiments that parallel the collective anxieties and ambitions of the remote and the inaccessible. This frozen interior island, or *indlandsis*, has become a laboratory for man-made techno-objects and architectural assemblies driven by militaristic, scientific and now touristic interests. Below its "cold desert" surface, Sermersuaq possesses an enviable 110,000-year-old recording of Earth's history. However, it is its most recent strata that is of interest here. From exploration and research to military monitoring and tourism, encampment and outpost activities have generated an alternative history of Greenland, with the ice sheet as its muse.

Following is a brief summary of tendencies in Sermersuaq's modern occupation.

SERMERSUAQ: EXPLORATION AGE (1800S)

On June 3rd, 1888, Fridtjof Nansen embarked on an exploration that would become the first successful crossing of the Greenland ice sheet. Previous penetrations of the Greenland interior, by Adolf Erik Nordenskiöld in 1883 and Robert Peary in 1886, never went further than 160 km eastward from Disko Bay before turning back. Nansen's would be a one-way journey from the scarcely populated eastern coast towards Disko Bay. The journey took seventy-eight days; with the crossing itself taking only forty-nine days while the other twenty-nine were spent drifting off course trying to reach the shore. Throughout the 1800s most of Greenland was explored and mapped. These early journeys remained essential to the remote and resistant character of Sermersuaq. Exploration took a more advanced turn with the German Alfred Wegener Expedition from 1929 to 1931, in which the first wintering on the interior of the ice sheet took place at the station "Eismitte." Numerous expeditions followed that sought to quantify, measure and take stock of the ice, with the University of Michigan Greenland Expeditions under William Herbert Hobbs (1926-31) and R. L. Belknap (1932-33); the British Arctic Air Route Expedition under Gino Watkins (1930-31); and British Oxford University Expedition under J. G. S. Sugden and P. G. Mott (1938).






MI
GRA
TING

SERMERSUAQ: MEASUREMENT / MONITORING AGE (1930S-PRESENT)

Following World War II, many military technological inventions found their way into Arctic exploration, including the weasels, snowcats and tractors. These technologies in addition to airplane and helicopter innovations facilitated scientific advances in the Arctic. In addition, several bases were established such as the US-initiated Thule Air Base in 1951 and the 1960s Distant Early Warning Line, a system of radar stations as a response to threats during the Cold War. The four Greenland DEW Line stations have continued a tradition of establishing monitoring camps and stations on the otherwise uninhabited ice sheet. In addition to radar stations, a series of drilling stations on the ice sheet have been assigned with the task of collecting ice core samples for analysis. Drilling stations, together with DEW Line stations, weather and climate analysis stations, and temporary research camps have generated a network of manned and unmanned structures engaged with and reliant on the Greenland ice sheet.

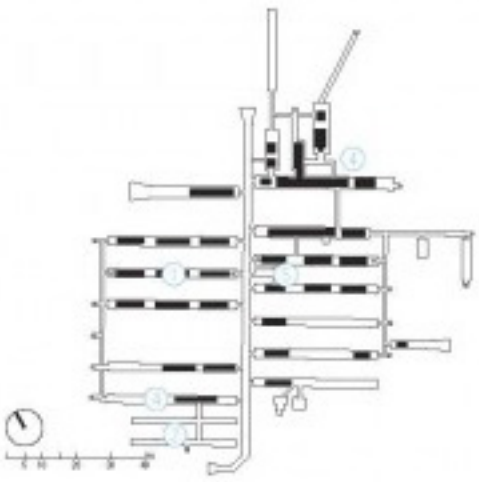
SERMERSUAQ: TOURISM AGE (1991-)

Greenland's tourism is built on an extensive but sporadic tourism history. From 1869, when the first "excursionists" arrived on the island led by artist William Bradford and polar explorer Dr. Isaac Hayes, until the late 1980s, Greenland hosted a small number of tourists each year through a small and largely fragmented tourism industry. In the early 1990s, faced with concerns about economic sustainability, the Home Rule Government declared tourism as one of four objectives in a commercial development strategy. Since then Greenland has enjoyed a steady increase in the number of tourists. Close to 30,000 people reached Greenland on cruise ships in 2010—twice the number than in 2004—with an estimated 30,000 more coming by air. As Greenland strives to increase its share of the adventure tourism and extreme sports tourism market, the Sermersuaq ice sheet will play a central role in hosting these new activities.

Several overlapping though distinct **strata** emerge on this slow-flowing ice body, which will be the focus here. Sermersuaq possesses a thin anthropocene stratum of **exploration**, **militaristic staging**, **scientific staging**, and now **tourism**. These occupational typologies reveal methods and techniques of encampment seeking to coexist or resist the challenges of the cold desert and its shifting, icy ground. These three types are represented by individual case studies: DYE-3 (1955-90), Camp Century (1959-66), and Summit Camp (1989-). These cases are illustrated on these pages to demonstrate their approximate location on the ice sheet, their relationship to the ice sheet's shifting surface, and their systemic or formal organization. The encampment formats that emerge parallel the architectural and urban ambitions of their time. The DYE station's heroic mega structures are representative of the large-scale technological architectures of the late 1950s and early 1960s through such provocations as those by Buckminster Fuller or Archigram. Camp Century, instead, preferred the hermetically planned urban systems similar to those found in Hilberseimer's "The New City" of 1944. However, the 1989 establishment of Summit Camp eludes any easy classification, but maintains an American pragmatism through its infrastructural clustering of mini-sectors. Each typology also presents a perceived critique of architecture's relationship to the exterior environment. DYE-2 and DYE-3 had its lattice-like piles that unexpectedly and unevenly sunk in response to footing settlement and ice movement. In a 1988 assessment, the DYE stations were estimated to move across the ice an astonishing 40 to 50 feet per year. Camp Century's impressive network of some twenty-five ice trenches (thus its codename "Project Iceworm"), also revealed the unpredictable and extreme movement of the ground. The idealized drawing was undone only four years into its occupation, as many of its trenches sheared and collapsed. Summit Camp has proven more resilient, and demonstrated the learning curve from past projects. Summit is not holistic nor megastructural. In fact, it is an example of "soft" planning and responsive structures. Summit Camp's structures are on jack-able pilings, and are not tethered to one another except by flexible wiring and cabling.

With continued anxiety over the shifts of Sermersuaq, renewed attention has emerged from the unpredictable nature of this dynamic ice body. For example, scientists believe a melted Sermersuaq would result in a 7.2 meter rise of the global sea level. What is next for this massive body of frozen water? As the agendas of monitoring and tourism collide, are there spatial hybrids that embrace both? There could also be other typologies of ice infrastructure yet to emerge. For example, the ice sheet's status as an iceberg calving system should be acknowledged and possibly even managed. The radical conditions of the ice sheet challenge conventional architectural tendencies, forcing a resilient, even pliant architecture that maintains a loose relationship with its ground. As politics and military occupation soften, the future of occupying Sermersuaq points toward recreation and next-level geo-science, demanding an architecture that moves, responds and coexists with and within this extreme climate and context.

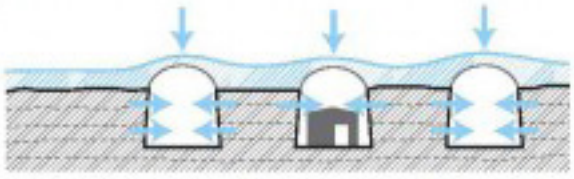
Research / Image Credits:
Mason White, Lola Sheppard, Alf Ford, Dorin Basil.
All drawings courtesy of Lateral Office / Toronto, Canada.

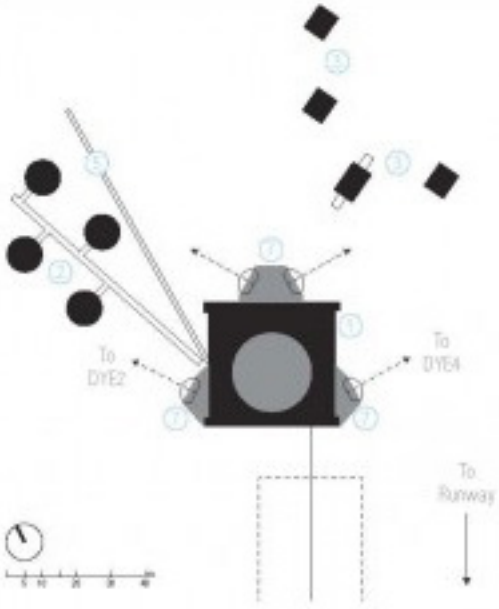


1959-1966
Camp Century

1,883 meters above sea level

Camp Century was a nuclear powered research center as a set of trenches dug into the Greenland ice sheet. It was occupied from 1959 to 1966 under the auspices of the Army Polar Research and Development Center.

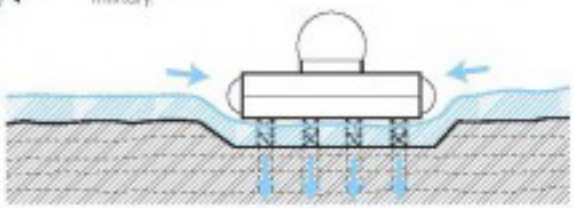


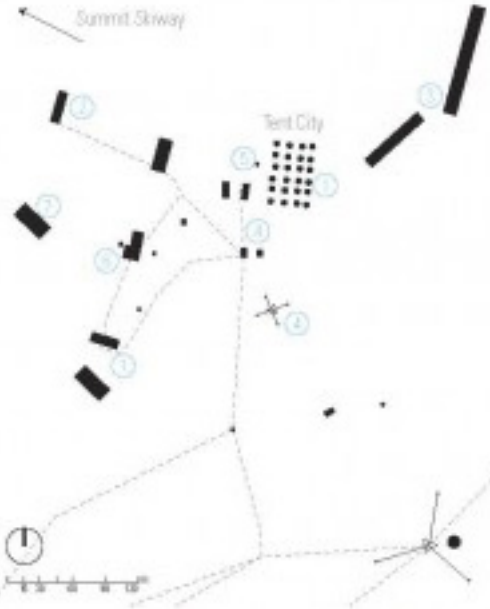


1960-1990
DYE-3

2,600 meters above sea level

1960-1990 as DEW line station
1971-1988 as GISP site
DYE-3 was an ice core site and one of four Distant Early Warning (DEW) line stations built in Greenland by US military.

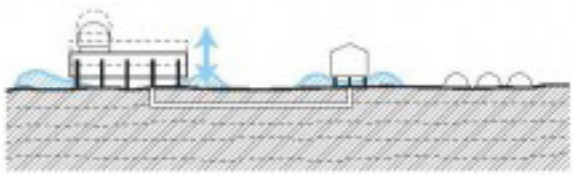




1989-present
Summit Camp

3,216 meters above sea level

Summit Camp is a year-round research station on the apex of the Greenland Ice Sheet. The population of the station is typically five in winter time, and has peaked at 55 in the summer.



1 Living Quarters | 2 Fuel Storage | 3 Cargo | 4 Generator | 5 Waste & Sewage | 6 Greenhouse | 7 Communication ○ Camp Location ↗ Outlet Glacier


Qaanaaq
Camp Century
NGRIP Camp
NGRIP
North Dye
North Central
Upernavik
Summit Camp
Qaarsut
Ittoqqortoormiit
[Scoresby Sound]
Aasiaat
pop. 3000
Kangaatsiaq
Sisimiut
pop. 5500
Kangaamiut
Maniitsoq
pop. 2000
Nuuk
Capital
pop. 18000
Paamiut
Ivittuut
Qaqortoq
pop. 3000
Narsarsuaq
airport
major towns
unmanned stations
manned stations (camps)
trails & routes
Diagrammatic Cross Section of Greenland
with relative location of station types
3000m
2000m
1000m
0m
Summit Camp
DYE3
Camp Century
Underlying rock
West
East
250km


U.S. AIR FORCE

Mason White is a founder of Lateral Office, and Assistant Professor at the University of Toronto Faculty of Architecture, Landscape and Design. White's work and research privileges architecture as a mutable territory that is formed out of and responsive to its environment and history. He is a co-author of Pamphlet Architecture #30: Coupling, and an editor of the journal Bracket: Architecture, Environment, Digital Culture. Lateral Office is the recipient of the 2010 Professional Prix de Rome from the Canada Council for the Arts.

PROJECT
GREENLAND MIGRATING
INTRODUCING
OPEN GREENLAND

MIGRATING

WHO WILL BE THE FUTURE GREENLANDER?

We asked ourselves this question upon receiving "Migration" as a research theme from DAC. The assignment also specified a context—the town of Ilulissat—where we studied how migration challenges could be transformed into opportunities through alternative forms of urban intervention.

Open Greenland

– Migration as a driver for development

TEAM GREENLAND MIGRATING:
KITAA Architects
David Garcia Studio
Henning Larsen Architects

The project is supported by:
The Danish Arts Foundation

MIGRATING WORKERS

INTRODUCTION

In 1973, the small settlement of Qullissat was closed down due to the demise of its mining industry.

Its population migrated to Ilulissat and took an important part of the community with them: their meeting space, and their church. Today, this building stands as a symbol of how meeting spaces are of vital importance to a community.

Movement and migration have been and are an intrinsic aspect of the Greenlandic culture.

A MANIFESTO

We propose a masterplan alternative, based on people as a resource, all kinds of people. Those who live there, and those to come.

Capitalizing on density and the migrating community, whether it be for one day, one season or one lifetime, this strategy aims to promote "meeting" as a resource for growth and economic sustainability.

OPEN GREENLAND

THE SEAL PROTOCOL
A WELCOME LETTER AND GUIDE
TO THE FUTURE GREENLANDER

THE SEAL PROTOCOL
A welcome letter

1.0 FREE MOVEMENT

Clause One proposes a Greenland which is inclusive and open,
allowing for free movement both locally and globally.
It underlines the potential of mankind's scarcity through a free movement policy. People are welcome to freely
move, settle in and from Greenland, increasing cultural crossovers, which allow for enhanced inventiveness
and understanding. In the past this was a necessity for survival and genetic richness. Today we propose a similar
approach to promote business ventures and stimulate brainpower. Under such a policy even migration away
from Greenland will at the very least always generate good ambassadors.

2.0 ZERO WASTE

In traditional Greenlandic hunting culture an animal was used in its entirety,
from skin to bone, leaving no waste behind.
Clause Two of the Seal Protocol is a zero waste approach which applies to any activity taken by a visiting or local
initiative. From industry to service, from tourism to education, the Zero Waste Clause should be one of the main
targets to comply as a visitor or a local. There is a way of migrating close to and away from Greenland and
working by example.

3.0 OPEN LAND

Land is borrowed not owned.
Clause Three proposes to extend the present Greenlandic urban policy of no private land ownership, to the
visible, of short or long stay and to a sense of social and economic sustainably.
From so land invasion to open respect for local and visiting traditions, migration and immigration will be
encouraged to a common understanding that meeting makes with your fellow visitor, or the world, translates into
immediate wealth and a rich archive of creative thinking.

4.0 CULTURAL BANK

In an effort to enhance the potential of cultural exchange, any large corporation, and in proportion to their
investment, will partake a training program, where Greenland nationals will be invited to train in the corporation's
relevant studies and country of origin.

5.0 WELCOME TO GREENLAND

Arrival to Greenland implies the signing and acceptance of the Seal Protocol and all its clauses.
All signatories become de-facto Ambassadors of Greenland and are henceforth to promote, disseminate and
encourage, both the Seal Protocol and the qualities of Greenland as a whole.
Welcome to Greenland!

THE AGGREGATED TOWN,
A NEW URBAN PARADIGM BASED ON MIGRATION

We propose an inclusive strategy engaging migration
as a driver for town development.

A strategy capitalising on people meeting people for a
sustainable, social and economic growth in
Ilulissat and the rest of Greenland.

WHO WILL BE THE FUTURE GREENLANDER?

MI GRA TING

CULTURE CENTER

Tourism is a vital economic life line of Ilulissat. From one day stops by cruise ships during the summer, to longer visits to enjoy the spectacular nature, tourism also has a large impact on the town's resources and infrastructure.

One of the largest challenges is to establish a meeting between the local culture and the visitor.

Next to the existing school, in the center of Ilulissat, we propose a Culture Center a multipurpose space where locals can meet for municipal gatherings. As part of this strategy, the elders home is integrated in the building while extending the cultural offer of the town by creating exhibition spaces and a main library.

The Cultural Center hopes to become a lantern in the town center that will attract both locals and visitors, young and old, where the local culture can be shared across generations and continents.

THE HARBOR

Lack of housing is almost endemic in Greenland. Waiting lists for housing in Ilulissat alone is in the order of five years. Due to future work migration linked to resources and the desire of the town to grow and attract youth to temporary housing is a crucial need for the area.

The harbor has been an area close to the town center, linked to fishing and the sea, the traditional connection to the rest of the world. Here we propose a market for locals and visitors next to the fishing harbor. Adding to this, temporary housing for workers and students is integrated in the market plaza and the harbor edge, an area full of potential and not developed. Locals, tourist, students and workers from abroad could enliven this otherwise forgotten space near Ilulissat's center.

GLACIAL HUB

Student migration in Greenland is a serious national concern. Oftentimes young students who travel abroad to pursue their studies do not come back. This is largely due to lack of higher education offers in Greenland that can compete with international curriculums.

On the way to the Ilulissat Ice Fjord, a UNESCO world heritage site visited by tourist and locals alike, a new meeting hub is proposed.

Aiming to enhance the encounter between students, locals and tourists, the Glacial Hub offers a new UNESCO office, a tourist information center and spaces for the new Faculty of Glacial Studies.

It's purpose is to attract students from Greenland and abroad to a specific curriculum only Ilulissat can offer. In this way, the center aims to enhance the cultural and educational possibilities of the town, using the ice fjord as a main attractor.

SPORTS PLAZA

Hunting, dog sledding, fishing and sports in general, are an everyday reality in Ilulissat. All generations engage with nature and sports, despite the hard climatic conditions of the winter, but the infrastructure cannot meet the needs of the population. It is often the case that the young stay up late awaiting their turn to use the overcrowded indoor facilities.

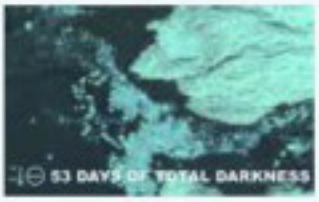
At the heart of the town, both the outdoor football field and the sports hall share one of the main streets in Ilulissat.

Capitalizing on this long tradition of sports and outdoor activities of the local culture, a sports plaza is proposed.

A temporary cover shelters the football field during the cold season, allowing for activities to take place all year round.

The street becomes a space for events, from the annual sled dog race in winter to football competitions during the summer, aiming to create a field of activities throughout Ilulissat.


MIGRATION
FROM CHALLENGE TO ASSET


53 DAYS OF TOTAL DARKNESS


56 DAYS OF TOTAL DAYLIGHT


40 METERS


ILULISSAT
MIGRATION CHALLENGES


A NEW MASTERPLAN
ALTERNATIVE


BASED ON PEOPLE
AS A RESOURCE

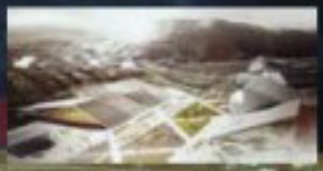

ILULISSAT
AQ + ORE + GATE


STEP 3


MARKET HARBOR


ARCTIC HUB


SPORTS PLAZA




CULTURE CENTER


EMBRACING MIGRATION
FOR FUTURE CHANGES


WHERE MEETING
POINTS GENERATE
A NETWORK OF
ACTIVITIES
CONNECTING
THE TOWN
PHYSICALLY
AND SOCIALLY


ILULISSAT
THE AGGREGATED TOWN

MI
GRA
TING

Human cultures have found two fundamental ways of sustaining societies. One is the sedentary agricultural form and the other is the nomadic hunter-gatherer way of life. The agrarian must cultivate land, and often, this cultivation is an on-going process that takes several generations. The farmer must own farmland, and be able to pass it on to the coming generations. A farm is much more efficiently run if several people collaborate on cultivation of a larger lot of land, compared to when everybody fends for themselves. For it all to work, the system requires several things. The first is leadership. One leader who takes responsibility and instructs all the others – a hierarchy. Grain from one growing season must be kept for sowing in the following season, and its nutritional value does not deteriorate significantly with time. This is the beginning of cumulative wealth.

In contrast, the hunter-gatherer is dependent on access to large expanses of land, but does not own a particular part of it, nor has any ability to enforce ownership. A hunter's main commodity is fish and meat—perishable products that do not keep well. A hunter's luck is unpredictable, and while one person may fail one day, another strikes bounty. For this reason, the hunter-gatherer finds it smarter to share the catch of the day with all his neighbors, and count on them sharing back tomorrow. The modern Greenland population is a mixture of Inuit hunters and European farmers, and the modern Greenlander has largely adapted to sedentary lifestyle and a diet with a large agricultural component.

The modern population of Greenland, however small it is, has vastly expanded beyond the carrying capacity of the ecosystem for traditional hunter-gathering life. In this project, we have posed questions about how the people of Greenland can make the most of their mixed cultural background to sustain themselves through a combination of traditional abilities and new opportunities for agriculture, trade, tourism and exploitation of hydroelectric power, minerals and petroleum resources in a warming Arctic. How can this be developed while still observing the Greenlandic realization that the land owns you, while you cannot own the land? How can agriculture and mining develop in a land where all ground is common ground?

BY MARIK ROSING

CULTIVATING

THE POWER OF IMAGINATION

BY MINIE ROSING

The brain consumes about one fourth of the energy spent by the human body. Even so, it uses a mere twenty-five watts, about the same as a modern energy saving light bulb. Despite this low consumption of energy, bright new ideas flash through brains somewhere on our planet every now and again. It is essential to our understanding of humankind's role in nature that we quantify the influence of human ideas, aspirations and desires on the functionality of our planet. We can do this by analyzing how large a share of Earth's energy budget human activities claim, because energy is a convenient common currency when comparing different processes.

The dominant source of energy on Earth is sunlight, which provides an average of 342 watts of energy to every square meter of Earth's surface. One third of this energy is reflected directly back to space. The remaining two thirds are mostly converted to heat, but a very small fraction (about one in one thousand) is used by plants and algae to produce biomass from water, CO_2 and mineral nutrients. When living organisms use energy from the Sun to produce biomass, their metabolisms alter the composition of the atmosphere, oceans and soils. The living organisms in Earth's surface environments collectively process much more energy than Earth itself spends in all the interior processes associated with volcanism, mountain building and the movements of the continents. Therefore, life is a major force in shaping our planet and its environments.

Earth's environment has been influenced by living organisms ever since life learned to harvest solar energy billions of years ago. In the geologic record, we can detect changes in the composition of the atmosphere and oceans when new metabolic strategies evolved in the biosphere. When microbes invented photosynthesis that produces oxygen as a waste product 2.4 billion years ago, the world was transformed. Oxygen destroyed some of the greenhouse gasses in the atmosphere, and Earth descended into a global ice age that lasted more than 200 million years. Oxygen also caused new rock types to develop, and Earth took an altogether different course of evolution forever after.

Humankind is also a biological force on the global environment. Our impact stems from two sources: one that has to do with our physiology, and the other that has to do with our behavior. We need natural resources to sustain ourselves. We eat mountains of plants and oceans of fish, and we feed even more biomass into the domestic animals that we eat. The global production of biomass by plants and algae, known as net primary productivity (NPP), captures solar energy equivalent to about one quarter of a watt per square meter of Earth's surface. This is the energy that fuels the activities of all animals and numerous other types of organisms. We can compare this quarter of a watt to the meager one tenths of a watt Earth spends on keeping its interior glowing hot, producing the magma that pours out of volcanoes, moving the continents across Earth's surface and building mountain chains where the continents collide. This contrast illustrates how great of a factor life is in the way our planet functions. In this accounting, the human need for food energy is only around one thousandth of a watt per square meter. In contrast to our very limited need for food energy for sustaining our metabolic needs, our behaviour has a significant impact on the energy accounting for Earth.

We often define the human species by its capacity for abstract thinking, but what surely marks us from the animals is our great desire to burn things—that deep urge to put a match to anything that will ignite. Since the origin of humankind, we have happily burned away. In the beginning we just made fires to keep our naked skin warm, and to cook our food to make it easier to digest. The twigs and branches we burned were readily composted, and the smoke produced was negligible. This side of our behavior had little global effect throughout most of human history. At some point in time, humans got the idea of planting and sowing seeds, and agriculture developed. Farming limited to directly arable land had little global impact, but the invention of irrigation stimulated biological productivity and human population grew thanks to the increase in food availability. Farmland became scarce, and large-scale slash and burn farming began to decimate the forests and impact the carbon cycle in a significant way. Today, humans appropriate about one third of the total biological production on land, because we still burn wood, use natural fiber for clothing and timber for construction. These sides of our behavior are responsible for much larger demands on natural resources than just our need for food.

With the development of

thermodynamics in the 18th and 19th century. It was discovered that energy can be translated from one form to another, and that heat was just another expression of energy, not a kind of matter as was believed earlier. This insight gave us the means to put heat energy to work. Coal became a source of labor rather than just heating, and industrialization could take off. Cultures that understood thermodynamics became major world powers. They could perform work equivalent to populations far greater and more than the primary production of their land could supply with food.

That relieved us of the ethical dilemma of how to get things done, without commanding or enslaving somebody else to do it. Industrialization made humanism affordable, and paved the way for abolition of slavery. As soon as it became less expensive to perform hard labor by steam rather than by feeding people to do the work, the ethical aspiration of freeing the human race became practical. The Enlightenment was contemporaneous with and probably promoted by the decreasing need for human physical labor. As innovation became the main provider of prosperity, the human spirit became a more valuable resource than the human body force. The new industry still had to invest hard labor into acquiring coal as an energy source, but the energy yield per man-hour of work in a coal mine is orders of magnitude greater than the bodywork spent extracting the coal. With the discovery of oil, the energy accounting became even more favorable. Easy access to fossil energy made it feasible to employ people to steer mechanical work rather than commanding them to do the work themselves

Democracy and humanism forms the basis of our society because it is easily affordable. Energy for work, heating, cooling and light is cheap, and we are unwilling to accept higher costs or give up any of these luxuries. Our collective burning of fossil fuels now amounts to an average of three hundredths of a watt per square meter of Earth's surface. This is equal to about one third of the total energy budget for all geological processes in Earth's interior, and twenty times greater than the energy we require to sustain our physiological needs. This spending of fossil energy has provided every human with a work capacity equivalent to twenty willing and soulless assistants whom we do not have to care about. They are machines and can be built and destroyed, commanded and directed by our will without any ethical qualms. The ease of transportation afforded us by this mechanical work force, with railroads, ships, trucks and airplanes, has allowed us to distribute food from regions of surplus production to areas of shortage. We can increase food production by bringing fertilizers and water to the fields, and the agricultural areas, formerly used for horses and oxen needed in preindustrial farming and transportation, can now be allocated to grow food for human consumption. Spending of fossil energy therefore not only added to our available energy budget, but also allowed us to appropriate the sources of food and renewable energy much more efficiently. In the industrialized world, this ability cured the problem of malnutrition and famine for the first time in human history.

That is the reason why the identification of CO_2, the waste product of industrial power, as an environmental problem is so unbearable. There is no end to the services brought to humankind by harnessing of fossil energy. For two centuries, we have been relieved of the ethical problems associated with having work done for us. We have eradicated famine in most of the world and built democratic humanistic societies. We can now see that our appropriation of a large fraction of Earth's energy budget has upset the ecosystem in a way that may be detrimental to civilization. However, it has also given us the power to avert further disasters and actively steward Earth, if we can muster the will and insight to shift our supply of energy towards renewable sources while also lowering the fraction of global biologic productivity we appropriate for our own use. We should accept that high energy consumption is a basal necessity for supporting a society guided by the ethical values we praise. What makes us human is that we spend lots of energy beyond our physiological needs on activities related to arts, culture and social interaction. We do not drive our cars because we are blinded by fascination with technology, but rather because we wish to get home from work soon and have dinner with our children, or to see our friends, attend sports events or visit museums. We primarily spend energy to facilitate social activities. We should not point fingers at our modern energy-intensive society as an expression of human folly, with the underlying assumption that we all share guilt for having brought our world in distress. It is also useful to remember that solar energy is available at a rate of 342 watt per square meter, more than ten thousand times as much as the three tenths of a watt per square meter we currently get from the burning of fossil fuels.

Even at almost 7 billion people, our physiological needs can be accommodated by Earth's ecosystem. What causes our overwhelming environmental impact is our behavior. A single idea fostered in a human brain can significantly change the way our planet functions. The concept of thermodynamics has not only completely transformed society, but also changed the trajectory of Earth's geological evolution. Our impacts on nature are almost exclusively functions of our aspirations and only to a much lesser degree of our physiology. It is what we want and not what we need that determines the destiny of Earth. It is our hearts—which, by the way, only spend half as much energy as our brains—that determine how we employ the powers granted us by our intellect. Architecture holds the power to generate visions that stimulate human aspirations and dreams to develop sustainable societies for a possible future.

" Even at almost 7 billion people, our physiological needs can be accommodated by Earth's ecosystem. What causes our overwhelming environmental impact is our behavior."

WHY SOCIETIES COLLAPSE

Maya in the Yucatan, the Easter Islanders, the Anasazi, Fertile Crescent society, Angor Wat, Great Zimbabwe are all societies that have collapsed. Archaeologists have shown us that there were environmental problems underlying many of these past collapses. But there were also plenty of places in the world where societies have been developing for thousands of years without any sign of a major collapse, such as Japan, Java, Tonga and Tikopia. So evidently, societies in some areas are more fragile than in other areas. How can we understand what makes some societies more fragile than other societies? The problem is obviously relevant to our situation today.

BY JARED DIAMOND, PROFESSOR OF GEOGRAPHY, UNIVERSITY OF CALIFORNIA, LOS ANGELES

What about ourselves? What is there that we can learn from the past that would help us avoid declining or collapsing in the way that so many past societies have? Obviously the answer to this question is not going to be a single factor. This is a complex subject. But how can we make sense out of the complexities of this subject? In analyzing societal collapses, I've arrived at a five-point framework—a checklist of things that I go through to try and understand collapses:

1. The first item on the framework is to look for human impacts on the environment: people inadvertently destroying the resource base on which they depend.

2. A second item on my checklist is climate change. Climate can get warmer or colder or dryer or wetter.

3. The third thing on my checklist is relations with neighboring friendly societies that may prop up a society. And if that friendly support is pulled away, that may make a society more likely to collapse.

4. The fourth item on my checklist is relations with hostile societies.

5. And then finally, the fifth item on my checklist is the political, economic, social and cultural factors in the society that make it more or less likely that the society will perceive and solve its environmental problems.

So, I'm looking at these issues of collapses for a lot of past societies and for many present societies. Are there any general conclusions that arise? In a way, just like Tolstoy's statement about every unhappy marriage being different, every collapsed or endangered society is different—they all have different details. But nevertheless, there are certain common threads that emerge from these comparisons of past societies that did or did not collapse and threatened societies today. One interesting common thread has to do with, in many cases, the rapidity of collapse after a society reaches its peak. There are many societies that don't wind down gradually, but they build up, get richer and more powerful, and then within a short time, within a few decades after their peak, they collapse. For example, the classic lowland Maya of the Yucatan began to collapse in the early 800s, literally a few decades after the Maya were building their biggest monuments, and Maya population was greatest. Or again, the collapse of the Soviet Union took place within a couple of decades, maybe within a decade, of the time when the Soviet Union was at its greatest power.

There are often many subtle environmental factors that make some societies more fragile than others. Many of those factors are not well understood. For example, why is it that of those hundreds of Pacific islands in the Pacific, why did Easter Island end up as the most devastating case of complete deforestation? It turns out that there were about nine different environmental factors—some rather subtle ones— that were working against the Easter Islanders, and they involved fallout of volcanic tephra, latitude and rainfall. Perhaps the subtlest of them is that it turns out that a major input of nutrients, which protects island environments in the Pacific, is from the fallout of continental dust from central Asia. Easter, of all Pacific islands, has the least input of dust from Asia restoring the fertility of its soils. That's a factor that we didn't even appreciate until 1999.

But how on earth did these societies that collapsed not see what they were doing? I've been trying to develop a hierarchical set of considerations about why societies fail to solve their problems—why they fail to perceive the problems or, if they perceive them, why they

PHOTO BY THOMAS EIS

fail to tackle them. Or, if they tackle them, why do they fail to succeed in solving them?

I'll just mention two generalizations in this area. One blueprint for trouble, making collapse likely, is where there is a conflict of interest between the short-term interest of the decision-making elites and the long-term interest of the society as a whole, especially if the elites are able to insulate themselves from the consequences of their actions. When what's good in the short run for the elite is bad for the society as a whole, there's a real risk of the elite doing things that would bring the society down in the long run. And the other generalization that I want to mention is that it's particularly hard for a society to make "good decisions" when there is a conflict involving strongly held values that are good in many circumstances but poor in others.

What's the most important thing that we need to do about the world's environmental problems? My answer is, the most important thing we need to do is to forget about there being any single thing that is the most important thing we need to do. Instead, there are a dozen things, any one of which could do us in. And we've got to get them all right, because if we solve eleven, but we fail to solve the twelfth, we're in trouble. For example, if we solve our problems of water and soil and population, but don't solve our problems of toxics, then we are in trouble.

We have a choice. Does that mean that we should get pessimistic and overwhelmed? I draw the reverse conclusion.

The big problems facing the world today are not at all things beyond our control. Our biggest threat is not an asteroid about to crash into us—something we can do nothing about. Instead, all the major threats facing us today are problems entirely of our own making. And since we made the problems, we can also solve the problems. That then means that it's entirely in our power to deal with these problems. In particular, what can all of us do? For those of you who are interested in these choices, there are lots of things you can do. There's a lot that we don't understand, and that we need to understand. And there's a lot that we already do understand, but aren't doing, and that we need to be doing.

Green(Peace)land

Questions to Greenpeace on Greenland

What are the future challenges and opportunities for Greenland and the Arctic from the environmentalist's perspective? We tried to find out more by asking some questions to Jon Burgwald, responsible for the Arctic region at Greenpeace Nordic.

BY CO EDITORS

QUESTION: *From your environmentalist perspective, what are the potential future conflicts in relation to increased mining and oil sector activity in Greenland and the Arctic in general?*

ANSWER: With the magnitude of the various large scale projects under development in Greenland, the list of environmental risks and conflicts is potentially very long. There are, however, a few issues that stand out from the rest. The biggest of these is the risk for an oil spill like the one we witnessed in the Gulf of Mexico. Currently the Greenland government is opening most of Greenland's waters for exploratory drillings. The Scottish oil company Cairn drilled a total of eight wells in 2010 and 2011 and the Greenland government is in the process of opening up the east coast for drillings already from next year.

When drilling in the Arctic, the short drilling window due to sea ice, and the ever present risk of iceberg collisions significantly increases the risk of a major oil spill. If a spill occurs in the Arctic, the consequences for the environment and the people living there could drastically surpass the effects from the Deepwater Horizon catastrophe. To remove oil from ice covered waters is impossible, and as we have seen from the Exxon Valdez accident in 1988, the oil will stay in the environment for decades. The effects on the environment are of course evident, but the effects on the Greenlanders and the Greenlandic economy cannot be underestimated. Currently more than 80% of Greenland's exports come from fishing, and if a spill happens off the west coast, almost all of this industry would disappear.

QUESTION: *How is your organization engaged in the developments in Greenland, and to what degree is there a climate for cooperation between the different stakeholders and interest groups?*

ANSWER: Greenpeace's engagement in Greenland is a part of an Arctic campaign, as a lot of the environmental problems in Greenland are similar to those in other parts of the Arctic. With the climate warming, the ice is slowly retracting, which opens an area for industrial exploitation—areas that so far have been naturally protected by ice. The retreating ice edge and acidification of the oceans are already causing pressure on the Arctic environment, and destructive industrialization will cause irreversible harm to a unique and wondrous part of our planet.

This is the initial reasoning behind Greenpeace's engagement in Greenland and the rest of the Arctic, but it doesn't make us blind to the social and financial situation in the far North. The Greenlanders have a fair and just desire for development and for the right to independence, and it is definitely not the wish of Greenpeace to hinder that desire. Greenpeace as an organization is there not only to take the position of naysayer, but also to offer our advice regarding environmental concerns and options when it come the large scale industrial projects currently under development in Greenland. We do our best to listen, participate and comment on environmental impact assessments, and in general try to identify and advise the Greenland administration in areas where we see room for improvement.

When it comes to cooperation between the different stakeholders and groups, Greenland is in a very interesting phase. Previously there had been little support and financial basis for national organizations. With big business increasingly eyeing Greenland, stakeholder groups, interest groups and local protest groups are growing like never before. Just within the last year, several groups have formed, and even though the formalized collaboration between them still is scarce, this is only a matter of time.

QUESTION: *The role of Greenland as a "climate mirror" of the world is stated by many—that the effects of global warming are seen here in a very concrete and pure way, and what happens to Greenland ultimately affects the whole world—what could possibly be the potential of this situation in the future development of Greenland? Can Greenland find a unique way to handle these issues and become a global example?*

ANSWER: There is no doubt that the global warming is seen to a larger extent in Greenland than in other places of the world. When you talk to hunters and fishers in the rural settlements, they in unison tell you that they have been aware of the changing climate for decades. Their parents were able to hunt on the ice for large parts of the year—sometimes they could even walk across the ocean to the Inuit tribes on the Canadian side. But now the ice is only covering the ocean for short, irregular periods. The hunters and fishers have had to change their hunting patterns and now fear whether they can continue their traditional way of living.

Even though the changing climate is a serious threat to the Greenland culture and hunting, it cannot be seen as a mirror for how the rest of our world will react to our continuously heating climate. In other parts of the world, climate change will undeniably have serious negative impacts on the environment and livelihood of the people. In Greenland, however, climate change both opens for interesting possibilities and risky pitfalls. These days the receding ice is seen as an option for

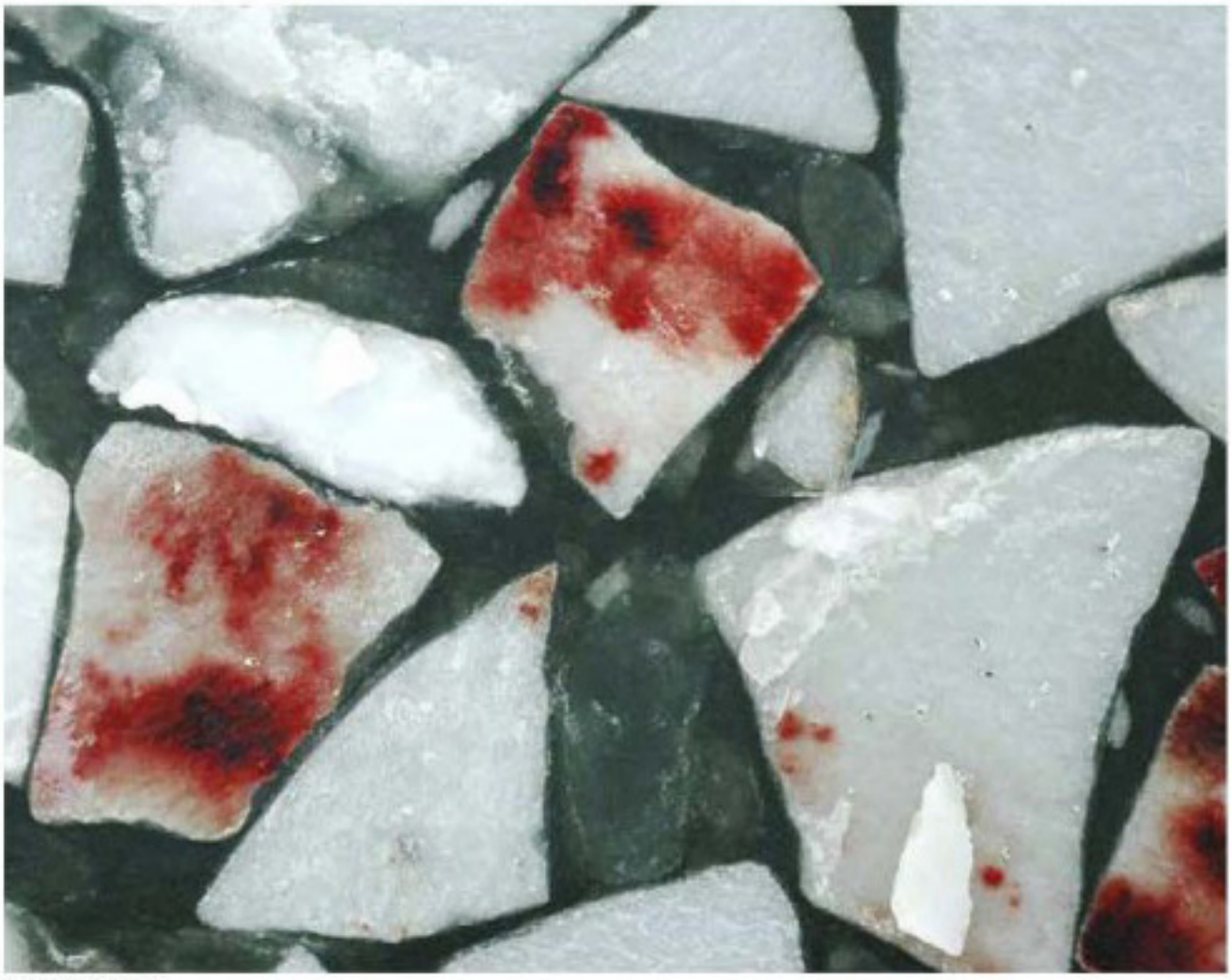


PHOTO BY THOMAS EIS

more of the same dirty oil, which caused the ice to melt in the first place. But in Greenland, the changing climate can also be used for good. It is increasingly possible to grow a variety of crops in the southern parts of the country, and the melting inland ice can potentially be one of the world's biggest untapped resources of CO_2 neutral energy.

Greenland is standing at a crossroad. The changing climate can either be used to the same industrial madness, which has caused environmental mayhem in so many parts of our planet, or it can be used as a platform for a development in respect for the pristine Arctic environment.

QUESTION: *Greenland has a number of challenges (socially, politically, etc.) and sees the income of the new industries related to oil, gas and minerals as a key to solving some of these problems. Aside from exploitation, how do you see Greenland solving or facing these challenges?*

ANSWER: For Greenpeace it is very important to stress that we do not want to see Greenland as a natural museum. Greenpeace fully recognizes the challenges Greenland is facing and their wish for development. At the same time, we think it is important to ask that this development be achieved in a way that respects the pristine Arctic environment. Our opposition to the last year's exploratory oil drillings was based on that concern. Oil exploration is always unsafe and environmentally harmful, but the risks and consequences of oil drillings in the Arctic compared to almost all other places are ten times higher. Therefore it is Greenpeace's position that the Arctic countries should protect the environment by implementing a ban on all offshore oil drilling. This is not the same as opposing all large scale industrial projects in the Arctic or in Greenland. For the mineral industry, we assess them on a case by case basis, and for some of them we see a huge potential for development in Greenland. But at the same time it is important to stress that we don't see any quick fix solution for the problems Greenland is facing. There are myriad examples of other countries that have tried to build their development on a few large scale extraction projects, but failed. This must not happen to Greenland, and they should proceed with care and demand the highest possible standards from the companies with whom they are engaging.

ORGANIZED BY NATURE **ENVISIONING GREENLAND**: CONTESTED NATURECULTURES IN THE MAKING

Currently, the traditional "cool" representation of Greenland as a frozen landscape devoid of people and human structures is being challenged by an emerging vision of Greenland as "hot." This article presents and describes these two versions of Greenland, showing how demarcations of what is "nature" and what is "culture" play active roles in representing and performing Greenland in very different ways. The visions of a cool and hot Greenland may be seen as contesting and contested natureculture (Latour 1993) that enact Greenland through shifting configurations, making some elements visible while others disappear. By attributing performative capacity to entities that we usually confine to the role of prop or backdrop to human agency, many new and alternative actors emerge on scene in creating possible Greenland(s). The question is how the current uncovering, distributing and reshuffling of resources, whether of a human or non-human kind, may contribute to visions that are able to sustainably integrate and bring forward Greenlandic, and global, naturecultures.

BY CARINA REN, ASS. PROFESSOR, INSTITUTE OF CULTURE AND GLOBAL STUDIES, AALBORG UNIVERSITY

COOL GREENLAND

Portrayed in travel and nature magazines, in documentaries and in the popular imagination as a colossal, remote and frozen landscape of silence and solitude, Greenland is by most people perceived as a place of nature. An example of this is how Greenland is marketed in tourism material. Brochures and webpages display ice-covered sceneries devoid of people and human structures. Only rarely (although increasingly) are the tourism representations of a country of ice, water and rocks challenged by dots of human activity and habitation. However, as any traveler to Greenland would know, gaining access to Greenland's tourism sites and experiences requires a careful composition of entities of which only a few would we usually describe or perceive as natural. Airplanes and cruise ships, travel agents, ticket purchases and documents carry us out to "nature." Local guides and service providers, lodging and outdoor equipment, maps and GPS ensure that we return back home safe and sound. In a tourism context, all of these entities, which we usually think of as cultural, work to perform the vision and enactment of a cool and "natural" Greenland.

Imagining a place perceived as nature begs the reproduction of stereotypes, for instance of indigenous peoples living in harmony with nature, consuming nature through food products and clothing, inhabiting and passing across the landscape in seamless, almost symbiotic ways. This vision of a frozen, empty landscape of purified nature, only populated by people entirely conditioned by nature, has worked as a potent representation of Greenland, not only in tourism, but also in many other spheres of the social-historical imagination.

NATURECULTURES

The representation and imagination of a place as a place of nature impacts the way not only our ideas, but also our experiencing of this place are framed. Representations and experiences of place reinforce each other through their mutual framing and hence, visions and the imagination can have a very real and powerful impact. As argued in the above, where nature reigns in our imagination, culture must necessarily yield. This occlusion of presence, of activity, of representation is the reason for which we should question and challenge our idea of purified nature and culture. The example with tourism demonstrates that the cool nature vision of Greenland is an abstraction, an illusion, an impossibility. Traveling to, or—as proposed in the exhibition through its four themes—inhabiting, connecting, migrating and cultivating Greenland requires much more than just nature. Instead, enacting Greenland requires a provision of naturecultures (Latour 1993).

The vision of a cool Greenland may be seen as a network of naturecultures that enact Greenland through shifting configurations, making some of its actors visible while others disappear (Law 2000). When the ice, fjords and polar bears step into the fore, people and industry disappear. In an emerging hot vision of Greenland presented in the following, roles are shifted as local empowerment and global interest, mining equipment and foreign investments access the top of the agenda. As development discourses triumph, voices of sustainability, conservation and climate change must

necessarily be lowered—or silenced. The question is whether the inclusion of naturecultures can help pave the way to a more balanced envisioning and enactment of a vision.

HOT GREENLAND

The deep-frozen cool version of Greenland is challenged by an emerging vision of vital enterprise and industriousness, easily identifiable in the media, politics and public discourse of contemporary Greenland. This vision of social and economic transformation is primarily connected to development plans in the oil, gas and mineral industries, and is heralded by its advocates through a hot vision of Greenland where Greenlandic society and citizens claim their rights to act, to industrialize, to enter and engage with a global economic and political agenda.

Unlike the cool vision, this new vision of Greenland is one of industry, urbanity and mobility. It is populated by entrepreneurs, oil drills, buildings of glass and steel, long haul airports and cargo plants, representatives from foreign powers and stopover tourists. Unlike the cool vision, this vision is one of cultivation. Similarly to how the cool, natural version of Greenland entailed a meticulous assembling of components that where highly cultural, this hot vision requires or absorbs elements from what we usually see as belonging to a natural sphere. Nature plays a crucial part in the composition of hot Greenland. Climate change and melting ice are but two actors engaging in uncovering grounds on which to envision, build and represent this new Greenland. As ice makes way for the bedrock, natural resources can more easily and less expensively be extracted and new industrial and dwelling zones can be developed. As the Northwest Passage becomes ice free, container ships and cruise liners suddenly gain access to attractive new waterways, not only attracting business opportunities, but also geopolitical interest.

The hot vision of Greenland can help demonstrate that Greenland is not organized by nature; rather it is organized along with and through nature. Also, the hot vision shows that nature is simultaneously being organized with and through local and global change. Hence, Greenland's reality is one of contested and contesting naturecultures.

CONTESTED VISIONS

In what I have termed the hot vision, nature and culture both play necessary and decisive roles. But as shown, the roles played by nature and culture are far from permanent and far from being recognized by all of the stakeholders who take part in the shaping and negotiation of Greeland's future. Nature gets in the way of hot visions as environmentalists challenge the building of facilities for mineral extraction in vulnerable areas; as wind and weather conditions preclude the (profitable) building of a long-haul airport at central tourism sites; as drilling for oil turns out to be too difficult due to the geological composition of the bedrock; as global climate advocates urge Greenland to support an agreement on lowering carbon dioxide emissions. A hot vision of a possible Greenland, cultivating without attending to viable connections with what Bruno Latour calls non-human actors, is far from accomplished.

A question remaining is what kind of vision, what kind of representation are we given of Greenland by the Possible Greenland exhibition? And second, how might these visions of a possible Greenland impact on the future framing, experiencing and enacting of Greenland? The answers to these questions are not (yet) given. Hopefully, the discussions and reflections the exhibition will spark in Venice, in Greenland and elsewhere, will help future lawmakers, public commentators, business entrepreneurs and citizens to carry on the work of not only envisioning, but also building sustainable Greenlandic naturecultural futures.

References
Latour, Bruno. We Have Never Been Modern. Translated by Catherine Porter. Cambridge, Mass.: Harvard University Press, 1993.
Law, John. "On the Subject of the Object: Narrative, Technology, and Interpretation." Configurations 8, no 1 (2000): 1–29.

"Unlike the cool vision, this new vision of Greenland is one of industry, urbanity and mobility."

EXHIBITING GREENLAND

BY DAVID WINFIELD NORMAN

'Exhibiting Greenland' was hardly common before Home Rule, and has almost never included the voices of Greenlanders. Instead Greenland was a symbol of the Nordic heroic history, the evidence of Scandinavian humanitarianism, or an arctic jewel. It was a tool for Denmark, and so, what makes Greenlanders 'Greenlandic' and not Danish was extricated from what makes them 'Nordic.' Photographs must be displayed alongside antique weapons, so the viewer knows they are looking at an ancient culture, instead of one living. This is Greenland curated by the West. But when Greenlanders curate and directly produce their own images, paradigms are overthrown. Upheaval of curatorial practices – contextualizing the anonymous ethnographic collection, performance installations occupying urban space, art reaching into life – characterizes the exhibitions of Greenlandic art of the last decade. Greenlandic artists mock the European need to regulate culture through symbols, and battle the outside process of creating Greenland through catalogued and exhibited materials. While today's Greenlandic artists sweep clean the ethnographic displays that previously exhibited Greenland, they remain aware that they must also attack the settler mindset that curated them. One of the earliest such exhibitions was a selection of artifacts from Iceland, the Faroe Islands and Greenland in the colonial wing of the 1900 Exposition Universelle in Paris. Despite the polar bear skins and umiaks in the Trocadero Palace, the Nordboudstilling reflects Denmark's history, the history of Danish possession. The exhibition committee sought to directly connect Denmark with the greatest Viking travels, as discussed in a Danish review: 'It whispers a few things about our past, about our culture's childhood.'[1] As Mogensen notes, it seems odd to include the Faroe Islands and Iceland "in the colonial section,"[2] suggesting:

> ...the traces of Nordic culture in Greenland could be better understood if the visitor could compare them...with the better-preserved houses and other material artifacts from Iceland and the Faroes.[3]

In other words, for visitors to more clearly link Nordic history with a non-Western, indigenous nation. The entire Danish contribution to the expo could be read as a "hierarchy of civilization"[4] – from 'primitive' or historic Greenland to cosmopolitan Copenhagen – measured by existing cultural content. While Greenlandic language texts exist from as early as the eighteenth century, language was a tool of conversion, and as non-Western, was not seen as a cultural-civilization marker – the opposite, the first means of imparting civilization.[5] Likewise Greenlandic literature was not discussed as a Greenlandic cultural development, but a reflection of the "excellent results of the colonization of the Eskimos in Danish Greenland."[6] And this all serves Denmark's desired self-image as heroic and humanitarian since, juxtaposed to the Icelandic and Faroese objects:

> ...one could understand the sad story of how these Northern-dwelling Christians had disappeared from Greenland, and therefore how we must strive to bring them to civilization from this wilderness.[7]

The Nordboudstilling only presents Greenlandic art within the Western context, never on its own terms. Bruun relates predominant geometric shapes and abstraction to European Iron Age styles,[8] revealing the dominant view of Inuit art as 'primitive' and 'naive.' In exhibiting contemporary materials alongside tools and archaeological artifacts, this position is upheld. Especially within an ethnographic exhibit – with its soft-scientific/historic pretext – material is filtered, as Çelik writes, by "the controlling nature of the empowered observer,"[9] traveling first through the hands of Western curators. Then the "empowered observer" (as visitor) exhibits "empathetic listening"[10] (as Greenlandic artist Pia Arke referred to it) in his relation to the exhibit – a move away from coveting the non-West's exotica, but still a way of consuming, defining and limiting it. Authenticity and autonomy are lost as culture is relegated to a list of outside symbols and concepts drawing from a broader European desire to categorize. The European 'orders' 'the wild,' then honours himself for his benevolence and his ability to recognize beauty in aesthetics opposed to European beauty. So then in an ethnographic installation such as the Nordboudstilling, only the Western man is exhibited in relation to what Arke calls "ethno-aesthetics...a narrative of the West seen from the outside."[11]

This is immediately evident in the contrast between Greenlandic art as exhibited with Western interests in mind, and where Greenlandic identity speaks for itself. In Pia Arke's Three Graces, women stand before a photo of the South Greenland fjord. They examine it casually, posing like museum visitors, then stand stiffly holding 'ethnographic objects', as if unable to relate and uncomfortable being associated with them. Finally they embrace them and reach out to the viewer, in an acknowledgment that Greenlanders can be modern and ancient on their own terms. In 2010 Kuratorisk Aktion curated these photographs in the ethnographic wing of the National Museum in Copenhagen, giving context and Greenlandic ownership back to the objects, a process that relates to Arke's pinhole camera, as Gant writes:

> The dream-like quality of the images that slowly emerge indicates that we are dealing here with an unfinished and maybe unfinishable process.[4]

The relationship is continuous and complicated, because these are not objects of study but lived objects.

The exhibitions and events program at Nordatlantens Brygge, Royal Greenland's historic warehouse in Copenhagen, expresses the same process across the three regions, but with the greatest resonance to Greenland. From within Denmark's original colonial arm, Greenlandic artists reclaim and redefine their place within the Danish realm, which is often expressed in curatorial practices that deny the typical isolationist art exhibition format. In 2009, the year of the COP15 climate summit and of Greenlandic Self-Rule, Inuk Silis Høegh turned Christianshavn into an ice field. The building, draped in photographs of icebergs,

PIA ARKE, BETTER GREATER, 1993

brought the Arctic to Denmark in a reminder that changes going on in Greenland and the rest of the circumpolar world are not just political platforms or scientific measurements – they are lived reality. The Top of the Iceberg harkens to another key work by the artist which brought that reality a little closer to Danish life, and also highlighted Nordatlantens Brygge as a center for cross-cultural collaboration, where the ones creating the show are Greenlanders, but where creative dialogue is fostered with Danish and international artists.

Inuk Silis Høegh and Danish artist Asmund Havsteen-Mikkelsen's performance installation Melting Barricades invaded Copenhagen in 2004 with armed kayaks, military processions and propaganda following its performance in Nuuk. Here Inuk and Asmund imagine a Denmark in Greenland's place, occupied by a foreign nation. It contextualizes the ways Danish policy has exploited Greenland's vulnerabilities and advantages, and studies Danish methods of conveying possession and authority through naming and imposing flags and national emblems – then code-switches them. Denmark receives Greenlandic place names, and Danes are taught what it means to be made foreign in one's own land. The reverse naming evokes the concept of Greenland as an object to be studied as in the ethnographic exhibition;[2] the non-Western mountain or people cannot define themselves because, in the colonizer's mind, before they encounter the West they are not entirely real. And so reality in Melting Barricades is just as flexible. It expresses the reality of Greenland as politicized and volatile 'object', but by comically invading Denmark; the scene is temporarily lived as Danish viewers play their new roles, but the artists are merely acting. The viewer cannot abandon his new role as a colonized subject, and so curation of Melting Barricades transcends the bounds of exhibition, theater, educational experience and reality. It reflects the looming void in Greenland as old political structures are removed, as the artist writes:

> Cultural barricades will melt, and new ones will arise. The question is how this transition should take place – and how Greenland will find its own two feet to stand on.[14]

The work was later exhibited in Iceland through Kuratorisk Aktion's traveling five-part exhibition and lecture series 'Rethinking Nordic Colonialism,' itself an act of border-erasure through art.

In comparison the exhibition 'Den Røde Snescooter' (The Red Snowscooter) may seem at first a bit more conventional – but the painting, sculpture, photography and installation within Nordatlantens Brygge's gallery was unconventional for precisely that reason. There were no ivory carvings or masks to be seen, and so the artists denied the old picture of Greenlandic art and their Danish curators denied the paradigm of the 'Greenlandic exhibition' as established by the 1900 Nordboudstilling, by arranging works like any other art in its own right. The only symbols present that could comfortably assert the show as 'Greenlandic' were in Julie Edel Hardenberg's contribution, notably her 'sculpture' Rigsfællesskabspause (A National Pause). It is a straightjacket made from the Danish and Greenlandic flags, back to back. But, as in Melting Barricades, even this denies the notion of static art; as a garment, one cannot escape imagining the wearer, and so the jacket is as alive as a performance. And despite the concreteness of the symbols, their roles and relations to one another cannot be entirely pinned down. Within Greenland the Dannebrog has been a reminder of submission as much as it has inspired unity. But as Wagner writes, it is also in transition, no longer entirely a symbol of Danish pride as it becomes the weapon of far-right groups.[15] And the Greenlandic flag has rarely been completely embraced in Greenland. Rigsfællesskabspause illustrates the constraint of symbols in expressing culture, as it literally straps in the imagined wearer. As Hardenberg says:

> The work represented the tense identity sphere that we find ourselves in, the postcolonial relationship between Greenland and Denmark...We all need a break or pause sometimes, when we don't need to relate to whether we belong to the one culture or the other, or if we are a third.[16]

Yet in the abstract art of Ane Birthe-Hove, Lars Møller and the like, is again subversion. There are almost no 'signifiers' of place or culture to cling to – so the assertion is, to be 'Greenlandic art' it need not conform to the past. It must only be made by a Greenlander. Likewise Bolatta Silis Høegh's paintings incorporating pop culture and urban images assert that Greenland, as well, is engaged in these global cultures and so global aesthetic issues are also relevant in a land the West would shutter away into history.

In some respects Greenlandic artists have had to source unconventional exhibition programs that deny the colonialist pretext of 'Greenlandic art.' As curator Iben Mondrup Saito writes, art institutions seem wary of supporting Greenlandic art "because their works do not meet notions of how art should look and what it should concern itself with. But it is surely only a question of time."[17] There have been far too few of these exhibitions. In the meantime Greenlandic artists – through media and progressive curatorial strategies – challenge the Greenland/Nordic borders, and in an assertion of art as lived experience, release the confined exhibition space.

1 Brown, Daniel, Skrapvæv, Island og Copyland per Verdenskulturfestivalen i Reykjavik 2000, Copenhagen: Nordisk Sydkraft, 1991, 43.

2 Jørgensen, Margit, "Nordboudstillingen i Paris 1900 – skønne fædre af kolonialismen," in Bosserup og Jørgensen, Margit (eds.), Arktis-Atlantis: Arktiske udstillinger i politik, videnskab, kunstkritik og kulturmøde, Copenhagen: Gyldendal Uddannelse, 1997, 8.

3 Ibid, 8.

4 Ortiz, Karen, and William Coron, Iceland Imagined: Nature, Culture and Storytelling in the North Atlantic, Seattle: University of Washington, 2011, 17.

5 Ibid, 112.

6 Brown, 51.

7 Høegh, 14.

8 Brown, 35.

9 Celli, Zeynep, and Leila Kinney, "Ethnography and Exhibitionism at the Exposition Universelle," Assemblage 13, 1990: 34-55, 36.

10 Arke, Pia, "Ethno-Aesthetics," Rethinking Nordic Colonialism, 2004, 7.

11 Ibid, 1.

12 Gant, Eric, "Pia Arke, Untitled, 1990," in Tupilak Revisited: Pia Arke's Use of Art, Ethnicity, and Colonialism, 1987-2008, Copenhagen: Danish Society and Rockwool Foundation, 2010, 35.

13 Ramadan, Khaled, "Politically Undefined Foreign Subject - Is Greenland Still an Issue?: Perspectives on the Art Object 'Melting Barricades'," Rethinking Nordic Colonialism, 2004.

14 Høegh, Inuk Silis, "Melting barricades," Rethinking Nordic Colonialism, 2004.

15 Wagner, Marc Christoph, "Flawed Flag?" 2009.

16 Mondrup Saito, Iben, and Julie Edel Hardenberg, "An Apparatus Afforded," in: M. K. Good Now, Stine Bidstrup Madsen and Cultural Diversity, London: University of London, 2008, 37-43, 39.

17 Mondrup Saito, Iben, "Den Særlige Samtidskunst," Nordisma 3, 2008, 9.

Artwork by Julie Hardenberg, "Rigsfællesskabspause"

PHOTO BY JULIE HARDENBERG

David Winfield Norman researches contemporary art, exhibition and archival practices across Inuit Nunaat and the North Atlantic, previously at the University of Glasgow and at the University of Oslo beginning in August 2012. To find more information on him see davidwinfieldnorman.co.uk, and for musings and extracts from his research interests visit inuitattachatigiit.tumblr.com

GREENLAND **AS THE AVANT-GARDE OF** POST-CARBON **AND** POST-GROWTH **ECONOMIES?**

Investigating possible anchor points for future oriented development strategies through speculative documentation and the hyperextension of objects

BY JULIA MARTIN

The discussions regarding a "Possible Greenland" seem to have passed a critical point. Faced with the accelerating scoping studies of mining companies across the country, the question for planners and politicians appears to be not if, but how Greenland will adapt to Western economic demands and procedures. This implies that the initial decision to exploit mineral resources on a large scale, and to infrastructurally and culturally modernize Greenlandic society has already been made somewhere, and that economic, social and political change in the direction of old-school industrialization is now inevitable and unquestionable.[1] I would like to suggest that a diligent, hasty search for instant solutions to the challenges posed by such newly created "facts" would cut short a fundamental critical discussion on the idea of development in times of climate change.

Even though it is late in the day this discussion is essential, not just for Greenland's future but globally, and it must not be skipped. Architects, planners, politicians, economists, ecologists, sociologists, artists and local experts should look closely at the basic motivations and responsibilities behind current adaptation strategies for the Arctic. Collectively, they should unfold a constructive and practical critique of the usual economic growth ideologies, which are now putting pressure on Greenlandic society to follow their disastrous example, in an automatized twinning of socioeconomic improvement and exploitation.[2] Investing this time, attention, intellectual effort and creative motivation could lead to the discovery and invention of alternative socioeconomic practices in and for Greenland, pioneering an entirely new, genuinely future-oriented organization of human-nonhuman ecologies.

What if Greenland, as a developing country full of possibilities, became the political and creative avant-garde of an emergent post-growth and post-carbon movement, eventually giving to the world not raw materials, but ideas and practices for the realization of innovative social, political and economic organization? In collaboration with international protagonists of post-carbon research,[3] the professional concentration on developing and testing such conceptual and technological alternatives would also enable Greenland to escape the very real danger of entering a phase of industrial neo-colonialism, manifesting in its economical and political dependency on the activities and fates of global mining and oil companies on its territory.[4] The presence and stability of these industrial players can never be taken for granted. They will disappear eventually with the final depletion of resources,[5] from the whims of the markets, or, more optimistically, with the invention of superior technologies requiring different or less raw materials. As an independent country within the world community, Greenland should not allow itself to willfully become that world community's "last quarry." This particularly applies to resources whose further use contributes directly to the acceleration of climate change, for example oil or coal. Such considerations of cause-effect-relationships are not solely based on fear of potential exceptional accidents such as oil spill disasters, but more importantly on the concern about the already steadily occurring everyday pollution and degradation of ecosystems through contemporary society's growing consumption. Today, resisting selling-out and opting against ecological degradation is not a sacrifice, but a demonstration of political agency and economic foresight. Rather than being seen as paying the price for the developed world's old ecological sins, such a decision should be regarded as a confident, sovereign step towards a discursive, experimental and creative post-growth future. Taking this step would mean taking a one-off chance to be ahead of the world's development.

At the moment, Greenland has many substantial social and economical problems, and from what I have seen myself, I am by no means under the illusion that it is a kind of idyllic "nature paradise." However, once the world community begins to transform its old habits into a post-carbon, no-waste world economy, Greenland already has the advantages of having virtually no roads, little pollution, no nuclear power and the potential for energy independence in the form of medium and small-scale hydroelectricity projects, supplying energy for sustainable domestic, industrial and agricultural use. As a formerly little-known country, brought into focus by the controversies and effects of climate change, Greenland is today of great scientific, creative, political and touristic interest. These are qualities and chances that might be irreversibly annihilated if too readily aligned with the outdated economic ideologies of heavily industrialized countries. Rather than being used and abused as a goldmine, literally, Greenland should be collaboratively supported by the world community to strategically research, realize and promote its exemplary

potential of becoming the post-carbon and post-growth avant-garde of a new ecological age.

In the context of current post-growth research, investigating the full causal chains of specific development options is vitally important. Two fieldwork-led artistic research methodologies could be useful, which I call "speculative documentation" and "hyperextension of objects."[4] Both focus on the potential and actual agencies, and interrelations of objects, actors and decision processes in ecological collectives.

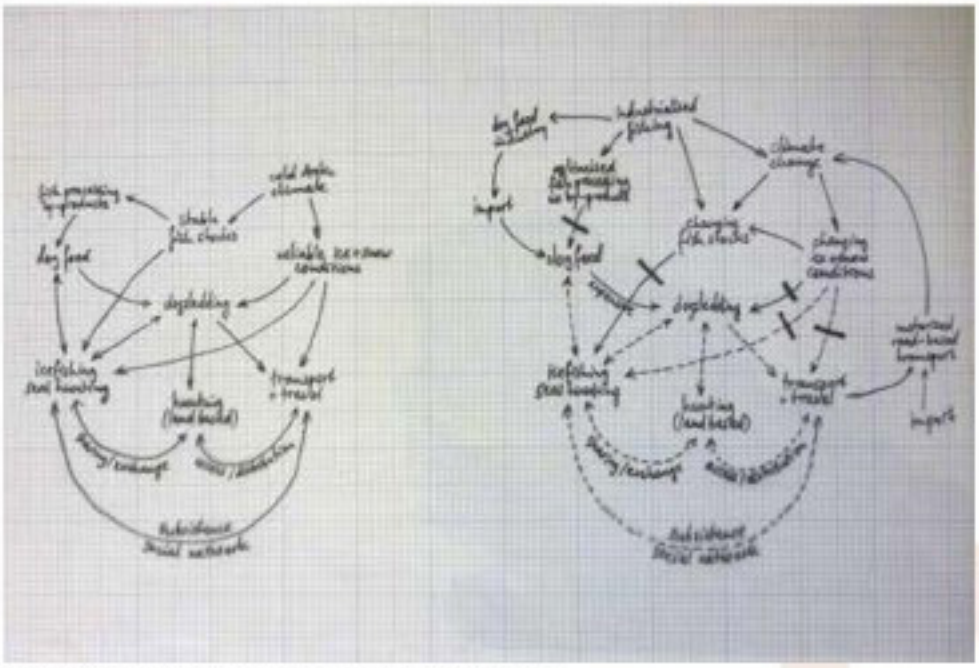
SPECULATIVE DOCUMENTATION

Speculative documentation highlights the practical and archetypal creative possibilities of quotidian, scientifically rather neglected elements of human-nonhuman ecologies; for example, the architectures and visual by-products of micro-economies. In times of fast cultural change, such physical documents of practical and experiential knowledge, visualizing economical and ecological interrelations, are in danger of being discarded before their potential to directly or symbolically participate in context-specific socioeconomic innovations have been realized. An example would be the hundeskur, used for storing dog food and dogsledding equipment, and a prominent visual element of the Greenlandic cultural landscape, for instance in and around Ilulissat.

Hundeskur, Ilulissat, West Greenland, J. Martin 2009

Hundeskur series in Ilulissat, West Greenland, J. Martin 2009

Using speculative documentation to create a visual analysis of these improvised architectures and their context, I have investigated the cultural, social and functional significance of dogsledding in Greenland, its inseparability from local subsistence-economies such as ice fishing, and its importance as means of transport in a country without roads between settlements. This practice is now in decline despite its highly adaptive and flexible characteristics. The disturbance is mainly caused by new macro-economic developments such as the optimization, or closure of fish factories—following the logic of de-localized economic growth—and the resulting rising costs of feeding a dog team combined with climate-change related problems such as a shortening snow and ice-fishing season.[7]



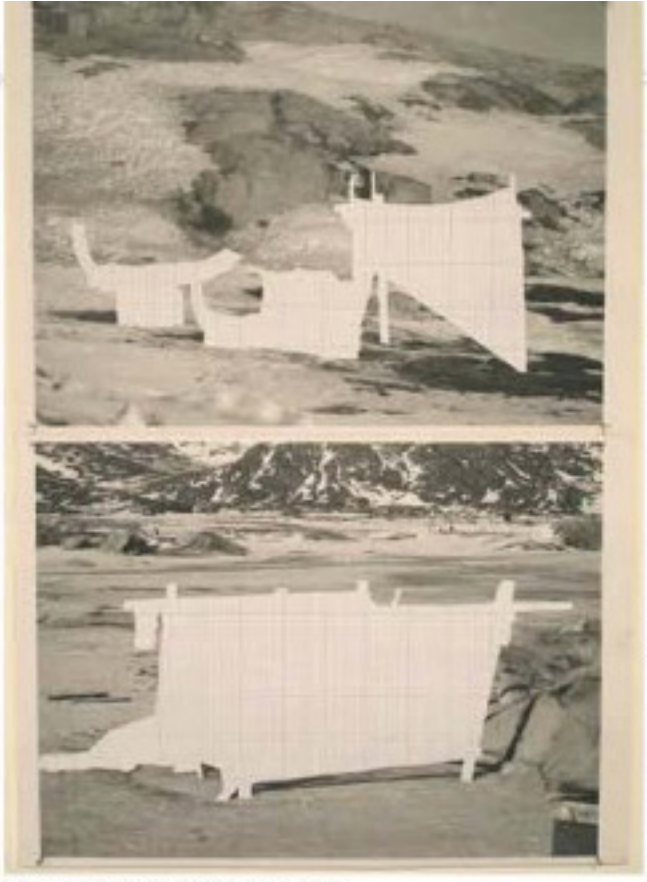
Sketch diagram showing the current changes in Ilulissat's micro-economic network, J. Martin 2009

Sketch diagram of dogsledding-based micro-economic network around Ilulissat, J. Martin 2009

Dogsledding at the end of the snow season, West Greenland, J. Martin 2009

Abandoning the micro-economic networks based on dogsledding under these conditions would be an understandable but still short-sighted reaction. If we envision a development towards post-carbon societies, existing micro-economic mechanisms and their important social and cultural functions could become essential and valuable points of departure. On the basis of speculatively documented, detailed knowledge about these collective systems, the realization and dissemination of their innovation potential could, for example, inspire the invention of alternative means of transport—vehicles as carbon free and cross-country capable as dogsleds, but useable all year round—leaving it unnecessary to introduce road-based traffic between Greenland's settlements.*

The architectural flexibility and visual variety of the hundeslisur is a result of pragmatic adaptation to shifting ground conditions and extreme weather changes, and of the appropriation of a wide assortment of objects as recycled building materials. From an artistic perspective, these improvised but purposeful structures could be seen as a metaphor for change itself. They embody experimental processes in which physical and conceptual structures constantly need to be built, altered, destroyed and rebuilt, according to ecological conditions and the individual and collective decision processes of their architects.



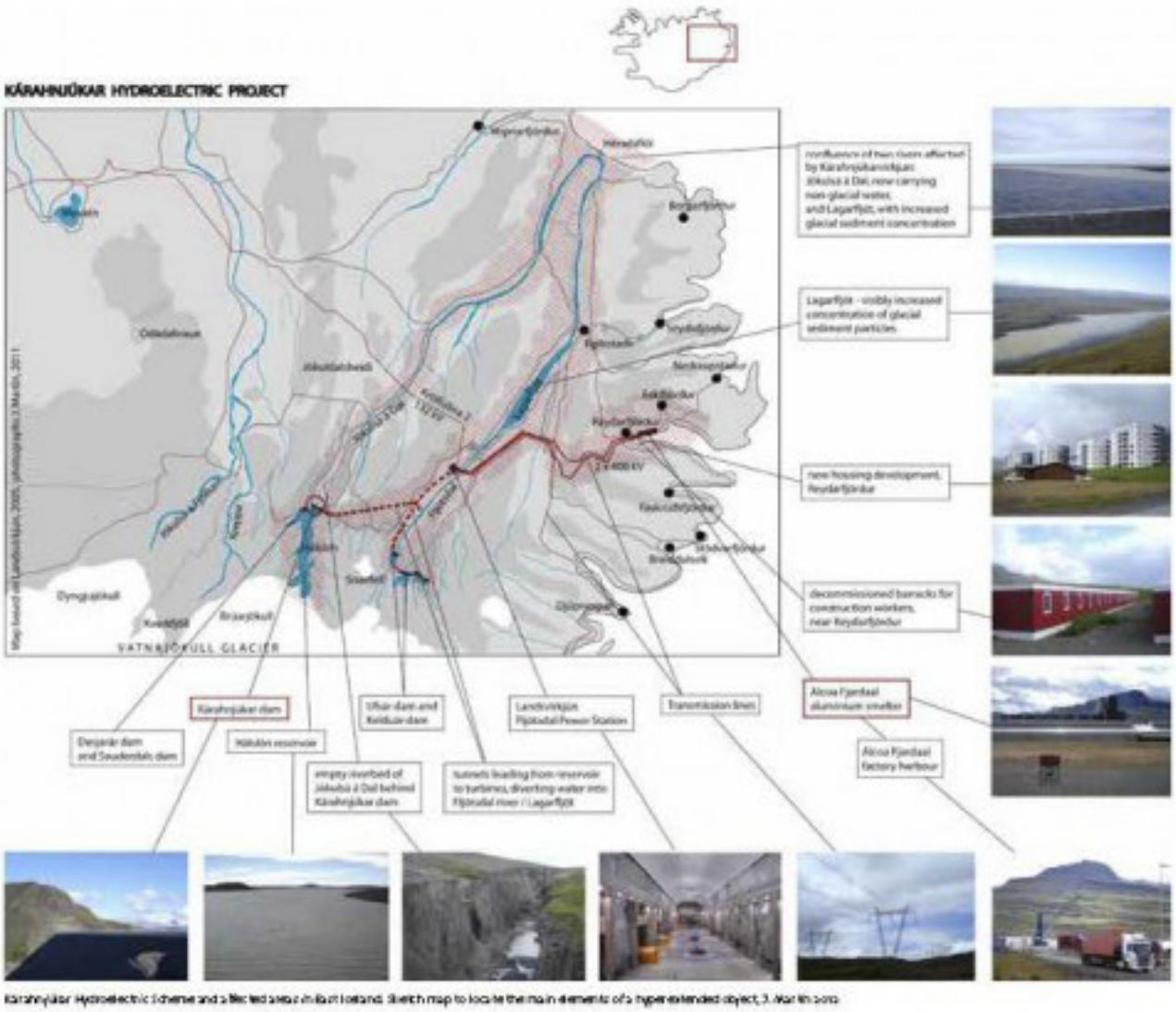
Avignon, collage: paper and acetate foil, 3. Mai 'Th 2004

HYPEREXTENSION OF OBJECTS*

Hyperextension traces the ecological agency of objects as fully as possible, investigating their production processes, attached infrastructures, by-products and economic and social effects, in order to discover actual and potential, temporary and permanent reaction points with the operational fields into which the object has been deliberately or accidentally placed, and through which it keeps moving. The wider ecological agency of the object and of the assemblies it forms with other actants and processual forces can be revealed, thereby forging and articulating ever-expanding concentric, polycentric and overlapping entanglements of consequential relations. Hyperextension asks to what extent the consideration of these extended relations can change the evaluation of their central object's agency, and how to make these contingencies explicit. As an active and creative process, hyperextension is more than information gathering. It relies on the individual practitioner's cross-disciplinary rambling research, accidental and specific knowledge, experience, imagination, subjectivity and limitations. Therefore, despite its quasi-scientific interest, as an artistic practice, hyperextension produces a personalized ecological object, which always explicitly includes the artist-researcher and his or her efforts and awareness.

In an ongoing hyper-extension case study, I am currently exploring the Kárahnjúkar hydroelectric project in East Iceland. The fieldwork around its structural and contextual components has included performative actions, visual landscape analysis and speculative documentation supported by background research in archives and through conversations with local experts.

Hydroelectric dams are particularly good examples of hyperextend-able objects. All dams are unique, site-specific constructions, whose appearances have developed out of their topographical situatedness. They already approach the limits of conventional objecthood—regarding their scale, their perceivability as objects rather than architecture, the technical and energetic effort and mastery required to build them, and the expansive reach of their material and immaterial causalities. The agency of such a dam as object is from the start quite obviously a collective, ecological and political one. It exists even before the dam's construction, as a political idea or interest, and reaches far beyond its local physical impact and the duration of its functional life. Hydroelectric projects are examples for human-nonhuman collectives stretching across time and space according to causal chains and automatisms yet to be fully deciphered. Their ecological and social impacts can be highly problematic,** depending, among other things, on the final use of the generated energy and the political conditions of the structure's emergence. The Kárahnjúkar hydroelectric scheme, for example, was built despite substantial protests to produce cheap, supposedly climate friendly energy for the aluminum producer Alcoa.* Seen as an isolated object, the dam might even manage to fulfill the promise of this reduced equation. But as a hyperextended object, as an actant in an ecology, it cannot. Following the process of hyperextension, the dam, the reservoir, the power station, the transmission lines, the affected rivers, the aluminum smelter and the regional housing and infrastructure developments accommodating an influx of construction and factory workers become part of the same hyperextended object—as do the bauxite mine in Jamaica, the carbon anode factory in Norway, and the container ships



Kárahnjúkar Hydroelectric Scheme and a filtered view in East Iceland. Sketch map to locate the main elements of a hyperextended object, 3. March 2012

transporting raw materials and finished aluminium ingots.[14] But in particular, the objects made out of this "climate-friendly"-produced aluminium cannot be seen as detached and passive objects either—after all, they become parts of airplanes, weapons, beverage cans, bicycle frames, yoghurt pot lids, window frames, take-away trays and sculptures, thus ironically eliminating the supposedly green agency of hydroelectricity. The hyperextension of objects in this way contributes to a critical discussion of the means and ends of production and construction in ecological collectives.

The Kárahnjúkar hydroelectric project, fully completed and operational in 2009, has significantly impacted Iceland's social, economical, ecological and political awareness, radically dividing public opinion. Its critics argue that the hidden costs of realizing this extraordinary scheme—the largest in Europe to date—have been too high. They include not only destroyed local ecosystems, but a loss of trust in the democratic integrity of the government, significant contribution to Iceland's economic collapse and the splitting of a tightly-woven society.[15] The central actor responsible for the irreversible transformation of East Iceland's ecology, including its social ecology, initially appears to be Kárahnjúkar dam, and hence it tended to be the main focus of protests.[16] However, by hyperextending this object of concern, tracing the political decision processes, the compromises and deals, and the scientific and societal controversies surrounding the project, another player comes into focus. The actor with the dominating driving force in this specific collective turns out to be Alcoa, the international corporation behind the Fjarðaál aluminium smelter for whom this low-cost energy supply, this hydroelectric scheme, was planned and built. Behind Alcoa, other actors are hiding: the weapons and aviation industry, car and computer manufacturers, and the ordinary consumers of throwaway aluminum products.[17] Considering all these players as integral to the hyperextended object, I maintain that their active agencies are inseparable from the ecological agency of the Kárahnjúkar dam—even though not all of them are sufficiently included and evaluated in the dam's environmental impact assessment.[18] The instruments,

Winning the Race" postcard from Qeqertarsuaq, West Greenland, photographer and year unknown, obtained 2009

formats and rhetoric used in conventional environmental planning and legislation are based on closed, local, controlled and homogenous objects, not in hyperextended, active, ecological objects—let alone in collectives of interrelated hyperextended objects. Therefore they must struggle, and fail, to represent the full scale and complexity of an assessed object's ecological agency, to the benefit of those who want this disruptive object to come into existence.

Kárahnjúkar's history within Icelandic politics can be seen as a model example for contemporary industrial neo-colonialism, steered by a global corporation and motivated by a global addiction to consumption. From a society's point of view, it should be most alarming that the instruments and procedures of environmental assessment and planning could be left in the hands of organizations with a direct interest in the construction of the assessed object, namely Landsvirkjun, Mannvit, and Alcoa.[9] Equally worrying is the observation that critical scientific reports, as well as petitions and protests, could be entirely disregarded by the public representatives during their decision-making processes.[10] Such failures of democracy actively erode the political agency and economic independence of ecological and social collectives. Very similar developments can be expected in Greenland, on a larger scale, unless the notion of development itself is reclaimed and redefined.

CUL TIVA TING

ARTISTIC RESEARCH STRATEGIES FOR FUTURE-ORIENTED PLANNING

The potential of speculative documentation and the hyperextension of objects as planning-relevant research practices lies in the conceptual and empirical expansion of the idea of ecology, and in the critical, ecological specification and evaluation of standard development strategies. Considering decision-making processes as traceably contingent, as politically and materially interrelated with the obscure lifecycles of objects, subjects and their assemblies, should make it impossible to take any of these actors for granted as passive and unchangeable.[19] This awareness should help planners of all disciplines to think more freely and more precisely of alternatives to the seemingly natural developments and given facts of economic ideologies based on profit-driven exploitation of resources and the illusion of unlimited growth. Speculative documentation and the hyperextension of objects aim to reveal the means and ends of development in existing ecological collectives, their potentials and failures. Global and local development is essential today, but for different reasons and on much deeper levels than the promoters of adaptive industrialization have in mind. Ultimately, the hunt is now on for concrete post-carbon, post-growth technologies and techniques, and new concepts for human-nonhuman ecologies. Some are already, or still, practiced in the form of micro-economies. The real future solutions to our ecological and economic crisis, whether high-tech or low-tech, might equally likely be found, and founded, in the centers or at the very peripheries of human habitats.

Julia Martin is a doctoral candidate at Goldsmiths College, London, Department of Art. Her practice-based thesis investigates new philosophical concepts of ecology, and their theoretical and practical challenges for ecocritical art in times of climate change. She holds a Dipl.-Ing in Landscape Planning from Technical University of Berlin, Germany, and a Master of Fine Art from Edinburgh College of Art, Scotland. Her artistic practice is strongly influenced by fieldwork, performative actions, landscape analysis and contextual research. Recent and ongoing projects have been based on repeated site visits to West Greenland, Scotland and Iceland (2008–2012). They focus on cultural effects of climate change in the Arctic and Subarctic, and on the critical, experiential exploration of obvious and not-so-obvious human-nonhuman ecologies. Julia lives and works in Berlin and London.
www.juliamartin.de

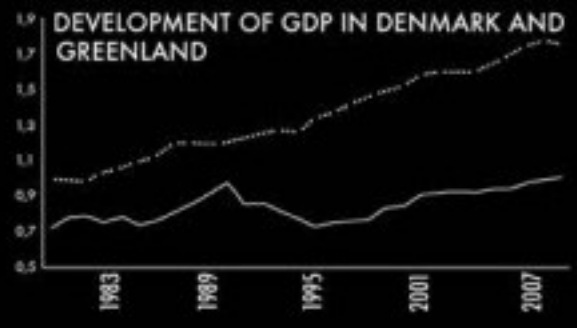
Contact address:
Eichdamm 38
13505 Berlin
Germany
0049-1762926379[5]
juliam.ir@hotmail.com

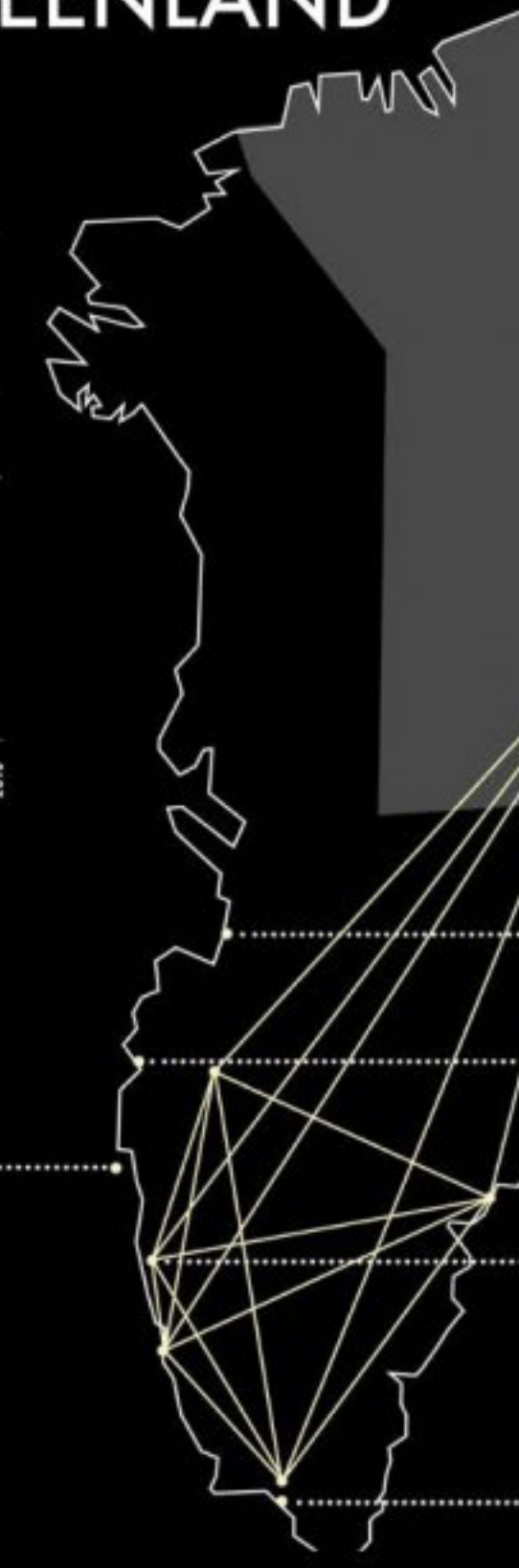
Notes

1. [illegible]
2. [illegible]
3. Latouche, Serge. Farewell to Growth. Cambridge: Polity Press, 2009.
   Serge Latouche, "Degrowth," Journal of Cleaner Production, [illegible]
   [illegible]
4. [illegible]
5. "Peak oil" [illegible]
   Shiva, Vandana. Soil Not Oil: Climate Change, Peak Oil and Food Insecurity. London: Zed Books, 2009.
   Heinberg, Richard. Peak Everything: Waking up to the Century of Declines. New Society Publishers, 2007.
   Meadows, Donella, Dennis Meadows, and Jorgen Randers. The Limits to Growth: The 30-Year Update. White River Junction, Vermont: Chelsea Green Publishing, 2004.
6. Martin, Julia. [illegible] Working paper, Department of Art, Goldsmiths College, University of London (forthcoming).
7. Personal conversations with local experts in [illegible], 2009.
8. [illegible] by the IPCC.
   [illegible]
   Research projects in this direction are on the way, for example:
   [illegible]
9. [illegible]
10. [illegible]
11. [illegible]
12. [illegible]
13. Magnason, Andri Snær. Dreamland: A Self-Help Manual for a Frightened Nation. London: Citizen Press, 2008.
    [illegible]
    Personal conversations with local experts in East Iceland, 2011, 2012.
14. [illegible]
15. [illegible]
16. [illegible]
17. [illegible]
18. Magnason, Andri Snær. Dreamland: A Self-Help Manual for a Frightened Nation. London: Citizen Press, 2008.
    [illegible]
    Personal conversations with local experts in East Iceland, 2011, 2012.
19. Latour, Bruno. Politics of Nature: How to Bring the Sciences into Democracy. Cambridge, MA: Harvard Press, 2004.

STUDY

GROWTH IN GREENLAND

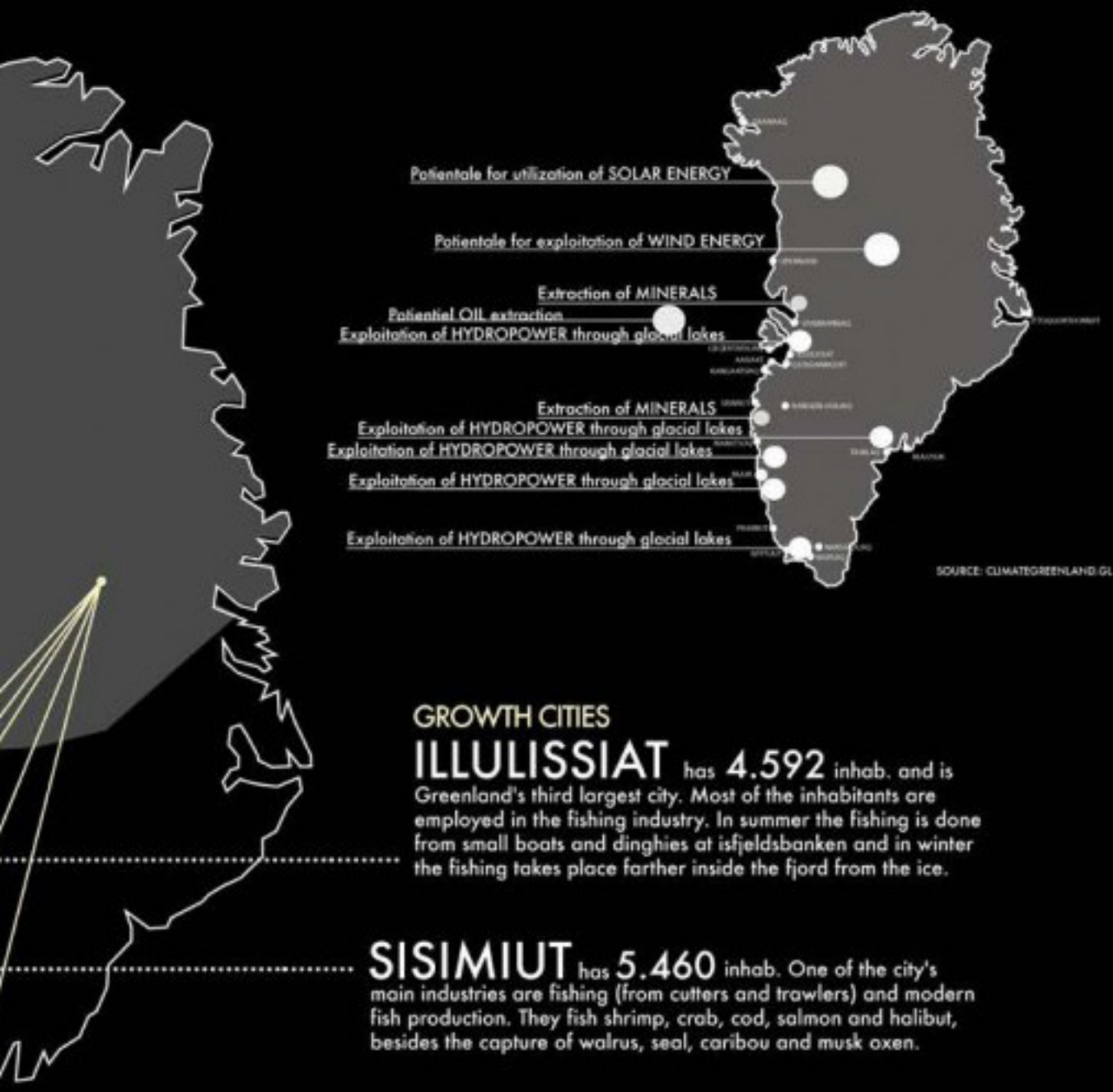




ENERGY INTENSIVE INDUSTRIES

MANIITSOQ

Aluminium smelter in Maniitsoq provided with electricity from two large hydropower plant



GROWTH CITIES

ILLULISSIAT has **4.592** inhab. and is Greenland's third largest city. Most of the inhabitants are employed in the fishing industry. In summer the fishing is done from small boats and dinghies at isfjeldsbanken and in winter the fishing takes place farther inside the fjord from the ice.

SISIMIUT has **5.460** inhab. One of the city's main industries are fishing (from cutters and trawlers) and modern fish production. They fish shrimp, crab, cod, salmon and halibut, besides the capture of walrus, seal, caribou and musk oxen.

NUUK has **15.496** inhab. and is the capital of Greenland. They are here in full swing to develop various business areas such as fisheries, agriculture, mineral water production, mining, trekking, cultural tourism and skills development. There are potential mineral projects in Nuuk, in pious of gold and iron.

QAQORTOQ has **3.306** inhab. and is the center of Greenland's sheep breeding. Qaqortoq is, with their high school, business school and the Greenlandic Worker hiqhschool, the educational center of South Greenland.

FRAGILE GIANT

DISCUSSING GREENLAND'S LAND VALUE

BY ALICE LADAGNI & BARBARA ELISABETH ASCHER, ILLUSTRATED BY FRANZ WALTER

Kalaalit Nunaat is the indigenous name of Greenland, which translates as "Land of Men." Land ownership within Greenland has historically been defined as a collective right belonging to the entirety of its inhabitants. Where the land is "of the people," individual rights to land have been defined over time primarily through practices of occupation. Minimally enacted in dwellings, these have rather consisted in an active yet ever changing use of the land according to climatic and seasonal conditions.

In such a context, the value of the land was largely determined by the possibility of accessing it and using it. Most of Greenland's territory, being neither accessible nor usable because covered in ice, was therefore hardly ever a real object of discussions on rights to land. This was especially evident during the Danish colonization of Greenland in the 18th century. This coincided with the development of the modern notion of property in continental Europe, based on an emerging capitalist system. Property was thereby defined as a commodity to be owned and traded by an individual. The absence of any formal individual ownership of the land allowed the Danish missionaries to interpret the territory of Greenland as a no-man's land and declare it "crown-land" owned by the Danish king.

The relevance of such an interpretation for the indigenous population of Greenland was, at the time, limited due to the fact that the land was largely unsuitable for permanent usage, such as for agricultural purposes. Legal ownership was relatively irrelevant so long as access to hunting grounds and ritual places was granted.

Within the Greenlandic indigenous tradition of land use, the value of land was primarily conceived as a "relationship" to the land. This relationship between humans and the land was based on an active and time-based practice rather than institutional law. Such a notion was widespread among nomadic and/or indigenous cultures and can also be seen among the Aborigines in Australia. A modern, Western notion of property, conversely, separates humans and land into a hierarchical owner/object relationship, ultimately objectifying the land as an abstract commodity and somehow negating its inherent temporal and spatially determined specificities. Property defined as such also provides a solid legal and ideological basis for various forms of land exploitation.

Not surprisingly, land ownership became a pressing problem with the development of Greenland's mining industry in the mid-19th century. Property speculation and the exploration of mineral resources emphasized the cultural differences of land valuation. Since the establishment of the first mines in 1850, the monetization of mineral resources has been the dominant mode of land valuation and has strongly influenced the debate on land ownership rights and urban development.

Furthermore, the logistics of property and land exploitation generated a need for territories to be quantified, mapped and partitioned, as evidenced in the delineation used by many colonial powers. Western countries thus abstracted land ownership according to managerial rationalities that contrasted with the traditional practice of territorial "occupation," and based their assessment on topography, access and suitability.

Today, this debate must be taken up again since Greenland's previously inaccessible and unusable land is rapidly increasing in value, often all the more so because it is seemingly inaccessible and unusable. Firstly, the Greenlandic ice sheet represents a valuable resource of fresh water for the planet. Its ecological and ethical implications make its value incommensurable. Moreover, the same ice cap potentially conceals a vast quantity of minerals, whose economic value could be tremendous with respect to the increasing global demand for raw materials.

In such a context, land value is primarily discussed in terms of access to resources and the potential for either development or exploitation. This notion includes factors relating to investment in infrastructure, payment for licenses, and evaluation of risks of financial losses. It treats land as a commodity, where precise legal terms define a site, characterized by dimensions, boundaries, and location—as well as certain rights of use associated with it.

On the one hand, the secession of the Greenland ice sheet as a result of global warming will continue monetization and speculation of mineral extraction on Greenland and simultaneously define increasing areas of the land. On the other, monetization of the carbon cap through the regulation of global emissions via a trade system could complement indigenous land ownership systems.

This creates tensions between local community interests, the needs of the individuals and the demands of the global community, which are hard to resolve within the existing democratic structures of urban and regional planning. The need to redefine the roles of existing institutions adds another challenge to the complex issue of negotiating political agendas and political power in a moment when Greenland is debating its independence from Denmark.

The current situation in Greenland is characterized by a threefold system of rights to land. The state of Denmark holds the right to ownership and legislation on property. The home rule authority of Greenland regulates these matters by granting land use rights to the individual Greenlanders. Dwellings are thus built

on common land, but can be rented and traded due to their legal status. The mining industry operates with similar conditions of usufruct rights. Licensing and general plans for development are under the regime of the Greenlandic Ministry of Mining. The Greenlandic Ministry of Domestic Affairs, Nature and Environment has an ambiguous role within this institutional setting. Its field of responsibility covers both urban and regional planning, economic development, resource management as well as environmental concerns. However, as the Home Rule Act for Greenland from 2009 shows, matters of taxation, licensing for mining and exploration are still the current language for discussions connected to land value and property. This situation clearly outlines the need for a series of reflections about notions of property rights and land value in the on-going debate on Greenland's future spatial development strategies, where globally and locally defined land values are at stake.

In our view, though, it is also imperative that one discusses the spatial and territorial implications of such a problematic and debates the problematic specifically in relation to urban planning and architecture. It is crucial not only to revolve once more around legal issues, administration and compensation in relation to land use concession, but abandon the consolidated ideas of property-rights-versus-land-use and economic compensation in favor of a more layered notion of land value.

Favoring the latter option, we suggest that one rethinks the idea of land value by exploring the potential of "site." In the book Site Matters, Andrea Kahn and Carol J. Burns define site as a "relational construct that acquires meaning and value through situational interaction and exchange."[1] Understood in this way, site combines the physical specificity of a place or land, together with a spatially and temporally determined multiplicity of agents and actions operating upon it, namely use(r)s. In so doing, the concept is able to draw on the full potential of a site, both regarding the refinement of the spatial qualities of it, as well as the facilitation of innovative combinations of actors and uses.

Could we think of land use not as a singular exploitative gesture, but rather as an act that is both transitional and contextual to a limited and historically pre-contingent timeframe? Could the future man-made environment of Greenland consist of a new kind of seamless territory of interlocking and overlapping zones, analogous to Greenland's historically

cultural and topographical approach to territory?

If we imagine architectural/urban planning sites without fixed borders or a fixed functional role, we would then instead draw upon their potential for use and the site-specific conditions of the landscape. Rather than a traditional master plan that divides land according to its functionality, a concept of "relational use" could be introduced. Relational use incorporates the notion of facilitating the largest number of possible uses or users at all times, based upon the idea that one type of activity or actor should not exclude the other, but instead emphasizes synergies of activities, actions and actors as the guiding model. This calls for a more conscious relationship to the land, as uses would not be classified according to their function, but according to their potential of combining with other activities.

Would this eventually diminish investment, which does not allow public access to the land? Could this encourage a more condensed urban development that preserves "virgin land"? Would this be an incentive to create meeting places in housing areas, demand cleaner and safer mining areas as well as nurture sustainable farming in and around inhabited areas?

To give an example: Could we think of industrial sites connected to, say, mining, which incorporate food production, public spaces and still provide a habitat for animal life? Could we imagine that this site was actually chosen for its suitability for those functions, as it is sheltered from the wind, with a view and part of a migration route of sea lions? Could we imagine that the environmental impact of the industry would be optimized to serve its after-use? Could we think of social activities on this site that could help to create a sense of community, as well as allowing for individual expression, for example, through the possibility of permitting temporary occupation of the site? Can compensation in this case be reformulated as a territorial responsibility rather than a merely economic term? Could this responsibility be both directed towards the land and the multiplicity of agents having an interest in it?

Could this system of relational use, again, be based on an expanded notion of negotiation instead of traditional hierarchic systems in urban planning? In a recent lecture, held during the Arctic Frontiers conference in Tromsø, Norway, the London-based collective Territorial Agency introduced the idea of "radical negotiation" as a driving concept for addressing the comprehensive spatial transformations that emerging interest and activities in the North—including, necessarily, Greenland—will imply.[2]

In light of this idea, negotiation could be redefined as an enlarged horizontal platform for discussions, neither top-down nor bottom-up, but open at every level—a discussion amongst equals, from government representatives to activists, involving various social groups. It is imagined to be inclusive rather than exclusive and continuous in time, thus providing a platform for consistent participation and proceeding collaboration, speculating on a possible outcome, an agreement on uses and relations rather than ownership as a cultural concept.

The discourse about land value in this sense will incorporate more aspects than the traditional exchange value of a site as described above. Urban planning will consequently need to involve (re-) programming, (re-)negotiation and (after-) use, which can provide the basis for site-specific, temporally defined and environmentally sensitive projects. This will hopefully contribute to giving the fragile giant of Greenland the endurance and strength it needs for the future.

1 Burns, Carol J. and Andrea Kahn, eds. Site Matters: Design Concepts, Histories, and Strategies. New York: Routledge, 2005.

2 Palmesino, John and Ann-Sofi Rönnskog. "Territorial Agency, Post- Semi-Glacial Arctic Neo Colonialism, the Architecture of a Territory Open on all Sides." Lecture held at the conference "Territorial Practices" as part of the event Arctic Frontiers, Tromsø, 26.01.2012.

Barbara Elisabeth Ascher, born 1980 in Erlangen (Germany) studied architecture and urbanism at Bauhaus University in Weimar and Oslo School of Architecture and Design with a scholarship from the German National Academic Merit Foundation. She graduated from Bauhaus-University in 2006 and has worked as an architect an urban planner in Austria, Egypt and Norway as well as a guest critic at the University in Stavanger since. She recently joined the Oslo School of Architecture and Design as a PhD research fellow, where she researches on Scarcity and Creativity in the Built Environment.

Alice Labadini, born 1981 in Parma (Italy), studied architecture and urbanism in Milano and Oslo. She has been working in various architecture offices in Italy, Norway and Great Britain, before she joined the Oslo School of Architecture and Design (AHO), as a PhD Research Fellow in 2008. Her research focuses on immaterial qualities in Nordic landscapes. Since 2009, she has also been teaching and lecturing at the Master in Landscape Architecture at AHO, discussing landscape architecture's approaches in urban conditions in transition.

Frans Walter, born 1980 in Nuremberg (Germany) studied Media Technology at the Technical University of Ilmenau, where he graduated in 2005. He has worked in a Design in Innovation Consulting Firm in Germany, before he founded 'nanuuq' in 2008. This tiny creative studio documented projects and expeditions, mainly with outdoor athletes, to the most remote places in the recent years. As a photographer and cameraman he thereby explores the relationship of landscape to human activity. In 2012 he began forming "Made by Nomads" a creative collective and think tank of professionals focusing on visual storytelling and post-artifact publishing.

STUDY

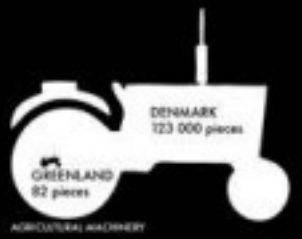
FARMING

GREENLAND VS DENMARK

0 - 1

FARMING IN GREENLAND
- Agriculture accounts for a smaller part of the economy
- It include sheep- and reindeer breeding besides nursery operations
- By far the largest part of the production is for the home market
- 0,1% of the total export
- Most importantly, exports of lamb and reindeer
- The total agricultural land is increasing

FARMING IN DANMARK
- Agriculture is an important part of the economy
- Producing food for 15 million people
- 11% of the total Danish exports (about 40 billion. Incl agricultural machinery, enzymes, etc.)
- The total agricultural land is declining
- A typical Danish farm is now either pork producer, dairy farmer or plant breeder
- Most importantly, exports of pork
- The production of pork has since 1995 increased by 26% to 2.0 million to 2005.



1 billion people are starving today

Problem feeding the world
Growing food and raising livestock for 6,8 billion people require land equal in size to South America.
By 2050 another Brazil´s worth of land will be needed, using traditional farming (i.e. soil-based; that much arable land does not exist
(source: Laurie Grace)

The choice is simple
Over 50% of all crops planted in the United States never reach the plate of the costumer.

Nearly 70% of the worldwide planted crops never reaches the harvest. Droughts, floods, spoilage, and plant deseases account for most of the losses.
(Source: the United States Department of Agriculture)

The choice is simple:
control everything (indoorfarming) or nothing (outdoorfarming).

2010

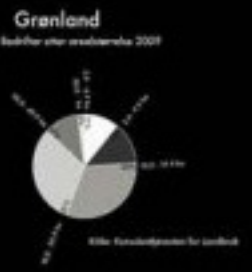
farmed land feeding 6,5 billion people

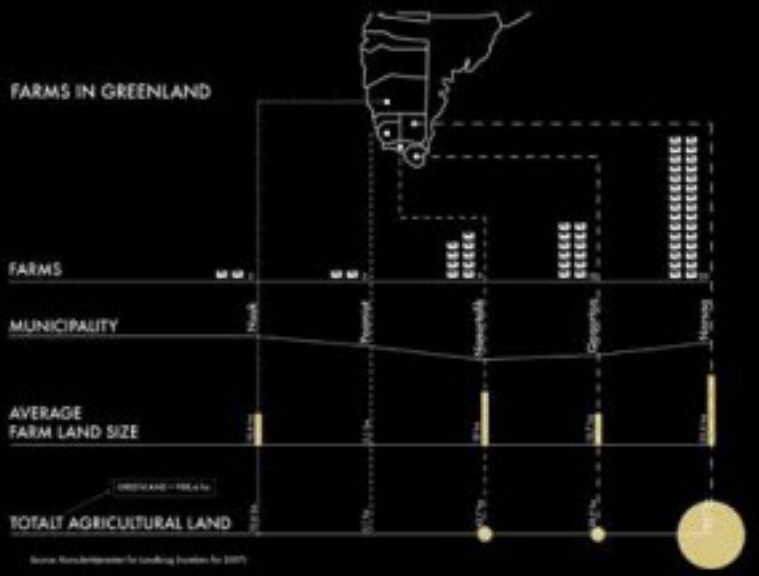
2050

farmed land feeding 9,5 billion people

source: UN

GRØNLAND
- 51 bedrifter (2007)
- De fire største bedrifter har et jordtilliggende på 30-50 hektar.
- Denne gruppe udgør 7 pct. af alle bedrifter.





Agricultural land (sq. km)

land suitable for agricultural production both crops and livestock. It is one of the main resources in agriculture

Rank	Country	sq. km	Year
1	China	5,225,460	2008
2	Australia	4,172,880	
3	United States	4,112,000	
4	Brazil	2,645,000	
5	Russia Federation	2,154,940	
104	Sweden	30,900	
107	Denmark	26,680	
114	Finland	22,960	
115	Iceland	22,810	
140	Norway	10,243	
155	Greenland	2,350	
191	Singapore	7	


CUL
TIVA
TING

PROJECT
GREENLAND CULTIVATING
INTRODUCING HOW TO SWALLOW A WHALE

CULTIVATING

Cultivating Greenland is not merely a question about generating ideas of how to capitalize on Greenland's many resources and to harvest the fruits.

We see cultivating Greenland as an opportunity to create an inclusive debate. This is necessary in order to define our values and formulate a vision for Greenland that can guide us in the right direction. Only a broad debate can lead to wise, consistent decisions and smart solutions. This project tries to develop and unfold an approach where Greenland can identify questions and find answers for a future holistic growth of Greenland.

How to swallow a whale

– cultivating resources in a sustainable and democratic way

TEAM GREENLAND CULTIVATING:
tnt nuuk
Hausenberg
ELKJÆR + EBBESKOV Architects

Collaborators:
Brian Buus Pedersen, Greenland's Employers' Association
Tele Greenland

Photos:
Leiff Josefsen
Paninguak` Olsen
Bent Petersen
Lida Lennert
Bang.gl
ilovegreenland

The project is supported by:
The Danish Arts Foundation
Dreyer's Foundation
ISCO
The BANK of Greenland's Trade Fund
If and Kalaallit Insurance Agency, Greenland

CUL TIVA TING

HOW TO SWALLOW A WHALE

We have a historical opportunity to create a better Greenland. The global demand for our natural resources is increasing, and with a warmer climate the minerals, the hydro power and the oil are becoming more accessible.

Cultivating our resources can help us meet our challenges. We have the world's largest public sector, social problems, poor education, weak business development and we are heavily depended on subsidies from Denmark.

As our Welfare Commission stated in 2011: Status quo is not an option! Fundamental societal changes are needed.

We need to discuss HOW?

When a small, poor country like Bhutan chooses to limit tourism, this is not necessarily an expression of a lack of business sense. It is a radical decision that supports a strong development philosophy about the country's growth being measurable not only in terms of economy, but also in terms of the happiness of the people—Gross National Happiness. The limitation of tourism may be perceived as an indication that Bhutan does not wish to be overrun, that the country wants to keep in step with its own development. In the short term, this implies a loss of income, but maybe the country will gain something else in the long term.

Greenland urgently needs to increase its income. An improved economy is also the way ahead if Greenlanders are to satisfy their dreams of increased independence from the Danish Realm. There is extensive public and political pressure to utilize the possibilities that result from the ice shrinkage and a warmer climate.

Greenland is currently experiencing that many opportunities are opening up: streamlining the fishing industry, agriculture in Southern Greenland, minerals, uranium, and rare types of soil in the mountains and possibly oil in the underground. In addition to this, tourism, hydropower, and, in the future, maybe a drinking water reservoir. How are Greenlanders to achieve the competences necessary to exploit their own resources? Which resources should Greenland focus on? Which demands should Greenland make on the interests of external capital? Which roles should Greenlanders play? Against which parameters should Greenland measure success?

How to Cultivate Greenland is not merely a question of exploiting every resource as fast as possible. It is a complex matter of prioritizing among existing and new resources and utilizing them in the ways that are right for Greenland. Ways that will resolve urgent issues in the short term, but without tripping up long-term development towards becoming a sustainable society. Greenland and the Greenlanders need to think carefully, make wise choices, and be well prepared. And the debate is already in full swing among politicians, in the media, in the general public, in the business community, at educational institutions, and in organizations.

Greenlanders want the exploitation of their country's resources to go hand in hand with a solution of their society's financial and social problems, and they want development to take place on Greenland's terms. However, this is far from being a situation which can be taken for granted, and it will only happen if we make the right decisions.

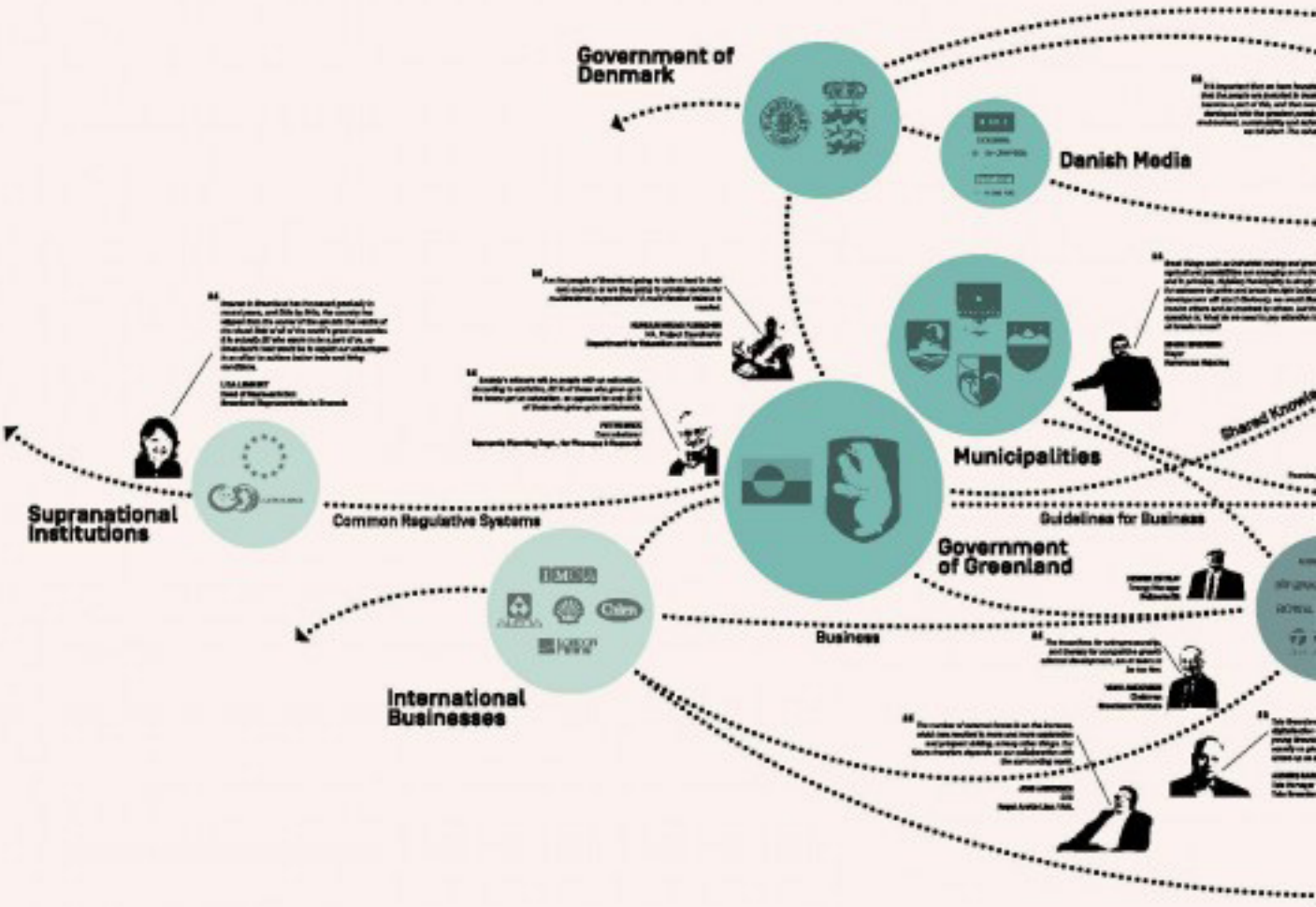
Greenland is a part of the world, and we hope that the entire world will contribute to the debate. A strong vision for the future is needed for the greatest island on Earth.

TEAM CULTIVATING 2012

"The advantages inherent in being a small population—e.g. possible flexibility in decision-making processes—are overshadowed by the negative consequences of the great turnover of labor. Our collective memory is leaching out and that is a great challenge."

LIDA LENNERT, HEAD OF REPRESENTATION AT THE GREENLAND REPRESENTATION IN BRUSSELS

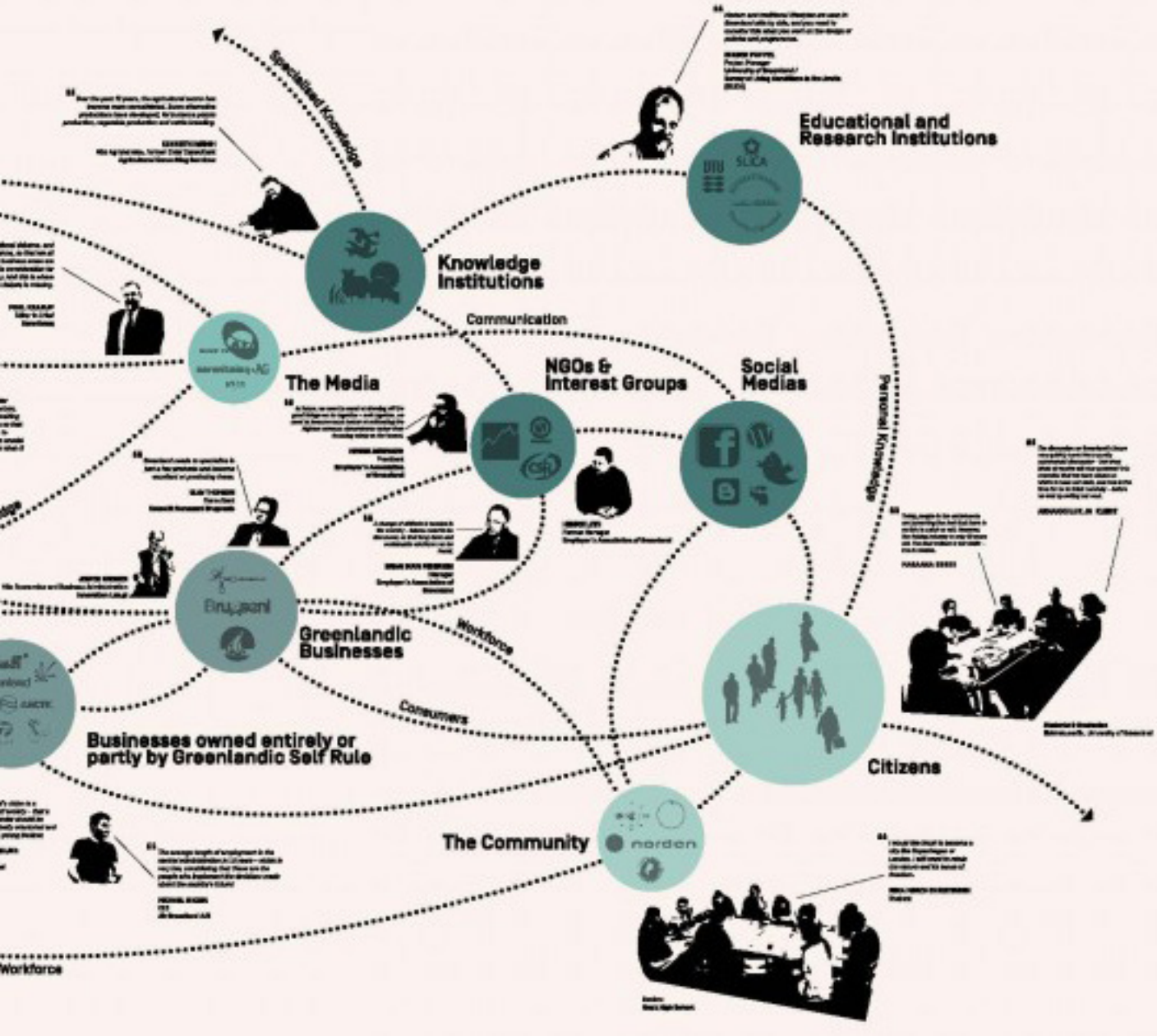
CONNECT THE VOICES OF GREENLAND



We do have visions and great ideas. But the public debate in Greenland often reflects the isolated character of our settlements: You watch your own community; you care for your own family. If we want change, we have to overcome geography and start working together. Only by coordinating our initiatives can we obtain the synergy and power we need to move forward.

Greenland is no longer under colonial power. Greenland gained extended home rule in 2009. So as Greenlanders we have to stand up and decide our future our selves. If we don't, someone else will decide for us.

We could start by seeing all of Greenland as our family.



CUL TIVA TING

A NEW WORLD ORDER IN THE ARCTIC—IS GREENLAND READY?

Climate change is opening up for new sailing routes through the Arctic and for the extraction of oil and valuable minerals from Greenland's underground. States and multinational companies are ready to jump into action. Wise decisions are required if Greenland is to avoid being exploited. An effort is needed if Greenlanders are to acquire the necessary competences to sit at the head of the table themselves. And they need to have courage and be willing to take risks to make demands and take the long-term view. The question is: Is Greenland ready?

As the ice shrinks, it will become possible to sail past Greenland and north around North America. And as the ice shrinks, it will become possible to quarry for sought-after minerals in the mountains and drill for oil in Greenland's seabed. Climate change is leading to large-scale raw material extraction in a vulnerable nature area, and this fundamentally shifts global trade. Greenland is moving from the edge to the center of the world.

Large international corporations are showing an interest in Greenland's underground, and nation states are rearming and patrolling the Arctic area. In 2012, Denmark is launching the third scientific expedition to gather proof that the North Pole is Danish territory. China has increased its staff at their embassy in Iceland significantly, and Japan, China, South Korea and the EU have all requested observer status on the Arctic Council.

Enormous possibilities and riches are at stake and, consequently, strong political and financial forces are in play. A special effort is required if Greenland is to achieve the competences to sit at the head of the table and meet the surrounding world at the garden gate. We need to be educated, develop, make demands, and be bold. If we succeed, Greenland will gain international recognition, social development, and confidence! Are we ready?

"Greenland might always be a little brother. But it's time to wake up and become the smart and bright thinking little brother."

JAKOB GENER, TNT

"Economic development is needed. The pistol is against the politicians' heads, and the pressure is on the people."

[PETER BECK, COMMISSIONER, ECONOMIC PLANNING DEPT., DEPT. FOR FINANCES]

"It is important to maintain a global view, both now and in the future. We must remember that we are not alone in this world, but a part of a greater world."

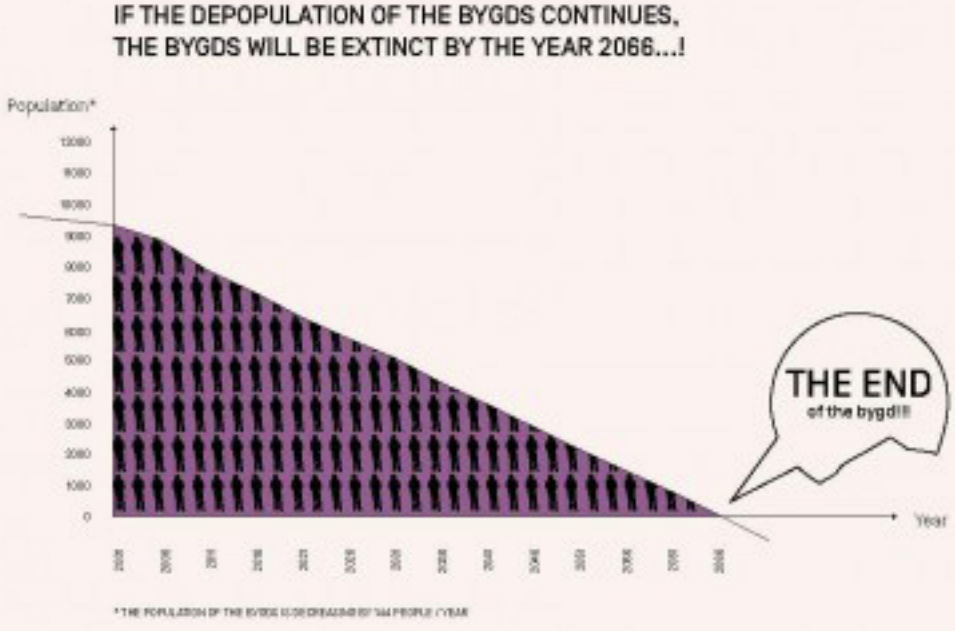
Brian Buus
Director
GA, The Employer's Association of Greenland

CUL TIVA TING

THE "BYGD"—AN EXPENSIVE CULTURAL ARTEFACT OR A FUTURE POSSIBILITY?

Greenlanders move from rural to urban areas. Most bygder (small settlements) are gradually being depopulated, and today, only a few of them are socially and economically sustainable. The question is, are we going to watch passively while the bygder slowly languish at a high cost to society? Or can we intervene actively, closing down the worst, and developing the best in order to preserve bygd life as a possibility in the future?

All studies indicate that the sensible thing would be to concentrate settlement, but nobody wants to remove families from their houses and homes against their will. How do you make a decision that is so difficult that no politician dares take the lead? This unpopular decision can only be taken through a public debate to create wide popular support. Let us actively develop the most appropriate bygds so that the future offers an attractive alternative to the urban community: A sustainable and top-level bygd. A forward-looking bearer of Greenland's culture. A place where young people can see a future filled with challenges and exciting offers. A place based on Greenland's traditions for community life and solidarity, and where nature is very close and a central part of life.



WHAT DO YOU SEE IN THE EYES OF THE TOURIST?

Modern Greenland culture is a result of interaction with the surrounding world, whether the area of contact has been trade, missionary work, colonization, military or research. Today, the tourist industry is an important window to the rest of the world. Greenland still has room for many more tourists and a beautiful, pristine nature—a luxury that many are willing to pay for. However, the crucial issue may not be the number of tourists, but rather what we want to achieve through tourism. Which impression of Greenland and the Greenlanders would we like tourists to take away with them? What is tourism to give to our country, and what impact are we willing to allow tourism to have?

TOURISM CAN KEEP CULTURE ALIVE

Round 18,000 sledge dogs resides above 60° northern latitude. No other dogs are allowed here. The dogs are not a pet but a working tool. The dog sleigh is still the ultimate means of transportation in the arctic. You can't eat a broken snowmobile. 2,000 full time hunters are left in Greenland, and they use around half of the dogs. The rest is used for hobby, racing and part time fishing and hunting. In full seat 26-28 dog sledge drivers combine their halibut fishing with driving with tourists.

Adventure tourism in Greenland is undergoing positive development, and cruise tourism has increased over just a few years to about 40 ships per year. However, as is the case for other industries, the country's severe financial situation and limited accessibility will be decisive barriers, also in the coming years. As of yet, only a few foreign tourists find their way to Greenland, and even with a significant increase in the number of tourists, the risk of being swamped is very limited.

The tourism industry can contribute to financial growth and job creation. In addition, tourism helps create and market the image of Greenland and the Greenlanders. All tourists take a little bit of Greenland with them when they leave. Here, unique nature experiences and the Inuit culture both play a central role. However, hunting experiences, extreme sports, and in recent years also climate awareness form part of the tourists' experiences in Greenland. But what is the image of modern Greenland that tourists take away with them?

We could consider tourism as a mirror that constantly forces us to discuss our own culture, who we are, and how we would like to be perceived. By choosing special impact points and staging our nature and culture, we can give both tourists and Greenlanders some strong shared experiences of nature and life in modern Greenland. Today, Greenlanders are both globally orientated young people with an urban lifestyle and traditional sealers and whalers who make their living from hunting and fishing. With the implementation of the Self-Government, we are in urgent need of a strong, contemporary and inclusive assessment of what Greenland culture is. Tourism offers a chance to maintain traditions and develop new self images at the same time.

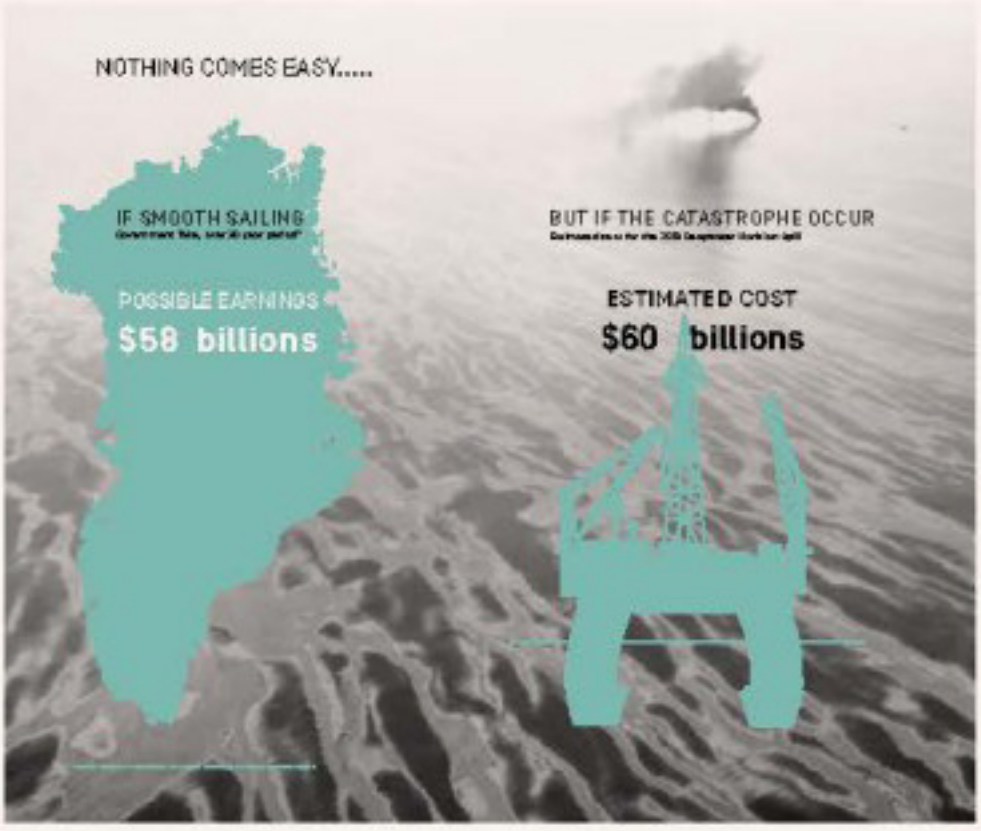
DOES OIL KILL INITIATIVE?

Oil revenues can satisfy dreams of autonomy. The question is how the oil revenues can at the same time become a lifting rod for society, not just a pretext for inaction.

Every year, Greenland receives the equivalent of more than 12,000 US Dollars per inhabitant in support from the Danish state. Critics believe that this so-called block subsidy has contributed to creating an entire people on public support and that this reduces the enterprising spirit and innovation capacity throughout the country. The same critics fear that easy oil money will only reinforce this trend.

The world needs oil, and Greenland has it. Whether it can be utilized commercially is yet to be clarified. However, the prospects of oil revenue come at a time when Greenland is seeking autonomy and financial independence from Denmark. The oil is therefore creating dreams about both prosperity and national autonomy. The best result of oil exploration in Greenland to date is therefore not the oil-containing mud that Scottish oil enterprise Cairn Energy drilled up from Greenland's west coast in 2011 under close attention from the press. Instead, it is the wide debate about the future Greenland that the oil has provoked throughout society.

Undoubtedly, oil money will give us Greenlanders something to live on. But what are we to live for? If our ambition is that oil is to serve as a lifting rod for a better society, then we need to discuss what kind of society it is that we want here in Greenland? The oil boom should not turn into a story about rapid access to consumer goods, young people who see no need to get an education or increased social inequality, as has been the case in other parts of the world. We must make the right decisions so that the oil boom becomes a story about Greenland's regeneration as a sustainable society with a high quality of life.



WHAT IS YOUR VISION?

There is no shortcut to a better future. There are a lot of choices to be made, a lot of barriers to be broken down, a lot of dilemmas to be solved. We need to define our values and formulate a vision for Greenland to guide us in the right direction. Only a broad debate can help us make wise decisions and develop smart solutions. We do not need to talk more; we need to talk better. Let the debate continue...

CUL
TIVA
TING

The igloo, that hemispherical snow house, was never a common form of habitation in Greenland. The present Inuit culture of Greenland has always depended on the house—a real house with four walls and roof on top, for winter dwelling. During summer hunting and fishing campaigns, people lived in skin tents. Even today many people like to leave their stale winter house behind and move into a tent for the summer. That is more or less the definition of summer. And modern Greenlanders now live in modern houses built according to Danish tradition.

But, Greenland is different in many ways. People wear a lot of clothes during the winter, and often hunt and fish. This means that every person has a personal mountain of stuff that the modern Danish-style house does not easily accommodate. Building materials are mostly transported 4,000 kilometers across the sea from Denmark to Greenland. It is practical to use standard Danish construction materials when the house is based on Danish standards, but perhaps local materials could find their way into the construction of a different future house of Greenland?

Despite Greenland's huge area, there is a shortage of building lots in most Greenlandic towns. If the rough grounds unsuited for normal buildings could be developed in a sympathetic way, more people could find a home within the narrow city limits of most towns in Greenland. We will certainly not try to define a new standard house that serves a conceptual generic Greenlander. Rather we will explore some possibilities and limitations in developing the Greenlandic city, and take advantage of the fact the land between the houses is common ground. We will explore some important questions, which might help Greenland define its own Greenlandic architectural vernacular.

BY MINIK ROSING

INHABITING

INHA
BIT
ING

Organizing Hope

Greenland has four municipalities and four Mayors. All four Mayors were invited to Ilulissat in February 2012 to meet with the Possible Greenland team. On the second day of the seminar the Mayor of Qaasuitsup Municipality Jess Svane had to fly up north to Nutaarmiut and assist the small community after a young man killed three family members and wounded four others.

Tor Inge Hjemdal and Boris Brorman Jensen met with the other three mayors: Simon Simonsen, Asii Chemnitz Narup and Hermann Berthelsen to discuss their hopes and concerns for Greenland.

BY TOR INGE HJEMDAL AND BORIS BRORMAN JENSEN

BBJ: *Roughly speaking, you could claim that Greenland has inherited the Danish administrative system, a system that Denmark boasts is the best in the world—though this is not to say that it's also the world's best administrative system for Greenland! But be that as it may, Greenland has just been through a process of trimming and reorganizing its administrative system. A sort of centralization process has recently been carried out, and four large districts have been established—a structure that will probably be revised again in a few years. But the question is: if you did not have this recently reorganized structure adopted from Denmark, what would be the best possible system for you? If you could start over this Monday morning, how would Greenland be organized and managed then?*

SS: People feel marginalized. They feel they are not part of the democratic system in Greenland. It's probably more about getting used to the new system. Of course it's annoying that having changed the municipal structure of Denmark, the same thing had to happen in Greenland. Because there are many people who think that this isn't as it should be, because ours is a totally different society consisting of very closed off communities with entirely different administrative needs. Perhaps you might change some of it, readapting it to Greenlandic society, but how much would you have to change? In all four municipalities actually there are people getting together and starting to talk about how we perhaps ought to return to the original eighteen local districts. But generally, I myself find that most of the population is happy with the structural change. There are many who find that service levels have increased and that the service system has improved. But then there are things like communication and technology lagging a bit behind perhaps.

HB: If the administration had to start over completely on Monday, then I'd say that today is Wednesday and I'd spend some time trying to find out what kind of administration practices would be best suited for the Greenlandic society. After all, our current administration system is something we've just been saddled with, without being able to change it. The latest example is the municipal mergers, a way of thinking we have adopted from Denmark. But the Greenlandic society consists of tiny little communities, and of course an administration system really ought to be based on their needs. But if I could turn back time, I would of course have liked to have been given a choice. Because if you'd been given the best administrative system in the world, you'd really think that that provided an excellent opportunity to look at ways of making it even better by looking at other things that other people have done in their way. We used to believe that everything coming from Denmark was the best in the world, but as we have grown wiser over the years, it turns out that this is not so—in a Greenlandic context.

BBJ: *What do you say, Asii?*

ACN: It's not even a Danish administration system. It's German basically, based on Max Weber. In this system, what is good is that equality principle, that everyone should be treated equally. I think that's a very important basic principle for a public administration system. So that's the only thing I think is good about this kind of thinking. If I had to go to work on Monday and say, "People, let's start over," then I'd challenge the current thinking. I'd say to all the employees, "You know what? You're no longer authorities; you're the servants of the citizens." We would go from authority to servitude. I think it's very important to tell people that, "We're here for you." Like, for groups of people to say, "We have this and that need, this and that problem," well, fine, let's sit down together and work it out. Delegate much more of the responsibility to the citizens themselves. That's how I'd like my people—by "my," I mean our employees—to work. I think that's really interesting, and it makes more sense in relation to us wanting people to take more responsibility. I'd rather focus on empowerment. On saying, "Yes, how do we get on?" There are a number of departments—for instance, within the area of social services—that use a lot of resources, including financial ones. The notes always say a lot about what people can't do, so I'd tell my employees that, "Every time you find that someone or another cannot do something, I want the same list stating five things that he or she actually can do." In that way, you achieve a balance between problems and resources. We are far too occupied with finding faults, and of course there are very many very great problems in our society, but people also have very many resources too that we fail to see in our eagerness to help. So those are the two things that I'd say to them.

BBJ: *I think that's a very great statement, that we're all equally entitled, equal individuals and that this assumption is the basis of democracy. It used to be an assumption of the Danish model that the wealth ought to be distributed as evenly as possible—also geographically speaking. That in principle, the welfare state should have a fractal*

Mayor of Kujalleq Municipality Simon Simonsen (Siumut), Mayor of Sermersooq Municipality Asii Chemnitz Narup (Inuit Ataqatigiit) and Mayor of Qeqqata Municipality Hermann Berthelsen (Siumut)

PHOTO BY BORIS BRORMAN JENSEN

" In this system, what is good is that equality principle, that everyone should be treated equally."

structure. A system so finely meshed that it looked the same wherever you found yourself, meaning that even the smallest village, even the most isolated hamlet, regardless of its economy would get its fair share of the social institutions and services, etc. That principle has quietly disappeared in Denmark. We now focus on two growth centers. These are where we place the large hospitals. These are where we concentrate our infrastructural investments. These are where growth is taking place. I know that you have had the same discussion in Greenland. Could you comment on that?

SS: I think that that will depend a lot on how or what sort of industry emerges here. We are so few people here in Greenland that we will be dependent on how living patterns change with the arrival of the large industries. Because I also think that the fringes will become more and more depopulated in the future. So the centralization and the migration to the large towns will probably happen automatically in the future too. There's probably no getting around that. But that goes for the rest of the world too, I think that's the road we are going to take again, depending strongly on what kind of heavy industry will be introduced in the four districts. There'll be, perhaps, oil extraction here in Northern Greenland and then mines in Southern Greenland, too.

ACN: Herman, you were there back when people started talking about four centers of growth—they were in Ilulissat, Sisimiut, Nuuk and Qaqortoq—and you participated in that discussion, also on another level.

HB: There are fundamental needs that people have, for instance, what you very appropriately mentioned about hospitals. Should you have the same services if you get ill in a small town as you would if you were to get ill in Nuuk? And we don't mind admitting that that's impossible. So therefore regional hospitals have been established in the four or five major towns here. That way you can be sure that in your district or region there's a hospital that can deal with most things. And then everyone knows that in case of more serious illness, you have to travel to Nuuk or, if it's even more serious, to the Rigshospitalet in Copenhagen. The principle of equality applying to natural things like falling ill is impossible. I think we have to admit that, regardless of where in Greenland you are. But I think of course the districts can succeed in practicing the equality principles within their own district. I think that that must be feasible in some way within certain areas.

SS: Ane actually asked what we talked about regarding the growth towns back before the merging of the districts, and I clearly recall the time when they started talking about those four growth districts. Our neighboring districts wouldn't hear of the possibility of one district becoming a growth district and not the others. There were already problems back then, and Hermann knows that very well. Four growth districts—what about the other fourteen then? Some of the districts were very much against it, I remember that clearly. It was difficult to get it to pass.

ACN: I'd like to say that I generally think that the idea of going back to that time and the talk of a few main towns is good, because the country is so big that it would be easier to create more equality within each district—taking some conditions and making them better. But then we were overtaken because we got autonomous rule, and boom, the oil companies and raw material corporations came knocking. On the map you can see how many there are. Now there's a lot of exploration going on and a few present and future extraction possibilities. So it's as if we'll have to rethink what we're going to do. This has come as something of a surprise to us. Here I was thinking that we would have many years to develop our districts, which turned out not to be four equally sized entities but rather four very unequally sized ones. We haven't yet completed the task we wanted to complete, which was to have four districts of equal size with similar capacity models. We did not get that.

TEH: *Are you saying that the changed terms are the reason for the new priorities and structural changes in the district?*

ACN: Well, as an entire society in general, I think that we have to pick up the discussion from there and say that given these prospects, given the experience that we have accumulated, what are we then going to do?

SS: We're undergoing changes here in Greenland, after all. Everyone is saying that we're the land of opportunities. And so we're working to spread that message to the great big world to get them to come because we need to develop like everyone else in the world. What have we got? How do we prepare for receiving these companies? What should we do? What demands should we make? And so on. I expect that the results from this project will be of a kind we can reuse later on.

TEH: *The changed terms are based on the challenging structural cooperation between the districts. Have you started working on that? Because those are quite big changes in terms of resources. What's the structural cooperation like?*

ACN: I haven't reached any conclusive thoughts on that yet. But it's very important that all four of us find or are given niches so all four can be self sustaining, because the unequal picture we see today is not okay. We must dare to think, "How are we going to distribute things so that everybody gets an equal share?" It's very tempting to just sit here in Nuuk and say, "Yes, we're just going to shovel in the taxpayers' money, and we can tell that there's growth, right?" But I don't think like that, and I probably wouldn't get re-elected if I did. I'm more interested in how we can distribute things. I think that's a very interesting discussion. That's why this

college of four mayors is a very important forum. The resources are actually located quite arbitrarily in our country. And it's also arbitrary whether they are handled by Herman, Jes, Simon or myself. We have to come up with some more comprehensive ways of dealing with that arbitrariness. It's completely coincidental, right? And where would extraction pay off and where wouldn't it, even though the same resources are present in several places. So there's some kind of exercise in showing complete solidarity with each other, even on a district level, if these districts are going to survive at all in the years to come. That's the next big question after all.

HB: The strength of Greenland has always been the fact that there have been people living almost all along the coast. That's why we can speak of Greenland as a whole today. Imagine if Greenland had developed into only the Nuuk, Sisimiut and Qaqortoq areas. We should be happy that there have been so many villages in Greenland, otherwise we would not be the united country we are today.

BB: *Shell and the other big oil companies will hopefully help Greenland become independent of Danish subsidies. But what will happen when you go from being bound by a bilateral relationship between two democratic parties with strong cultural and historical ties to being dependent on multinational companies whose sole purpose is to make money? And who will shirk their responsibilities if they can? Multinational corporations have one interest only and that's to pay as little as possible and make as much profit as possible. What challenge does that entail for Greenland?*

HB: We shouldn't become another banana republic like in South America in the early 1900s when the multinational corporations ran the countries based on who knows what principles. Today, we are run by the multinational corporation of Denmark, so to speak. Should we replace Denmark with another multinational corporation? Will oil companies or mining companies rule us because of their financial clout? That would be a challenge I think we should be wary of. I don't want us to be governed by a money machine over which we have no influence. Now there's a lot of talk about Greenland's resources, and we've almost already started counting how much money we're going to get, but there aren't all that many multinational companies who pay corporation taxes. We know all about that from Denmark. Should Greenland start focusing on getting them to pay corporation tax first once they start making a profit? I, for one, would like a share of the money they're taking out of my country from day one. Because if Coca Cola and Nestlé don't pay corporation tax in Denmark, how can Greenland with its tiny little communities stand up to other multinational companies when we haven't even got the jurisdiction to do it? If Denmark can't do it, it's 100 times less likely in Greenland. If I were in charge, I'd drop all the talk about corporation tax. They're never going to pay us anyway. Start thinking about making them pay from their first day of operation in Greenland. Whether it's 1% or a tiny little amount, that's not the problem. Greenland has been exploited for so many, many years, and we haven't received any interest from the money that we've given to multinational corporations, including the multinational corporation of Denmark. Excuse the hard words.

BB: *Don't apologize. I think it sounds quite sensible.*

SS: We don't want to be like what has happened in other countries. In a way we're probably a bit more knowledgeable than them now, and that's to our benefit. So we can start making tougher demands when they come here and say, "This is what we want." Because I also think that it won't be a big deal to them. They're going to make a lot of money anyway.

HB: We must demand a big deal!

ACN: I'd like to say two things. If you think about what Hermann calls the multinational corporation of Denmark and the other multinational corporations, the advantage of the multinational corporation of Denmark is that it's a democracy. That's not true of the other corporations because, as you say, they have only one thing on their minds, and that's making a lot of money. They'll cheat whenever they can—they do it all the time. We shouldn't believe that it's a charity organization just happening to pass by. We know very well that there's great danger. And I think we need to talk about Greenland too. We were granted autonomy, but what does that mean? How fast should we move away and make ourselves independent of the subsidies? And what price are we willing to pay? I think we should return to that subject in the local debate in Greenland. Another scenario is to just open up the country for goodness sake and let everyone come here and hire many, many clever people, the best of the best, and then we'll be like Vancouver, for instance. That's a great place to live, I think. I'd like that. But I don't think I'd get re-elected for that either. I'm just stating my personal opinion now, and I'll stand by what I say. But it's not something I've discussed with the council, so I haven't got any official support. I'm just talking as a citizen of the world. To me, these scenarios should ideally develop slowly, allowing us to heighten our own competence and gain even more knowledge. We can't match those big companies, we simply can't. So I hope that no one finds any oil. I'd much prefer small scale mining. Small scale we can handle [says something in Greenlandic].

HB: Of course there's democracy in Denmark, but we haven't even been granted autonomous rule on our own terms yet. We're not even a sovereign state yet because we have a "multinational corporation" (Denmark) controlling us.

ACN: But Herman, you can write Helle Thorning Schmidt tomorrow and say that from the day after tomorrow, Monday, when we go to work, we'd like to be independent. Then she'll write, "Yes, my dear Herman, here you go." That's part of the deal. And it's not something we've been given. It's a political struggle that has taken place because—it's a political struggle, not a gift.

HB: Well, of course, that's not what I meant by it. I'm just comparing, saying that it's the people who have money who get to decide, even in a democratic society.

TBH: *How do you exploit the exploiters? How do you do that in a good and sustainable way? Like when you say that you'd like a slow pace because that allows you to acquire knowledge to get a sustainable development that will last after Shell and the others have left.*

ACN: We should do like in Stavanger, which we visited with the finance committee in August. The outgoing mayor told us that he's been part of the process for many years. When the Americans arrived wanting to build, they said, "We have one demand: you must train us." I think that's the most important demand to make from everybody. They have to train us, because we're lagging severely behind. We must become even better than them.

HB: That's why these three districts, Asii and I, we've signed a cooperation agreement between the Cairn oil company and the government that training must be included. It plainly states that they can only extract oil on one condition, and that's training young Greenlandic people.

ARMELLE CARON **MAPS OF NUUK, SISIMIUT AND ITTOQQORTOORMIIT**

ILLUSTRATIONS BY TINA HARRINGTON AND SIV BØTTCHER, TEXT BY BORIS BRORMAN JENSEN AND MINIK ROSING

Armelle Caron Map
Nuuk
1:10000

Tina Harrington

Nuuk
1:10000

Tina Harrington

INHA
BIT
ING

Armelle Caron map of Sisimiut

Building footprints 1:10.000

The Italian architect Giamattista Nolli's map of Rome from 1748, with its clear figure/ground pattern, engraved pilgrim route and section plans of cultural and religious spaces, has become the representation of architecture's ability to orchestrate urban space. Nuuk, Sisimiut, Ittoqqortoormiit and other towns and cities in Greenland don't reveal any distinct urban quality when seen from a Nolli perspective. Unmapped in an Armelle Caron fashion, the individual buildings can be depicted and sorted out by typology, but we still have no clue where the arctic-urban genius is embedded.

The Greenlandic municipalities have two different urban elements: the town and the rural settlement. A rural settlement is characterized as *Nunaqarfik*, which literally means "a place that has land." A town is called *Illuqarfik*, which means "a place that has houses." This characterization illustrates the general schism of urbanization. A city is a collection of houses that provides some services, but which comes at the price of loss of connectedness to nature. When you grow up in a small rural settlement, the world consists of your radius of activity. Everything within this domain is yours to enjoy and exploit. You own the world. When you grow up in a town, your life is confined to a cityscape of other peoples' possessions. Your normal sphere of operation is confined by the city limit. The world is global, and you may travel to visit other places as a guest. You become a spectator to a world that is mostly owned by others.

INHA
BIT
ING

LIFE **AT THE EDGE** OF THE WORLD

BY MINIK ROSING

When I graduated from high school, more than thirty years ago, a stay in a remote Greenland township was the character-building experience of choice for young urban Greenlanders. Here, you could find your roots and strengthen your ties to the authentic and unspoiled Greenland. At about the same time, Chairman Mao was romanticizing simple rural life in China. With extreme brutality and not much success, he attempted to make peasant life the framework for China's development. Greenland made a different choice. Its townships were depopulated almost immediately after, with less brutality but still with great efficiency, in order to concentrate the population in larger towns. And here in Denmark, even though fewer and fewer people actively choose the unspoiled life in the country, we still think of village life as a touchstone for the notion of Danishness, and we value it.

There are some qualities of life in the village, a township or fisherman's camp that are missing from our modern urban arrangements. This matters to us, and discussions about how to keep those real or imagined qualities alive and well are taking place everywhere. We are willing to invest resources into preserving townships and villages, so their wealth of cultural identity—our cultural identity—is not lost forever. But instead of keeping this life in remote rural societies artificially alive, we could identify the values found in the townships and small villages and transport them, take them with us when we move to the city. In thinking about those values and qualities, I'd like to describe my experience of a Greenland outpost at the edge of the world, from a journey I made as a teenager back in 1977.

My career as a fisHermann and hunter began a good meter from the ice edge at the mouth of Amerloq Fjord south of Sisimiut in Western Greenland. I had just jumped over the gunwale of the Narhvalen dressed in my uncle's sealskin pants, my friend Ono's anorak of caribou fur and a pair of colossal American polar boots that someone had left in my Aunt Alma's outhouse. I thought this getup gave me a stature and demeanor reminiscent of Peter Freuchen—exactly what you'd imagine an explorer or a great hunter to look like.

I surveyed the January darkness for signs of the sleds from Sarfanguaq. I hoped they'd spotted Narhvalen's lanterns, and were on their way to pick me up and take me to the settlement thirty kilometers inland over the fjord's ice cover. The deep thumping from the ship's funnel and the sharp whistle of drifting snow made it impossible to hear the dogs, but in my excitement, I listened hard for their howling in the dark. Suddenly a warm golden light appeared out of the darkness, and a sled with a swinging kerosene lantern approached at a depressingly slow pace. After half an hour's wait in the cold (minus thirty-two according to the wheelhouse thermometer) the sled reached us, and the journey towards Sarfanguaq, one I'd longed for all my life, could finally begin.

Natural order triumphs unconstrained when you travel by sled in extreme cold and winter darkness. The sled dove over the uneven ice. The light from the moon and the northern lights planted stars in the snow and across the rough icy surface. The melancholy sound of the runners groaning their way over the frozen ground melted into the dark and the cold. I couldn't tell how fast the sled travelled over the vast ice plain. It could have been one hundred kilometers an hour, or it could have been one. The sled

weaved in and out of time and space, my eyes froze and my vision blurred, we were whirling through a universe without co-ordinates.

Suddenly reality threw the sled a lifeline. There was a beacon of light from a Petromax lamp set out on the track at the halfway point, and our little expedition was pulled back to the world. With the lamp on board, the sled headed on through the night towards a strip of light nosing out of the township. It reached out to lead us back to people and to warmth. In reality, it's almost impossible to get lost on the way to Sarfanguaq, it lies at the bottom of a rather narrow fjord, but the visible goal kept up the sled driver's spirits. And so Sarfanguaq emerged out of the night. There were twenty houses, each trying its hardest to light up the blackness through ice-armored window panes, but only managing a weak, opal glow. Now and again a chink of light cut through the dark when someone went in or out of a door and the light streamed out, as if it were under pressure inside the house. Just before the door closed, a last little bit of light seeped out of the crack, and the sled driver's eyes, adjusted now to the darkness, tried to fool themselves into seeing a little pool of light left outside the house, only to slowly drift away with the wind.

The houses and lights suddenly gave the plains dimensions, time returned, and from inside my fur cocoon I began to burn with a longing for township life. And township life was what I got. From the moment I stepped into the bright kitchen I was struck by the intensely familiar household elements I had lost as a child when we departed our own miniature township, Ittinera. I had longed for these things with all the force of nostalgia ever since. And here they were. The water barrel by the side of the stove, the smell of coal and sealskin, the gentle bubbling of the meat pot, and the soft voices in Greenlandic, of which I only understood scraps. But the instant I entered the house, all eyes focused on my gigantic boots. They appeared to grow larger from the attention, much to their own satisfaction, and my horrible embarrassment grew with them. Gundha broke the silence: "This won't do!" to which everyone agreed, softly shaking their heads.

So the town council ordered that all attics and outhouses should be searched for oversize sealskins. Some people seemed to remember that Ujuat had shot a gigantic ringed seal earlier in the year, and he grudgingly relinquished the top quality blue-black skin. The morning after my arrival, four of Sarfanguaq's most prominent women assembled on the floor in the kitchen. Now, the feet must be presented. Everyone held their breath, then broke into a hearty chuckle and went on with the chatter. Their gestures were not unlike those used by seasoned anglers, and as far as I could tell the discussion centered on whether the rest of a man's anatomy might be proportional to these gigantic feet.

After a single glance at my feet, the four of them began resolutely on Ujuat's prize skin. Suspending the skin in the air with the left hand, they cut it with the ulu, the knife traditionally used by women. First, it was split down the middle. Then each half was sliced into three sections to be transformed into the kamiks. Quite how the size of the feet could be transferred to the skin, and how the curves and points of these three shapes could be pieced together to make a pair of completely waterproof, snugly-fitting kamiks, on the basis of four different women's glances at a pair of feet, was a mystery that briefly gripped me.

My state was soon interrupted when Markus, the shop assistant, tossed the frozen corpse of a dog in through the porch. While the dog, which had been shot after getting into a fight with a rabid fox, thawed a little as it hung by its hind legs from a nail in the ceiling, the women had a cup of coffee. It was a delight to see four nice ladies in their seventies—each with a ring carrying the blue cross emblem of the temperance league on her finger and a small neat handbag on the arm—sit and gossip freely about this and that while they waited to get started on skinning a dog. With the common sense of a housewife one laid a wrung-out dishcloth under the gunshot wound in the dog's forehead to catch the blood. The dog's fate was to provide skin stockings to line my kamiks. The inner stocking would be separated from the outer kamiks by a layer of insulating hay. A few days later, my sealskin boots were ready to wear. I was equipped with a sled and five good-natured strong dogs, and my life as a hunter, a merry son of nature in direct contact with his Eskimo roots, could begin.

It's often said that all beginnings are hard. This is especially true of driving a sled. Everyone knows dogs have their own characters, and anyone who has driven a sled knows that five dogs have five different world-views. So the driver must start his career with a psychoanalysis of every single dog. Nalunarutaq, who was large and white, had a rough childhood, and despite being the biggest dog in Sarfanguaq, seemed convinced he was the universal underdog. At the least sign of threat from another dog he would throw himself on his back, throat bared in total submission. Kaju, on the other hand, was a swindler who had taught himself to keep his traces stretched without pulling the sled forward in the slightest.

In addition to an individual character, each dog generally has its own idea of where it intends to go that day. The driver has to head the pack in the same direction, but with individually tailored methods of communication. While one dog may require a bite on the ear to get the seriousness of a message, another must be judged gently so as not to disturb its delicate nature. Once the team has come together as a handful of individuals, their relationships with each other must then be accommodated. Angut thought that Singarneq had snatched the sole of a kamik from him the day before and had to spring two traces to the left to bite her in the hind leg. As for her, she finds Kaju irresistibly charming, and wants to run along on his right side, so she takes a single move to the left, still pursued by Angut. Kaju and Nanok are deep into a scheme to make a predatory attack on the neighboring dog team, so Singarneq steps to the left. This shocks Nalunarutaq, who throws himself on his back, and drags behind the sled like an anchor. All these transactions have taken three to four seconds. After three minutes of what should have been a well-ordered routine, our fan of traces had been turned into a thick rope, frozen together with an adhesive produced by the unfortunate after-effect of Singarneq stealing a half kilo of soft soap and wolfing it down outside the store the day before.

I did eventually make some headway, and after a couple of weeks my activities, on the whole, resembled sledding. I was even able to reach the fishing spots on the ice. Here, the residents of Sarfanguaq had pitched their tents so they could take a nap while fishing. They were cheap, single-layered cotton tents, with a groundsheet of reindeer skin. With two or three primus stoves running, it can get tremendously warm in a tent like that. The tea is beefed up to help with the cold: a good dollop of margarine, a little sugar and a handful of oatmeal makes for

a thick, warming consistency. A pot of fish or meat is always within reach. A tent like this in the minus thirty degrees cold, packed with people and boiling kettles, is inevitably surrounded by a gigantic pillar of steam, as if it were a geyser on its way through the ice. It looks biblical to me, although I am not sure why?

Ten days after the spring equinox, springtime came to Sarfanguaq. It hit with such a force that everyone was flung out of their houses. At ten in the morning, old Johanne, at eighty-one years old, found herself on her way up the hills with a coffee pot in her hand and the urge for a heather-fire in the soul. The older boys and girls moved to a tent on the other side of the bay and surrendered themselves to sheer unbridled recklessness.

Itivinnguap's Idi Amin found his favorite bitch (she went by the unusual name of Hans-Lars) with five thriving puppies. His civilian name was Peter, but after having thrown himself into the role of monarch and dictator over the small Itivinnguaq Bay just off the coast, he deserved a new, more spectacular name – Idi Amin. He claimed Itivinnguaq as his exclusive fishing waters, and even though he was a friendly and peace-loving man, he thought it only reasonable to fire a shot or two after anyone who disputed his claim. Everyone knew he took this wild view, and frequently discussed whether or not he really did have any legal standing. But all agreed, legal or not, it wasn't reasonable to shoot at his own flesh and blood—as no-one wanted to risk challenging him, the shooting was not usually necessary. Itivinnguaq's Idi Amin avoided conflict with the rest of the population and possibly with the law as well. Today, the first day of spring, he stood out in his bay with a hole in the ice and pulled one codfish out after the other. He'd done this almost every day for several years, but as he stood there in the midst of his kingdom he couldn't control his enthusiasm. He welcomed each cod to the surface with whoops and cries and a dance on the spot. The biggest, best cod got a smacker of a kiss.

The sunshine over the land made it so sharply white, that were it not for the clear scent of frost and the flocks of snow buntings and arctic redpolls that whirled through the air, you might think the atmosphere had been blown away with the last storm of winter. Where the snow was hit by the sun's rays it evaporated before it had time to melt. In the shadows the frost was still severe, and condensation formed into fragile crystal feathers that grew upwards towards the weak breeze. The ice on the fjord buckled under the sun and adjusted itself, first in pops and hiccups, then long snaps, as the pressure sent cracks across the fjord. The swell from the ocean reached all the way into the bay—a powerful pulse in the seal's blowholes. The ocean ice had broken at last and the mouth of the fjord 35 km to the west was now open waters!

The heat-haze above the ice created a world of mirages: gigantic Moorish palaces hovered at the horizon, only to vanish when a gust of wind howled through. The ice floe went on forever, and it was only when a seal crawled up to enjoy the sun could the eye find a spot to rest. A pair of sleds drove towards the ice edge, hopeful that walruses and small whales had come down from the north with the West Ice. Others hiked across the fjord to catch Uttoq—seals slumbering in the sun. It went incredibly well. Blood trails from all directions puddled on the ice ramp by the sea, several seals had been dragged home. All traces of the hunt gathered here at this ramp as the ice platform was passable even at low tide. Fjord ice moves up and down with the tide, and at low tide a meter high wall of ice emerges along the coast. In shallow bays, the ice moves over a long enough stretch that the tough saltwater ice doesn't break, but hangs in a gentle arch, making a kind of ramp. With a good run-up and a light sled you can hop from fjord to field along these ramps, without having to wait for high tide.

As you can imagine, all of Sarfanguaq's hundred residents were building up a tremendous urge to party. They usually were anyway, but today there was another, special reason. There was plenty of meat, all the floors were newly scrubbed and the fresh spring air had replaced the stale winter air inside. During the night the sleds returned from the ice edge. You could see their good fortune from far away. On one of them, the front half of a walrus sat as if on a throne. The carcass was so big that even though the outside was frozen to a hard shell, the inside was still bloody and warm. It looked jovial as it sat hovering with its great moustache.

The walrus is the Arctic's answer to the party ham: a huge piece of meat with two practical handles at the front. With great difficulty the sled was backed up onto the ice ramp, while the mountain of meat teetered alarmingly over the edge. Outside, the men grabbed the handles, and dragged the front of the carcass into the house. The party had found its home. The biggest pot in the kitchen was placed over the fire, and every dish and bowl in town was filled with meat. Someone had brought the frozen tail of a young beluga whale as trimmings, and while everyone waited for the walrus to be cooked, we peeled the delicious skin, the maktak, off the tail with a pocketknife. When the walrus was finally done, the elegant profile of the tail had been reduced to a scrawny rack. Great steaming clumps of ebony black meat were brought in, and while tall stories drifted through the air, the walrus disappeared bit by bit.

The party downed a bottomless supply of non-alcoholic beer, and before long, it was time to dance. An old accordion, which despite the clean air suffered from terrible asthma, was accompanied by a five-stringed guitar and an upside-down plastic wastepaper basket from the school to make a cavalcade of whaler polkas. But before the dancing could begin, everyone had to wash. It's considered extremely impolite not to wash your face and your hands—right up to your elbows—after eating. A basin with warm, soapy water was sent backwards and forwards between the stove and the dinner guests until everyone was clean.

The most eligible bachelors of the township had made themselves irresistible by pulling up long red fisherman's wellington boots, which gave the perfect seductive plop at the point in the polka where everyone stamps on the floor. The modest dance floor only allowed for dancing in shifts, and everyone at the party took turns to whirl in and out of the dizzying polkas, using the breaks to play a hand in a game of Ölsen, or to go outside and see the northern lights play ball with the moon, while the body's heat returned to the heavens.

I too needed to step out at intervals into the pleasant night air. I remembered my first journey through the heavens and the stars to Sarfanguaq. The shadows had shrunk now. I understood most of what was being said around me, and I think I understood where it was coming from. For three months I had passed as a parody of an old school Greenlander. Without the authentic furs, which no local would ever dream of wearing, my shadow had shrunk considerably, and I could easily make out the contours of the eternal amateur Eskimo.

"The walrus is the Arctic's answer to the party ham: a huge piece of meat with two practical handles at the front."

PHOTO BY JULIE HARDENBERG

INHABITING

STUDY

ARCHITECTURAL TIMELINE

	INDEPENDENCE I	SARQUAQ	INDEPENDENCE II	DORSET	LATE DORSET
ARCHITECTURE					
NAME	INDEPENDENCE I	SARQUAQ	INDEPENDENCE II	DORSET	LATE DORSET
PERIOD	- 2500 UNTIL - 2000	- 2400 UNTIL - 800	- 800 UNTIL - 400	- 700 UNTIL 0	- 500 UNTIL 1200
DISSEMINATION					

THE NORTHERN FAMILY

985 UNTIL 1450

THULE

1200 UNTIL 1900

PREFABRICATED HOUSE

1950 UNTIL 2012

THE BLOCK

1960 UNTIL 2012

MODERN ARCHITECTURE

2012


INHA
BIT
ING

LAND **ADMINISTRATION IN** GREENLAND

Physical planning in Greenland is a new phenomenon. The praxis of planning was established by the colonial power in the 1950s. After thirty-three years of home rule, most of the planning remains in the hands of Danes with little or no relationship to Greenlandic society.

It is the author's experience that urban planning in Nuuk has not at any point brought anything good to the city, but rather has been an obstruction for appropriate development. In cases where planning actually was guiding development, the consequences were disastrous.

In this article, he suggests a new Greenlandic administration of land use, which must be built on Greenland's needs and values and the actual geographical, social and economic situation—a situation that is maybe not unique, but is definitely not in the slightest bit Danish.

BY THOMAS RIIS

PLANNING AS OBSTRUCTION

My client wanted to build a tool shed. He had the will, the ability and plenty of space. We applied for permission on the 2nd of February 2009, to use approximately twenty square meters for the shed. One year and four days later we received a land grant and the project could move forward. Ahead lay the correspondences and meetings amounting to several hundred man-hours of work for the public administration, not to mention our time.

An owner of a store building in central Nuuk wanted to tear it down and build a bigger one, and asked the administration for limitations and opportunities. He was informed that first a plan should be laid for the area but "no worries, the task has high priority." After five years of fruitless labor and hopeless waiting, he sold the building. The will and ability were present, as well as the space. Only the public administration stood in the way of development.

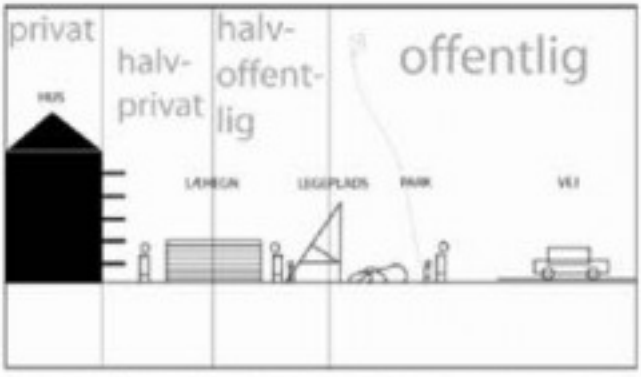
In 2005, a new five-year plan for the municipality of Nuuk was decided. It included a new area for the development of 125 dwellings within walking distance of the city center. Now the only thing needed was a detailed plan that had never been made. From 2005 to 2012, approximately 700 new homes were built in the distant suburb Qinngorput. But the 125 urban dwellings never did appear. The will was present, so were the skills, and the need was extreme, but the public administration of land use was absent.

These three examples are far from unique. They are the rule rather than the exception. Our way of planning and managing land is an obstruction to the development of society. Sometimes possibilities are hindered, while in other cases the projects are delayed so long that opportunities are missed.

Despite this lack of effective administration, we do have a lot of building activity, and in these cases the planning process often plays the role of a democratic fig leaf when already agreed projects are to be realized. Monstrous projects are eased through the system without regard for spatial qualities. The planning system has made it legal for the Greenland Home Rule Government (GHRG) to purchase a massive office project at a site reserved for housing in a record four months. Another plan for building 300 homes in a new settlement that appears to be a dystopian Russian coal mining camp was adopted after only half a year—close to the record. These two examples are some of the largest building projects in the history of Greenland. Comparing this to the fact that approvals for a tool shed often take more than a year, indicates we have a serious problem.

A colleague has long

The structure pasted on a snowwhite landscape seems at a distance of 5 km.



A general scheme of private and public space used in danish planning tradition, here the usual treatment has been shifted by clones and triangular shapes.

A picture of a Japanese Garden.

advocated that at the exit of our airport a sign should be erected that says, "Welcome to Nuuk! Excuse our mess." And he's right. The city has for many years developed at a rapid pace, but never for the better. A gaudy, aimless patchwork of random development continues to grow and expand over the mountain.

THE LAND IS COMMON PROPERTY

We Greenlanders are big landowners, but at the same time no individual has ownership of one single square meter. All land, cities, bygds, mountains and fjords are community property. The cultivated fields and conifer plantations are not privately owned. The area we use we have borrowed from the community. We cannot buy or sell land.

When someone wants to use a piece of land, we as a community may grant the users rights for a limited period or for an indefinite lease. Or we may reject the request for occupancy if we do not find the project aligned with community interests. A European will probably wonder about the scheme, but for us it is quite obvious. The reverse, private ownership of land would be incomprehensible in our context.

Land administration is handled by the municipal authorities with the GHRG as appellate. We apply for the land grant by handing in the project outlines, and the administration controls whether these outlines are compatible with public interests, previous grants and ownership of surrounding buildings and infrastructure. To handle all these interests, we make very detailed district plans so the administration can just check whether or not the applied project is strictly in line with the plan's provisions.

If it's a small greenhouse for the garden, a social housing project or an airport, it makes no difference; you'll have to apply by developing your whole project. Even a place to put your boat in the winter requires a land grant. Any land use is a privilege taken from the community and granted to the individual.

When a building is traded, the land grant will be transferred to the building's new owner. In a bygd with abundant land, the value of a building often equals the value of building materials—or less. At the top addresses in Nuuk, a rotten hovel could be sold for EUR 200,000 or more. Land grants may sometimes have great economic value, and the implications of the public management of land use are in many ways larger than the tax authority's work—in economic, social and human terms.

PLANNING GREENLAND

From 1950 to 1981 the Greenland Technical Organization (GTO) was in charge of all national, municipal and urban planning in Greenland. The Danish colonial power organized all its technical activities in GTO, which thus became the master builder and operator of virtually all infrastructure and construction in Greenland. GTO was quite effective in placing responsibility for both planning and execution in the same organization, but it was hardly the guarantor of planning boum from a broader analysis of society's future needs. Public engagement was quite limited. The private part of the construction activity, in which GTO did not get involved, was largely single-family homes without plumbing, which did not lead to greater needs for planning.

Soon after the arrival of home rule in 1979, the decision was made to retain responsibility for planning in Greenland. For six years, the National Planning Committee under the parliament had the task to provide a plan for the nation, and local authorities were required to prepare a development plan for all settlements with more than 800 inhabitants. The local council was empowered to grant permission for use of land within urban areas, while nationwide the committee was responsible for the allocations in the countryside. The National Planning Committee largely relied on the advice of GTO.

After new regulations, from the 1st of January 1987, the GTOs role in planning was transferred to the GHRG and re-baptized as "Nuna Tek." In the transfer, most of the staff and all of the traditions from the previous organization were retained.

In the following years the responsibility for physical planning has shifted between directorates and departments of the GHRG—some years connected to economics, others to environmental administration. Plans for Greenland have never been consistent or durable. We made plans on building a lot of airports to improve transportation with fixed-wings aircraft, but no following plan for what to do with the ferries. We had plans to make great plants for fisheries, but no strategy for migrating the workforce. When in the middle 1980s the need for registration of landmark buildings came up, some Danish students and employees under the Directorate of Economics were handed the job, and since then nobody cared.

Changing patterns in Greenland's economic structures led to the adoption of a new regulation in 2008, which just two years later was renewed after self government was introduced. In every one of these changes over the years, areas of responsibility have been taken out of the hands of parliament and given to the government, Naalakkersuisut, which now has the power to issue national planning directives and give them legal impact as a municipal plan. The municipalities are still obligated to make the plans, but the government has the force to overrule and instate other plans.

PLANNING NUUK

From 1987, the municipalities have been required to develop detailed area plans prior to land allocation for large or significant building or construction work. The vast majority of local planning has been for public building and housing projects, and municipal planning for Nuuk could for decades somehow be based on public five-year budgets. The master plan designated the new land for development. Once the building projects were adopted, you could write the local plan. The planning was not for urban quality considerations or general interests of society, but primarily to prepare a legal base for the agreed projects. In that way we followed the fine tradition founded by the GTO.

In the past decades there have been some exceptions. One example is the idea of an "historical axis," which was born in the late years of deconstructivism. It posed the idea of making a historical theme the anchor of physical planning in a large part of Nuuk, where a wheel track shown on a old map were to be highlighted by a new line of high-rises. Nuuk was to be given a skyline diagonally cut through the city. In this particular case, area planning went ahead of the projects in an attempt to do active spatial planning, and the results were disastrous.

First part of a local plan is describing and play an illustrating role that only has very limited legal effect. This part tend to grow voluminously and increasingly deploy the use of beautiful images to sell a future vision of Nuuk that will supposedly arise if these plans are followed. The actually expected consequences of the proposed projects are obscured. In this way the plans for paving

the subject of the plan 415 a under construction. the perfect spot for a tranquil stone garden overnight think.

the way for a monstrous dystopia are sold to us with beautiful words and color images of Japanese gardens.

The planning tends to very detailed on building regulations, defining shape, colour, roofing, share of glass in facades etc. The high level of detailed regulations increases the fear for those in the administration of being wrong. And it is anyway safer to fantasize new buildings for virgin mountains than it is to deal with the complexities of an existent city, and therefore the plans for the city eventually end up allowing for nothing at all. So most of the existing city of Nuuk is regulated by plans saying nothing but "this area is fully developed."

Not only do our way of administration obstruct development, but for the development that happen, our administration has no positive impact. In addition, the system seems to hold ample opportunities for corruption at many levels, and there is no evidence that this does not occur.

But if these are the unfortunate side effects, what are the system's positive impacts?

None, as far as I can see. In the twelve years I have worked as an architect in Nuuk I have not seen any positive effects of urban planning. Whatsoever.

HOW TO MANAGE IMPROPERLY

It is my impression that there is a fatal system failure. Often we are led to believe it is the individual employee in the administration that is hostile to us, has a bad day or just does not know how to do something sensibly. And it can too be true, but I think the problem runs deeper. It is a system failure.

Our planning law is largely inspired by its Danish counterpart. The civil servants who author the laws usually have had both education and work experience within the Danish system. Municipalities have largely left it to Danish consulting firms to make the plans, and the public employees who administer the plans tend to be architects and planners with experience from similar employment in Denmark.

Between the Danish consultants and the public servants there is both contamination and inbreeding. A Nuuk municipality technical director, after a few years in the administration, took on an excellent position in a Danish consulting company with great interests in the Greenlandic market. The municipality's current head of the planning department has for many years operated a Danish consulting firm whose primary activity was the production of plan documents for the Greenland municipalities. The crowning glory of this is that we asked the Danish consultants to conceptualize our latest laws of land use and planning, given the opportunity to secure their market in future.

Furthermore, we have the legacy of GTO. It is still a general perception among both local officials and the Danish consultants that planning is about inventing new, exciting projects, which might be scrapped, or maybe realized by

public funds. Private investment in economic development is not present in their image of Greenland. The administration's architects use many resources inventing buildings that have no basis in reality other than the architect's designing ambitions. For many years Danish consultants traveled to the coast and invented new forms. Following the merger of municipalities, the architects in Nuuk are now designing new cozy dwelling areas in Tasiilaq. In both cases, the pencil is most often led by people who have not lived in the location, or even under similar conditions.

Our law and planning practices have their basis in a physical and economic reality that may exist in Denmark, but has nothing to do with Greenland. Most plans are authored by short-time visitors who are just passing through and who will not be personally affected by the administration. When the effects of the law or planning document materialize, the author has traveled back to Denmark, and we'll have to ask the new visitors to make a new law, or planning document.

IT MIGHT BE POSSIBLE TO BE WISER

If the problems described are due to a system failure, the only solution is to establish a new system. Our colonial heritage was not successful, but we could look abroad and maybe find other systems to be inspired from. I would be grateful for any qualified hint. Meanwhile I think the only way is to try to do it the Greenlandic way.

To begin, we must articulate our values, our potentials and our abilities. This is the basis we build on. The system of land administration should only focus on our needs for regulation.

I will propose a basis of four points:

- The Earth, and the right to exploit it, belongs to the people who live in Greenland. This is a quality that strengthens the society and the building of the nation.

- Grants of land use can create value for both society and the individual. Therefore, the individual's right to use of the land should be prevented only when the application is obviously opposing community interests.

- Regulations of land use can only be given by those who have an obvious, substantial and defined interest in the land use.

- The community can collect a share of the value added from the individual's use of the land.

I propose a model where we take the decisions by negotiation, and work the plans upwards to a suitable level of negotiation, contrary to the existing top-down management, and that we negotiate with those whose interests are most closely relevant when the plan is adopted. The number of levels of negotiation should not be excessive but suitable for a nation of just fifty thousand human beings. The interests will follow the case, which means the negotiation on one level should always include the levels before.

If society, as a "nation," has interests you want to secure, the interests must be clearly identified; otherwise you cannot argue that a case should be negotiated on the highest level, as the highest level has no clear and relevant interest. The same goes for the municipality and city level. If the broader parts of society have no clearly identifiable interests in the proposed project, they have no right to claim part in the negotiations.

That makes a serious call for strong sectorial plans on a national level as well as a city level, all in outlines and not in details. On the other hand, it cancels the need for the great, glorious, comprehensive and detailed plans for every little spot of Greenland.

You might find this naive at a time when Shell and Phillips are knocking at our front door, and London Mining is lifting the back door off its hinges. I do, however, think that we have no chance at all managing our areas with a system so disorderly and unfocused, and so unfitting for the Greenlandic reality. In this present system we lose insight, value and potential. I see no problem granting the rights to exploit a part of our ground to foreign companies, but it should be done within a coherent Greenlandic administration of land.

I call for a system based on Greenlandic values and built to fit our possibilities. We might not achieve independence, some might even not want it, but we should get rid of the internalized Dane where he is only hindering our progress. After all, this is Greenland.

The area I live in central Nuuk. According to municipal plan this area is "fully developed". It is possible to get permission to expand your existing house to a limit of 100 sq.m. and that's all.

http://www.nuuk.gl/da/borgerlig/planlaegning/kommuneplan/kommuneplan_for_nuuk


INHA
BI
ING

PHOTO BY BORIS BADRMAN JENSEN


INHA
BIT
ING

BLOCK **P** – THE GREENLANDIC **SELF**-IMAGE

Block P is an icon in Greenland's architecture and in Greenland's history. At the time of construction in 1965-66 it was the largest residential building in Denmark. It is only five stories high but more than 200 meters long and equipped with 320 apartments. With its grim concrete exterior and a floor plan indifferent to Greenlandic ways of living, it rapidly became an emblem of failed post-colonial urbanization, imposed by a seemingly un-empathic Danish administration. Huge and ugly, it stood in stark contrast to the traditional weatherboard houses painted in bright and optimistic colors decoratively sprinkled over the rocks. Block P's appearance was one thing, but perhaps more importantly, it became the symbol of an official "concentration" policy known by the unromantic name G-60.

BY MIRIK BOSING, PHOTOS BY STUDENTS FROM AARCH

Concentration policy was a blunt instrument. It was part of a broad attempt to modernize and develop Greenland. Its starting point was to relocate the population from a multitude of small rural settlements to the cities, and it was implemented with greater or lesser regard to the wishes of the people concerned. Block P was built to house a full 1% of Greenland's population, and came to be seen as the shining star of injustice and abuse. During this period of rapid and often relentless reconstruction of Greenland society, many people felt dissociated from the changing society, disenfranchised. They lost their self-confidence and status, and with it, their initiative.

Greenland descended into an epidemic of suicide among young people, notably young men. For a couple of decades, the increase in life expectancy brought about by better housing and health services with its welcome reduction in tuberculosis, was offset by suicide, alcoholism and murder. There is no single cause for the broad fan of trouble and disaster that Greenland experienced during this period, but the loss of cultural identity and pride, loss of prospects for life and the devaluing of the skills and knowledge that most people had acquired through informal, but highly competitive and challenging training in traditional trades related to hunting and fishing, had plenty to do with it.

But it wasn't all bad. An increasing number of Greenlanders received higher education and with this, a process to reduce gradually Greenland's dependence on Denmark started to take hold in both Danish and Greenlandic political awareness. Home rule began in 1979, and Greenland formally started its journey toward self-governance. With the increased political power came increased responsibility for the development of Greenland society. Those governing now had to take responsibility for the adverse effects on cultural tradition brought about by development. There is no doubt this combination, first home rule and later self-governance, had a positive effect on Greenlandic society and improved the sense of pride and self-respect of most Greenlanders. There has even been room for a little historical acknowledgement and

some forgiveness. It became clear that many of the highly criticized decisions made during the Danish administration were made for the right reasons. In all likelihood they averted potential disasters for Greenland, and helped establish the present Greenlandic nation.

Paradoxically, the new autonomous government has reintroduced a policy of concentrating the population in a few cities. As others concluded before them, it is hard to provide good services to a remote and dispersed population. Future development, cultural coherence and Greenland's prosperity depend on further concentration of its population. But this time, its people are part of the public discussion on how this will happen, and what Greenland's towns and cities will look like.

Block P has lived through this phase of Greenland's history. When it was built, there was a severe shortage of housing for a rapidly growing population. There were massive health issues associated with the existing housing in most of Greenland. That said, how could hunters and fishermen be productive and comfortable in apartments designed for placid office clerks? Despite this poor fit, in reality, Block P solved a suite of serious problems for Greenlanders and brought sanitation, running water and electricity to a population that would have been without these luxuries, not to mention a roof over their heads altogether.

People live differently to the way they did forty-five years ago. Wage jobs vastly outnumber occupations in hunting and fishing. And over time, the reputation of Block P has mellowed. The grim concrete building has taken on a more nuanced historical significance, and the population of Nuuk has adapted to the kind of housing it offered. Ironically, just as Block P is finally receiving some well-deserved acceptance, it is to be demolished. No longer will you find it in the housing market, nor will it stand as evidence of the recent, urban history of Greenland.

PHOTO BY ALEXANDER HEIEN BERG, STUDENT AT ASA

INHA
BIT
ING

HOUSING FOR HEALTH, **HEALTHABITAT**, AUSTRALIA

Healthabitat has worked for twenty-seven years, mainly in rural and remote Australia, to improve the health of indigenous people by improving their living environment. The principles used have resulted in the recent expansion of the program to rural Nepal and urban Brooklyn, New York City, and beyond. Therefore, while the solutions that have proved successful in Australia will not be directly relevant to the Greenland condition, we have been made aware of Greenland's significant rate of housing-related health problems and suggest that the principles may be used in local, creative ways as has occurred now in numerous locations around the world.

BY MUL PROUDS

The first project commenced in 1985 when a small group of Australian indigenous communities living in the remote northwest desert of South Australia requested that a strategy be developed to "stop people getting sick" by improving the living environment. In the local Pitjatjantjara language, the work was called Uwankara Palyanku Kanyintjaku (UPK)—a strategy for wellbeing, or a plan to stop people getting sick.

The three directors of Healthabitat—Paul Pholeros (architect), Dr Paul Torzillo (medical doctor) and Stephan Rainow (environmental health)—worked on this initial UPK project. Through this project, nine healthy living practices were developed which now form the foundation of the Housing for Health program and the "survey, test, fix" methodology that underpins it.

Between 1987 and 1994, small Housing for Health projects were completed in Central Australia and the methodology was further developed and improved. Healthabitat was formed during this period of work. From 1994-1999, trial Housing for Health projects were completed in other states around Australia. These trial projects proved the method was successful in a wide variety of environmental and social conditions and led to further projects nationally.

Housing for Health projects aim to improve the health of indigenous people, particularly children 0-5 years of age, by ensuring they have access to safe and well functioning housing, and an improved living environment. The Healthy Living Practices describe in detail the illnesses likely to be prevented, and link these to the functioning hardware needed in a house to allow access to healthy living. We therefore coined the term "health hardware" to describe the physical equipment needed to give people access to the health giving services of housing. For example, to wash a young child, the "health hardware" needed may include a water supply, pumps, tanks, pipes, valves, taps, hot water system, tub and drainage pipes.

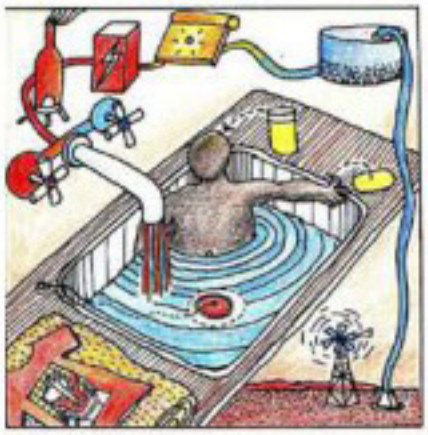
From 1999-2010, Housing for Health projects, supported by a succession of state and federal governments, have improved over 7,300 houses in 184 project locations around Australia for an average cost of AUD 7,500 per house, which makes the Housing for Health program an extremely low cost process for increasing health standards in the Australian context.

KEY FEATURES OF ANY HOUSING FOR HEALTH PROJECT

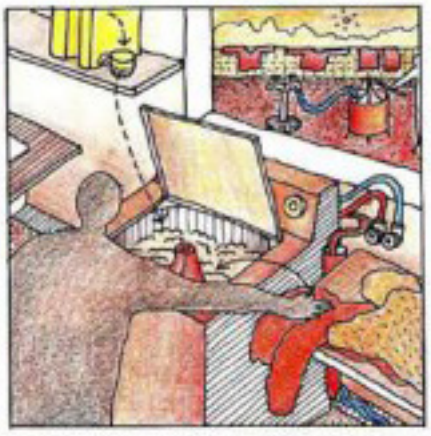
Housing for Health projects are run according to a carefully prescribed methodology for testing and checking house health hardware function using over 250 standard, repeatable tests. The methodology connects apparently simple health goals with immediate and longer-term repair work.

One dilemma in implementing this work is the tendency of governments to commission reports based on interviews and research that involve those struggling with their health in an abstract manner. We have viewed the subsequent loss of trust and "research fatigue" of disadvantaged people as a key dilemma to be addressed if this work is to be successful. Therefore, on the first day of the project, the tools, materials and skilled people are available to commence urgent repair work on houses as identified by the survey/testing. Rather than receiving a report on housing faults, the resident experiences an immediate improvement in the function of their houses, and this builds trust for the work to continue.

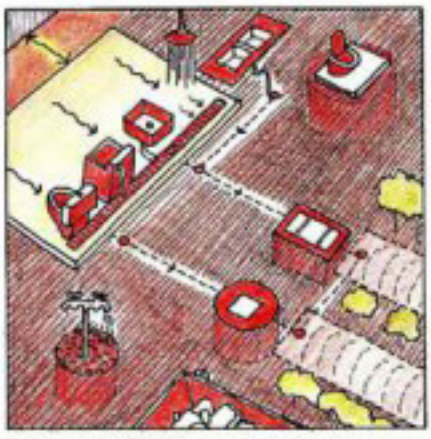
To facilitate this experience of immediate action,



1. Washing people

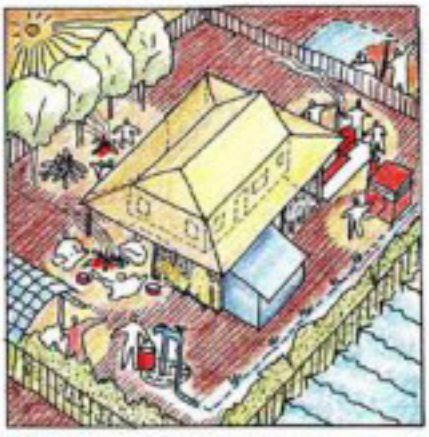


2. Washing clothes and bedding

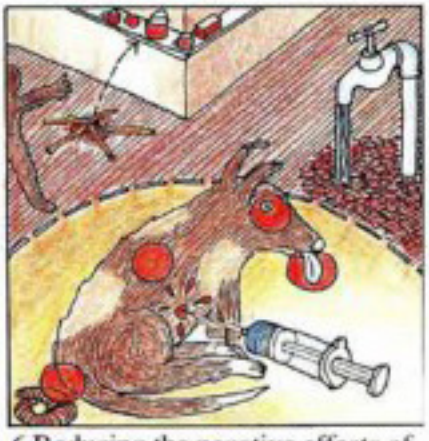


3. Removing waste water safely

4. Improving nutrition

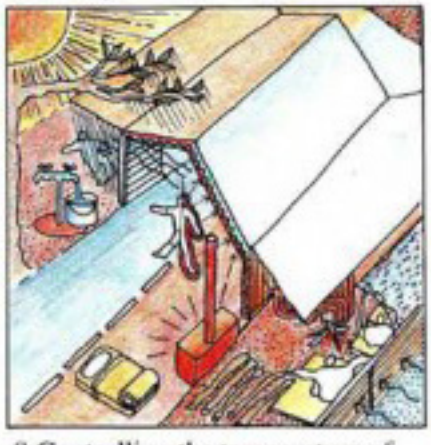


5. Reducing the impacts of over-crowding

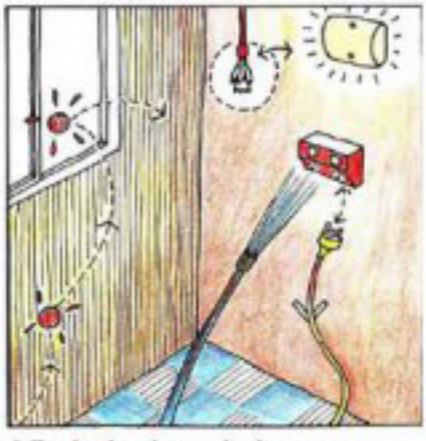


6.Reducing the negative effects of animals, insects and vermin

7. Reducing the health impacts of dust



8.Controlling the temperature of the living environment



9.Reducing hazards that cause minor injury (trauma)

an on-site Housing for Health database captures the results of the testing and checking of house health function that leads to:

- identifying immediate repair work to improve the houses
- collecting detailed "before" data by which to measure improvement at the end of the project (when the full survey / testing / fixing process is repeated)
- developing a project database for the use of the local community for ongoing housing maintenance programs
- compiling a national database describing house function in great detail and indicating areas of common failure, which in turn facilitates targeted housing research.

In all aspects of this work, 75% of all project staff are from the local communities that are affected, thus involving these groups directly in the improvement of their living conditions, health and daily life. The benefits of this local community involvement include:

- Senior local community members usually agree to accept the program. They help plan the Housing for Health project, select local staff and serve as an invaluable liaison with the community members about the aims and methods of the program.
- Local employment opportunities are created where unemployment rates are usually high.
- Local community staff members develop skills in "health function" assessment of the houses and basic maintenance work.
- Local knowledge of families, community patterns that may impact on the work, house use and failures, language and significant cultural issues are integrated into the program. Housing for Health thus becomes a community program.
- Ongoing maintenance works by local community people can continue after a Housing for Health project is completed. A supplementary program called Maintaining Houses for Better Health has been designed to continue training and teach skills to local staff on "health based" house management systems.
- Experienced indigenous staff are then often used to train new staff in other communities.

Healthabitat has also initiated a broad range of applied, practical research projects to improve housing. Some examples include research and development of tap water; hot water systems; waste disposal systems; lighting; kitchen design; prefabricated transportable shower, laundry and toilet modules; local indigenous staff training aids; customized database and information systems; water use monitoring and subsequent water saving; and improving the internal temperature of existing houses using simple, low energy devices and materials.

BENEFITS OF THE PROGRAM

The benefits of this program are many and touch all strata of the community.

First and foremost, the program improves the functions and conditions of a household, and therefore leads to an improvement in overall health. Data collected about the program has shown that hospital separations due to illness caused by poor living conditions were reduced by 40% for families who have benefitted from a Housing for Health project when compared to those who had not received the program.

These benefits for individual families are then compounded by the benefits for the entire community in which they live, given the extensive involvement of locals in the work. The work also quantifies in detail more major housing and infrastructure needs beyond the financial scope of the program, and exposes these needs to governments who have the resources to complete these larger tasks.

Housing for Health data is also used in a number of ways. At a practical level, housing designers and managers who procure housing for these communities can use the data in the design process to guide vastly improved housing design, thus avoiding mistakes from the past in new work. Housing policy makers and health planners can also use the data as it provides them evidence on which to base policy decisions.

PROGRAM EXPANSION

Between 1999 and 2012, Housing for Health projects have improved the living conditions of over 43,000 indigenous people. For over twenty-seven years, Housing for Health projects have been supported by local indigenous communities and state and federal governments of various political orientations. This broad support acknowledges the universal nature of the program, which is aimed at improving the health of disadvantaged members of society in an economic way, building individual communities and assisting health and housing professionals in their work.

The success of this program has now resulted in invitations for Healthabitat to assist communities outside Australia. For example, the health priority principles set by Healthabitat have been applied to sanitation projects in three rural villages in Nepal and, most recently, a Housing for Health project is on trial in an urban public housing district of New York City.

Paul Pholeros AM, architect
Since 1984 Paul has been the principal of an architectural practice based in Sydney, Australia working on urban, rural and remote area architectural projects throughout Australia and overseas.

Paul is also a director of Healthabitat. For 27 years Healthabitat has worked to improve the living environment and health of Indigenous people in many suburban, rural and remote areas of Australia.

In the last 10 years alone, Housing for Health projects designed and managed by Healthabitat have improved more than 7,400 houses in 184 projects around Australia improving living conditions of over 45,000 indigenous people.

In 2011 Healthabitat won the Australian Institute of Architects national Leadership in Sustainability Prize and the international UN Habitat World Habitat Award.

THE AESTHETICS OF **NECESSITY**

Structures made for storing dog sledges and equipment are made from available material. Everything from drift wood, old building, furniture and boats are used to make these structures. Scarcity makes you improvise. Buildings and structures are pragmatic and contextual.

TEXT AND PHOTOS BY JOAR NANGO

Joar Nango is an architect with a degree from NTNU in Norway. He works explore the boundary between architecture, design and visual art. Thematically speaking, his work relates to questions of indigenous identity, often through investigating the oppositions and contradictions in contemporary architecture. Recently, he has worked on the theme The Modern Sámi Space through, amongst other things, a self-published zine series entitled Sámi Hiksendáiddat the Fanzine, design project Sámi Shelters and the mixtape/clothing project Land & Language. He is also a founding member of the architecture collective FFB, which works with temporary architecture in urban contexts. At the moment he lives and works in Tromsø, Norway



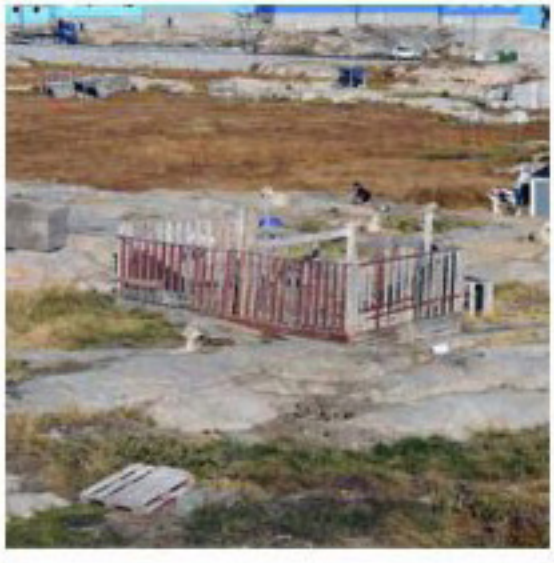










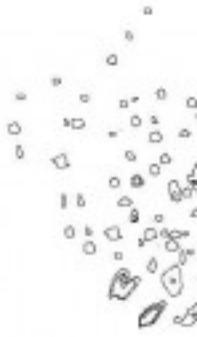




INHA
BI
ING

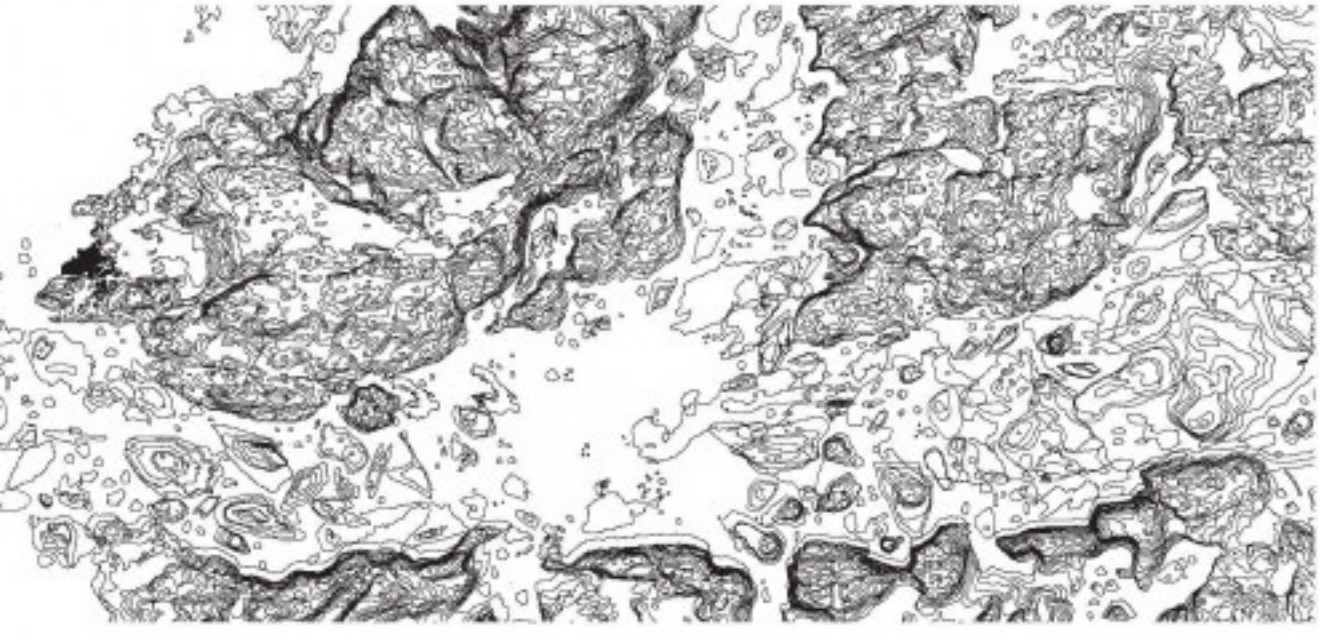
AN INDEFINITE **DYNAMIC** LANDSCAPE

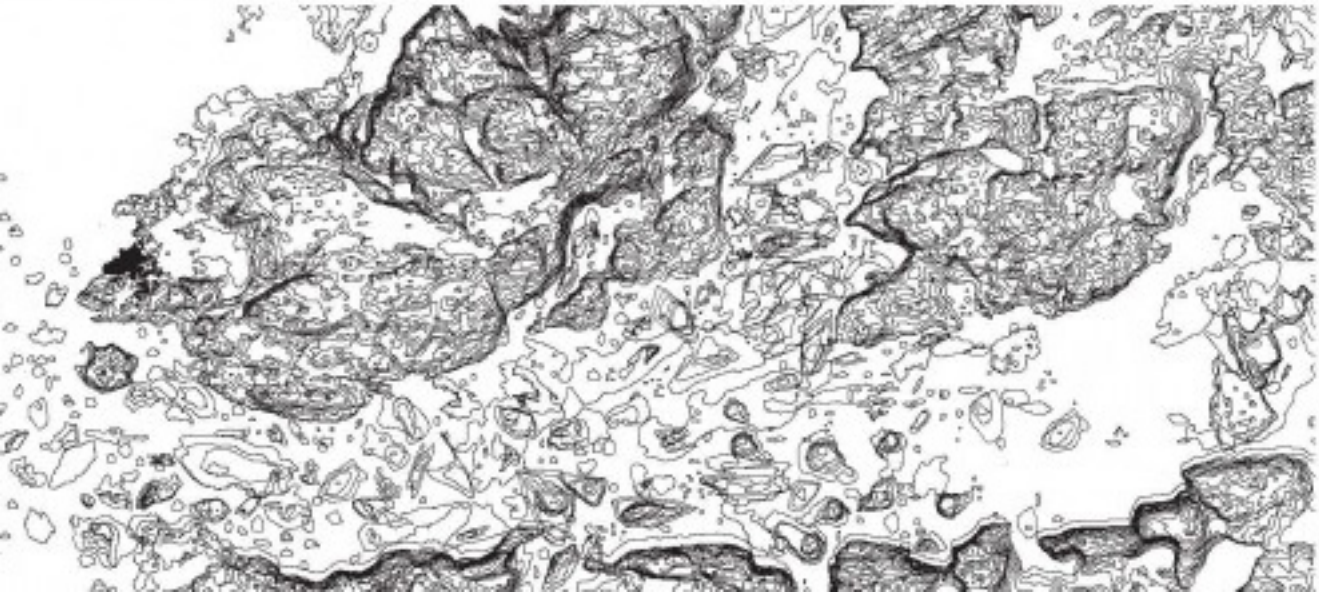
TEXT BY BORIS BRORMAN JENSEN / ILLUSTRATION BY ALEXANDRA BJERGLUND MADRAZZA AND SANNE YDE SØNDERGAARD (STUDENTS AT AARHUS SCHOOL OF ARCHITECTURE)



Large parts of Greenland are unexplored and have never been mapped. Scientific researchers and commercial companies searching for oil and natural minerals have mapped various isolated areas. These cartographic fragments are floating in a void of geographic uncertainty. The magnetic deviation of the polar region prevents us from knowing exactly where these cartographic fragments belong. Many small villages and local dwellings have not been mapped for decades—some for centuries.

There are no roads connecting the cities in Greenland. When you travel from town to town you either sail or fly. The seabed is not entirely mapped, and you don't want to be the first to discover an underwater rock so you follow well-known sailing routes. But the arctic waters, with its dynamic landscape of floating icebergs, are only mapped once a week. Taking the seaway you have to navigate in an indefinitely dynamic landscape.





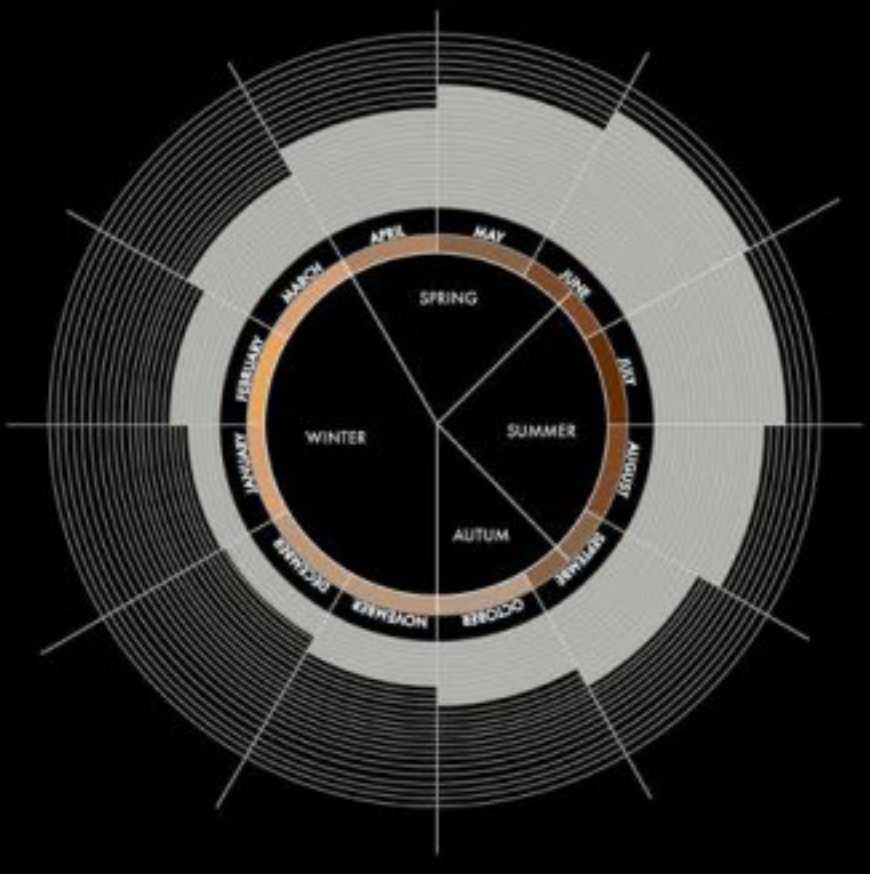
INHA
BIT
ING

STUDY

GREENLANDIC SEASONS

NUUK (South Greenland)

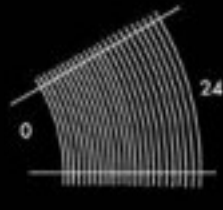
ITTOQQORTOORMIIT (



AVERAGE TEMPERATURE
DIVIDED BY MONTH

-26 -17 -12

AVERAGE SUNSHINE HOURS
PR. DAY PR. MONTH

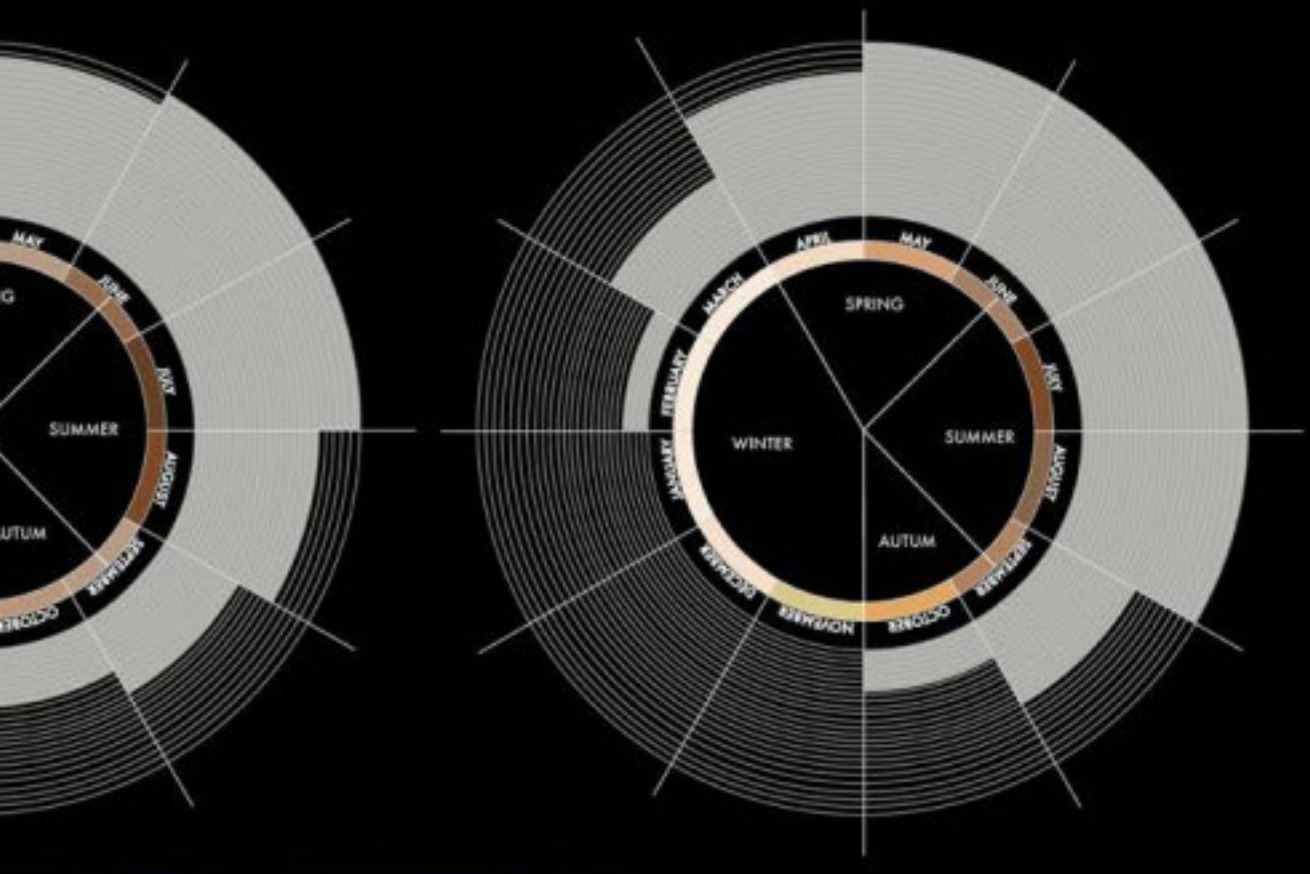


HIGHEST AND L
TEMPERATURES

Every year 400 billion TON

Central East Greenland)

QUANAAQ (North Greenland)



-2 4 6,5

OWEST

- 70
Measured in 1950
at the ice cap

+25
Measured in 1990
in Kangerlussuaq

ice is melting in Greenland and Antarctica

SOURCE: www.timeanddate.com og www.greenland.com og wikipedia

PROJECT
GREENLAND INHABITING
INTRODUCING
BUILDING THE ARCTIC VERNACULAR

The question of inhabiting Greenland, how to build and organize homes, how to help people construct their own, was posed to us. The proposal for a new Arctic building practice is our tentative reply.

The problems and possibilities on Greenland are unique, yet today they are typically answered with uncritical imports from the south. Our own answers only raise more questions—moral, existential, political as well as practical, logistical and financial—something that always happens when working with housing.

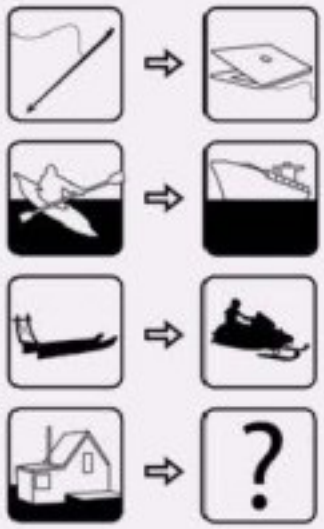
Building the Arctic vernacular

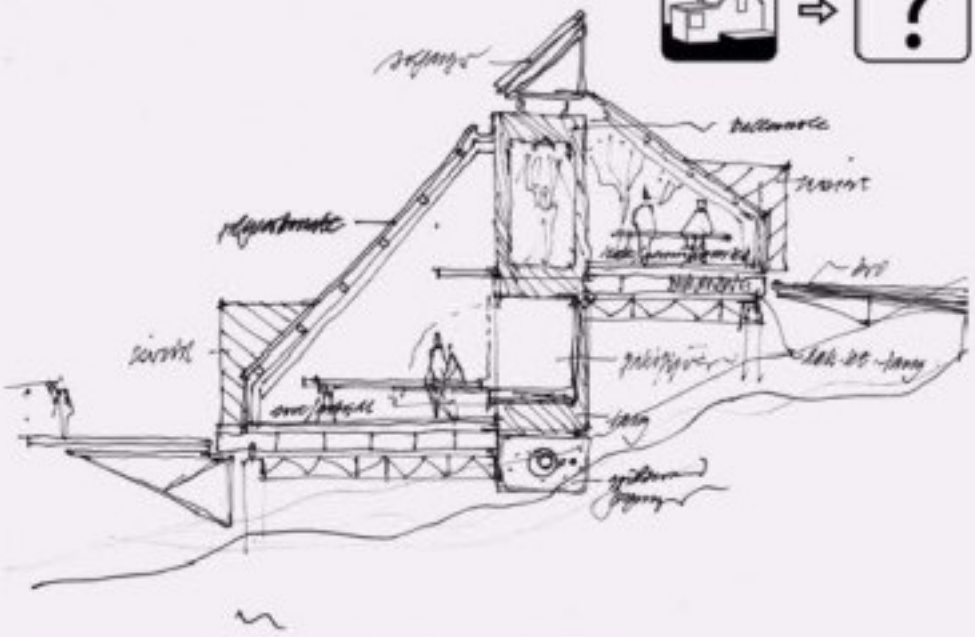
– Inhabiting the Arctic with new building practices

TEAM GREENLAND INHABITING:
Qarsoq Tegnestue
Clement & Carlsen Architects
Tegnestuen Vandkunsten

The project is supported by:
The Danish Arts Foundation
The A.P. Møller Relief Foundation
Government of Greenland – Tips & Lotto Pools
The BANK of Greenland
The Dreyer Foundation

THE NEW GREENLANDIC HOUSE / AESTHETICS





NEW ARCTIC BUILDING PRACTICE

When we build, we occupy land. In Europe we sit on it, matriculate it, fence it in and entrench ourselves behind deeds and property rights.

In Greenland, thankfully, we live by other rules. The mountain side is common ground, and we must live by other priorities here, move closer together, and find foothold and home in useful, high-ceilinged spaces that greet the view and guard against cold and wind by means other than those previously assumed.

Greenland is currently experiencing growth optimism, but it is necessary to reach a sustainable balance. There is no reason to repeat the mistakes that a blind faith in growth has led to elsewhere. There must be fish, seals and seaweed in the sea for those who come after us, and we must place our feet with the utmost care in the northern landscape.

SCALE

We can no longer uncritically import self-absorbed, European, iconic monumentality that ignores topography and scale. We reject multi-story buildings from the catalogue of housing on Greenland. Instead, our response to the landscape and the intrinsic climate conditions is a lightweight, assembly-friendly system which will effortlessly follow the contours of the mountainside.

PREPARING THE GROUND

Architecture should not strive to reconcile contradictions between nature and construction. We must, however, stubbornly study and listen to the place we are visiting. More care must be taken when planning authorities' search for suitable sites: places with natural shelter and great views in virgin territory; places in existing urban conditions where increased density may aid economy and social life.

We forbid the use of dynamite and provide a principle for development which reduces landscape intervention to a minimum, embracing the cliff face instead of blowing it up. Our lightweight system will bring areas that were previously deemed unbuildable within reach.

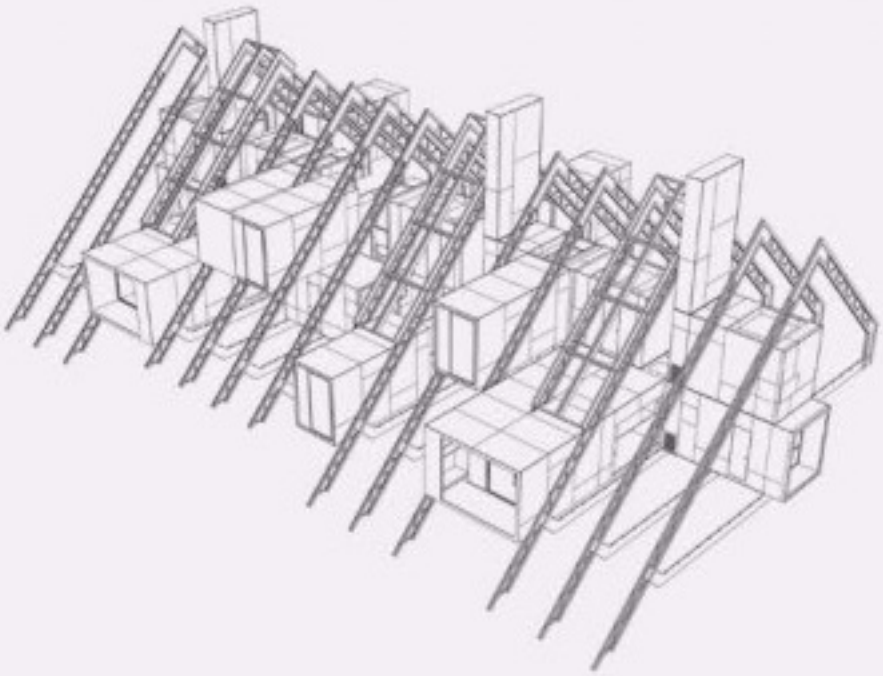
Once the sites are decided, the ground is prepared with the establishment of shared entry decks that become the area's service-friendly supply route, appearing as lifelines in the landscape, following it carefully, lit at night and in the dark months of winter.

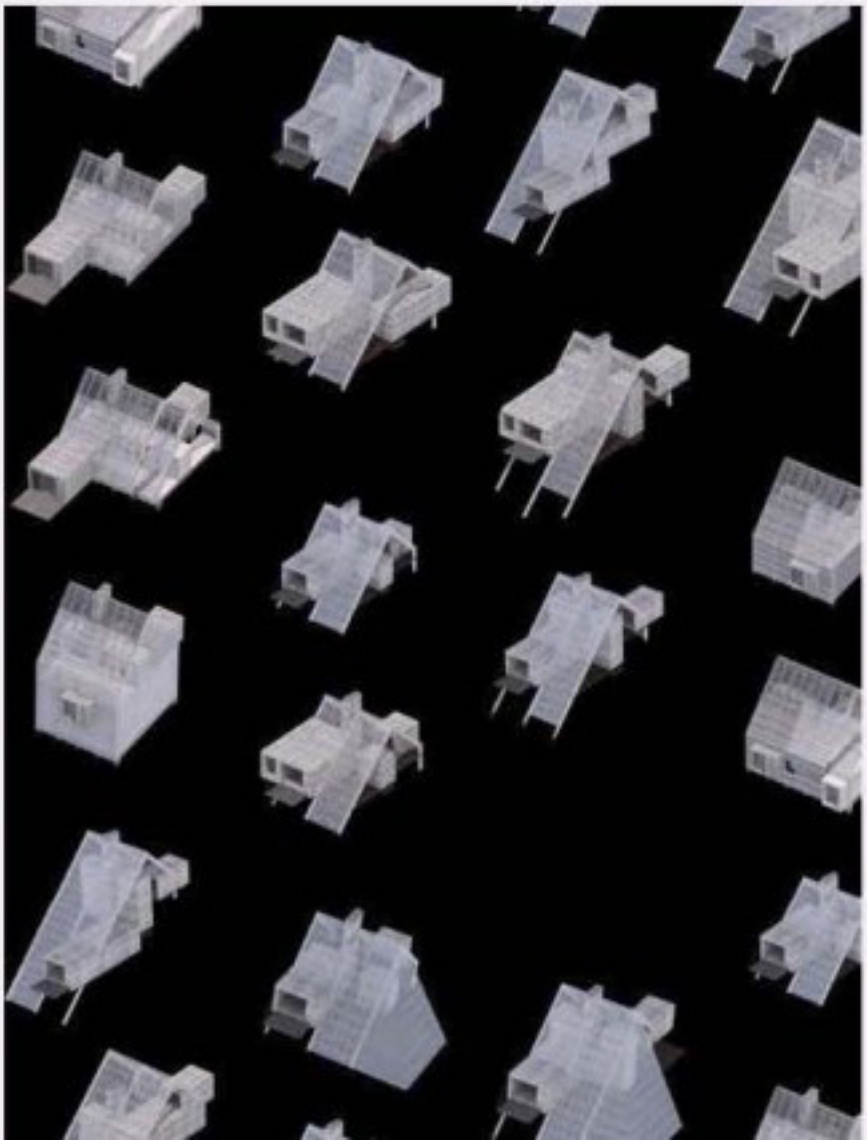
THE BUILDING PRACTICE

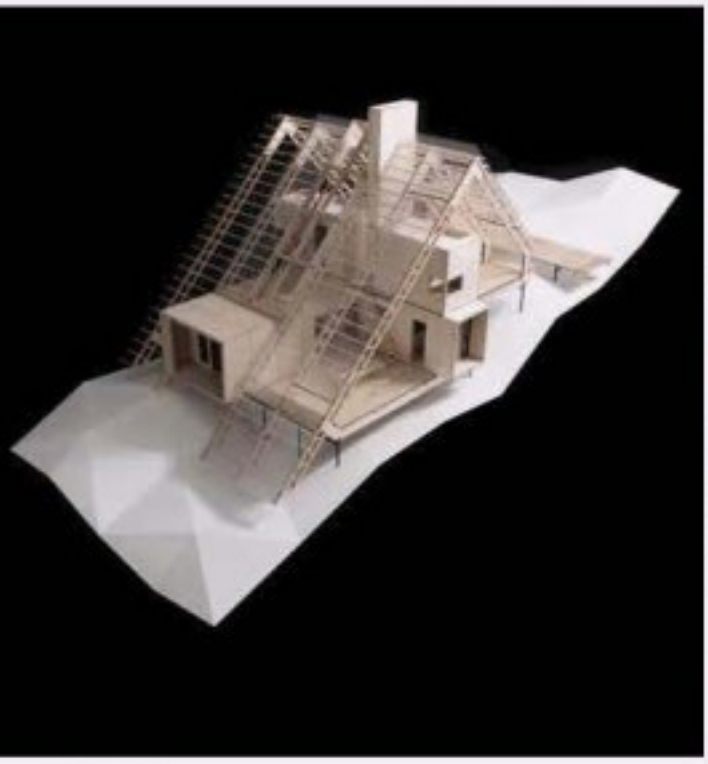
An Arctic building practice must withstand the harsh weather, bear the snow load, retain heat and remain standing on the mountain side even when the storm rages.

A building practice is not simply made up of two sections, three floor plans and four elevations. Rather, it is a method, a language, and a game of almost infinite combinations, and its figurations form a dialogue with context and needs, those of today and those to come.

It must deliver known building typologies such as single family houses, double houses, long houses, row or clusters of houses, co-housing or large collectives. The social organization will decide property boundaries.

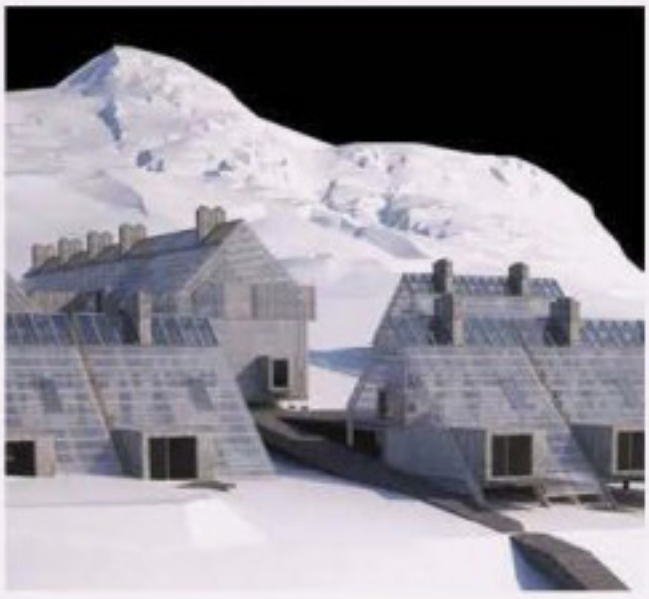






PROCESS
A system of construction only develops into a building practice when its teething problems are cured and the architectonic and utilitarian qualities are adopted by those who use it and those who build it. As much as we may consider the demands on logistics and assembly made by the difficult conditions, it can only be developed and find its true form locally and with time.

For decades, changes to local hunting culture have increased the number of idle, unskilled hands. This points to a building practice which reduces the need for both craft and heavy machinery, a light system which can be handled by crews of only 2 to 4 men, allowing work on difficult sites and a high degree of independence as was always the tradition in the North.



THE SOCIAL SPACE
The principle of the combined supply route and access deck makes it natural to move closer together. We build along the edge and meet on the deck for common functions such as shared laundry, smoke ovens and snowmobile parking.

Wherever possible, direct access to the sea is offered. The decks play out sequences of narrow passageways, alleys and courtyards, but first and foremost "cultivate"s the terrain and give the settlements a clear border to the landscape.

ARCHITECTONIC ELEMENTS

The architectonic elements are few, but offer numerous spatialities and have the following successive sequence:

The Lifeline or access deck
The base
The skeleton
The skin
The "paqibiq" boxes

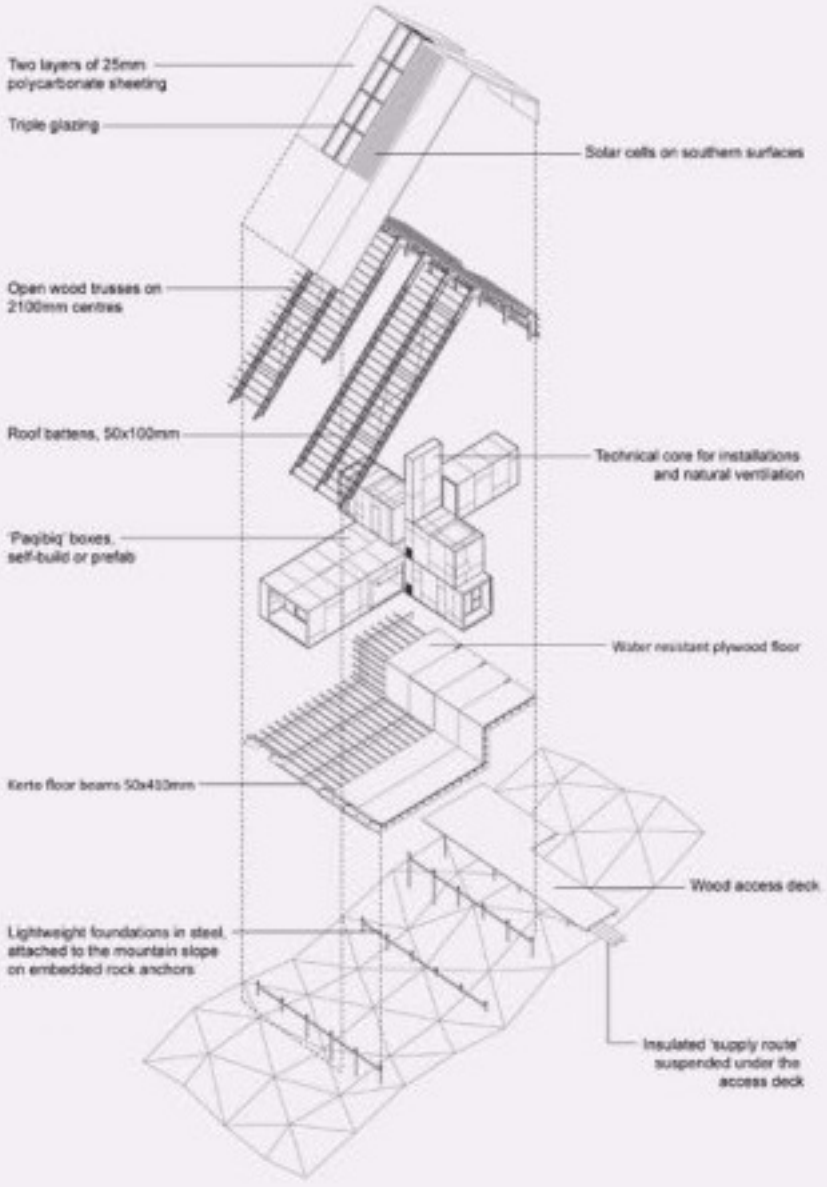
First, the lifeline or access deck is established with supplies, sewage, heat and water.

Next comes the base. Lightweight foundation in steel, attached to the mountain slope on embedded rock anchors on which the building's floor in the form of seaweed-insulated, light floor slabs, is laid out.

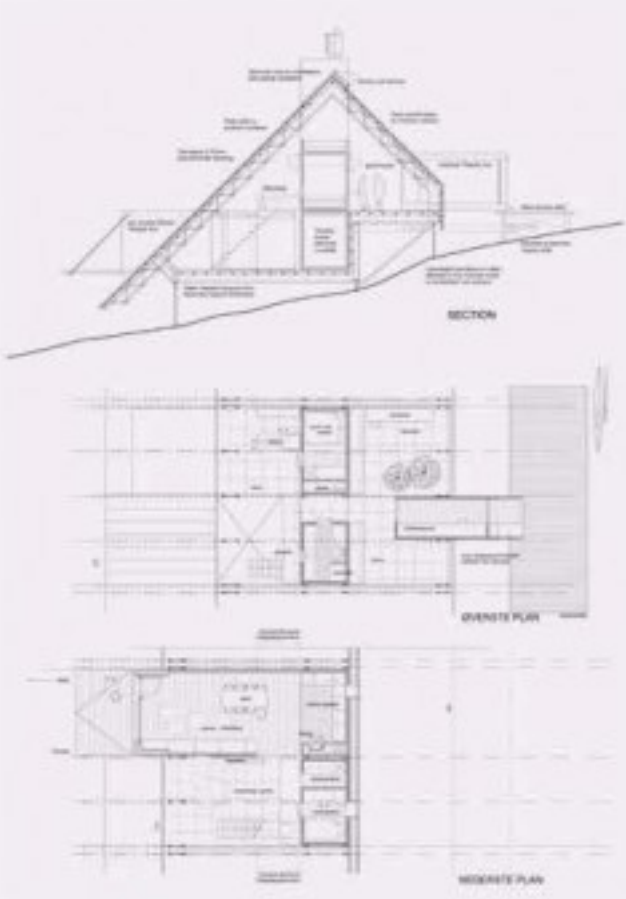
The skeleton, is formed by partially prefabricated, open trusses on 210 cm centers.

The skin, the climate screen, is mounted in long, narrow polycarbonate sheets of varying translucency with a continuous skylight in clear glass above. It forms high-ceilinged, informal, coarse spaces under the lightweight canvas, like workshops or greenhouses.

The paqibiq boxes, in either self-build or prefab, extrude through the facades as points of entry, sheds, balconies, and bay windows framing views.



INHA BIT ING



FUNCTIONS OF THE HOME

The new Arctic building practice must deliver on a number of specific functions that separate it from the traditional, Scandinavian single family house. We relate to an Inuit culture that has developed its own ingenuity, astuteness and identity.

In answer, we place the basic functions of the home such as cooking, resting, storage and hygiene in stackable, seaweed-insulated, partially prefabricated 'Paqibiq' boxes, like a range of room sized wooden furniture. The paqibiq boxes help us in pursuing our ambition to define a clearer spatial hierarchy in the home by making the small rooms smaller and the large rooms larger.

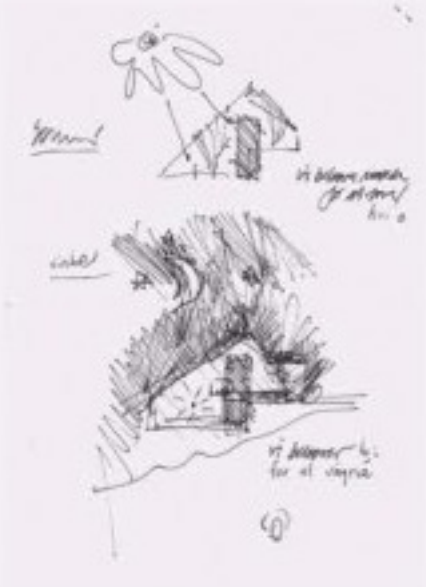
They free up space for other residential purposes such as workshops, greenhouses and equipment rooms. These find their place in the high-ceilinged, semi-climatized studio space under the translucent polycarbonate skin.

LIGHT AND DARK

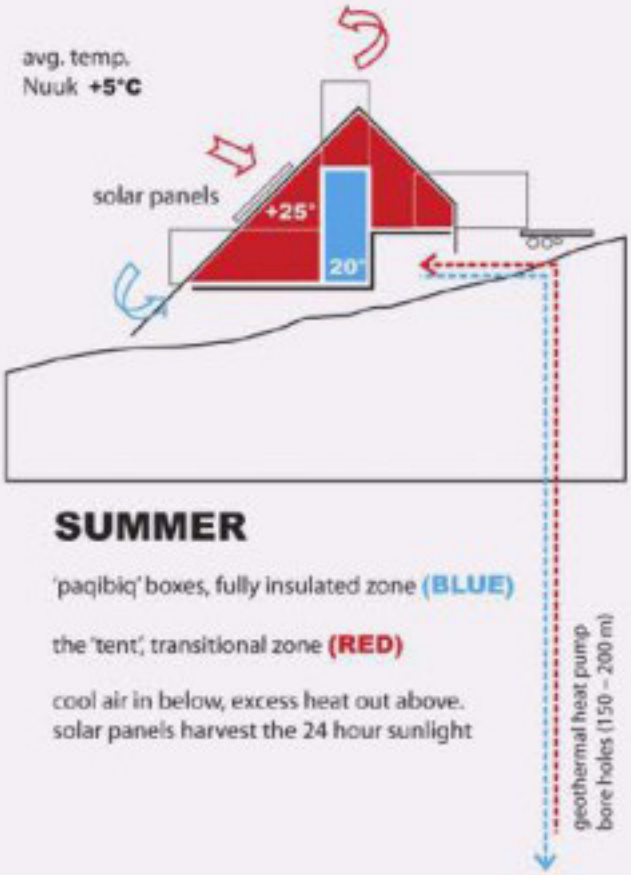
Arctic housing must be able to handle the summer's strong, sustained light and winter's inevitable darkness. In the single long day of summer, there must be darkness for times of rest, and during the long night of winter there must be light in order to stay awake.

The proposed small, stacked pavilion boxes are legitimized by their two-pronged aim: firstly, they can shut the light out and offer good conditions for rest when the sun refuses to leave the sky in summer, and secondly, they can retain heat and act as a "cave" when winter's freezing temperatures set in.

We introduce a building practice that deliberately integrates the demands for light and dark, and offer homes that acknowledge the dramatic light conditions and allow for it to shape the building's spatial organization.



INHA
BI
ING

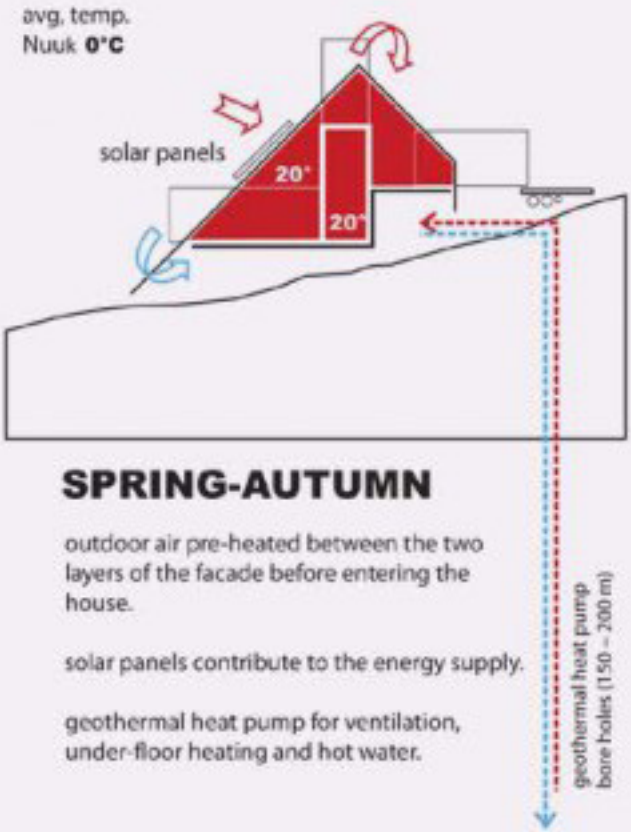


SUMMER

'paqibiq' boxes, fully insulated zone **(BLUE)**

the 'tent', transitional zone **(RED)**

cool air in below, excess heat out above.
solar panels harvest the 24 hour sunlight



SPRING-AUTUMN

outdoor air pre-heated between the two layers of the facade before entering the house.

solar panels contribute to the energy supply.

geothermal heat pump for ventilation, under-floor heating and hot water.

HEAT AND COLD

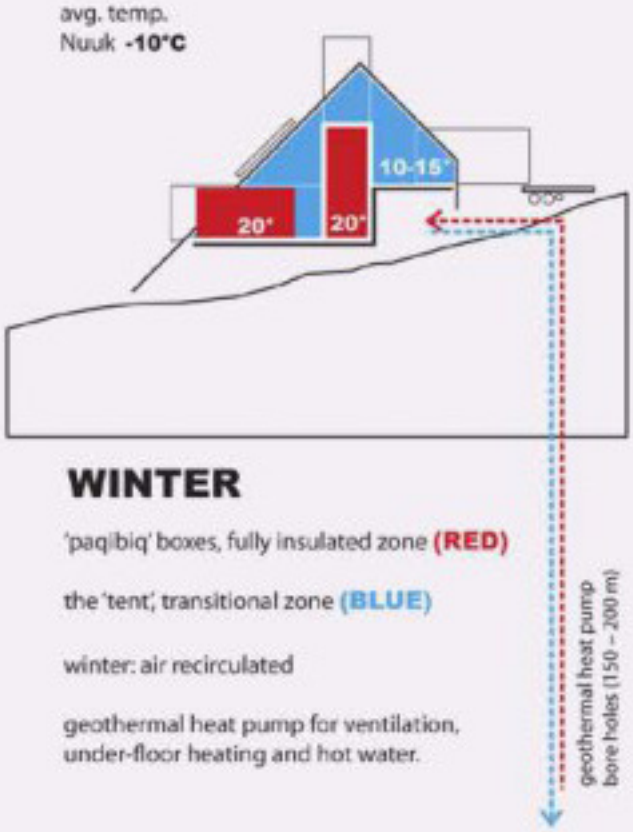
Our dwelling offers two climate zones.

The paqibiq boxes make up the building's fully insulated zone to which you retreat – in the winter for warmth and comfort, in the summer for shade and shelter from the arctic sun which never sets.

The tent is a transitional zone which even in winter holds 10–15 degrees Celsius, and in which simply putting on a sweater allows for activities the Arctic climate would otherwise prevent for much of the year. In winter, it is a workshop or a meeting place; in summer, it provides a place for the cultivation of vegetables and friendships.

In the dark of winter, the house collects its energy from the very mountain it sits on. A bore hole and a heat transfer pump is all it takes to provide hot water, under-floor heating and ventilation.

The 24 hours of sunlight that summer sees are harvested with built-in solar panels. Surplus production is sold to the public grid which in turn guarantees supply in winter.



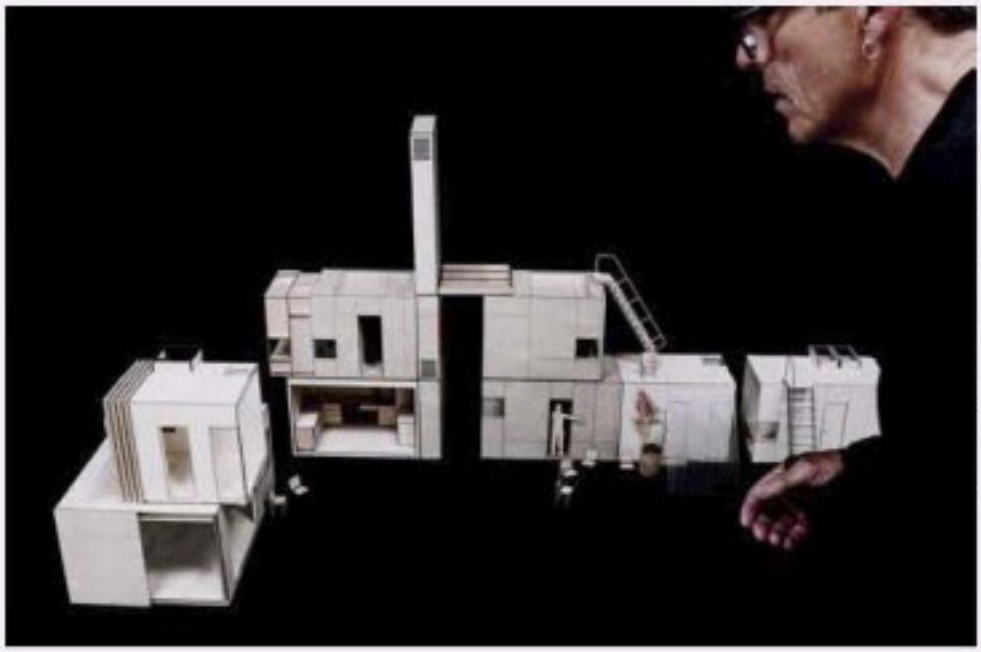
WINTER

'paq|biq' boxes, fully insulated zone **(RED)**

the 'tent', transitional zone **(BLUE)**

winter: air recirculated

geothermal heat pump for ventilation, under-floor heating and hot water.



POSTSCRIPT

It is our assertion that meaningful architecture grows when challenges are soberly observed and when technical choices are made by gifted craftsmen. We consider it wrong that Arctic homes are built using the same template as in mainland Europe.

It is outside the scope of architecture to make Greenland a happier society. However, one should expect thoughtful floor plans, a distinctive style, rich experiences, and efficient spaces that all contribute to a better quality of life.

PHOTO BY STUDENT FROM ABECA


POST
RIPT

Move On!

An interview with Olafur Eliasson

Iceland gained its independence during WWII and many people in Greenland see Iceland as a role model for their future. How is the situation in Greenland seen from Iceland? Danish Icelandic artist Olafur Eliasson has agreed to share his thoughts about Greenland's cultural state of affairs.

TEXT AND PHOTOS BY BORIS BROEMAN JENSEN

BBJ: I've got three themes or topics that I would like to discuss with you:

1. *The significance of cultural hybridity and the potentials of intertwined heritages;*
2. *nature as a resource for artistic expression and a cultural resource;*
3. *architecture, design and works of art as catalysts for change.*

If you want to release the energy that, in my view, is inherent in cultural hybridity, you need to first deal with some of the static notions of identity feeding the postcolonial trauma. So while I'm working on doing away with my own prejudices against Greenland, I would like to confront the theme of identity in Greenlandic culture that looks back through history in an attempt to define a "real Greenlandicness." I don't much care for the notion of a true cultural and ethnic origin, just like I don't care for the notion of a true Danishness. There are many aspects to this discussion, and we don't need to go through them all here, but unlike the notion of true Danishness, the notion of Greenlandicness includes a sense of victimization. I think that in order to evolve as a culture, Greenland needs to discard this notion. Julie Hardenberg, for one, has worked with this notion in her "Move on" project. Do you think art can open other ways of defining cultural identity on a collective level? Can art establish other observation points and offer a different dynamic?

OE: I agree that we need to get rid of our focus on the victim role that has always been assigned, directly or indirectly, to the Greenlanders. It's of course essential to openly acknowledge their strengths and resources, but that's not enough. I think we have to state clearly that Greenland has been neglected by Denmark. Instead of working with the existing social structures and developing

a school system, healthcare, and elderly care—while taking the specific context into account—they simply superimposed a social infrastructure onto Greenlandic society from the top down and left it at that. And then things collapsed. Although of course the issue is much more complex, since the Greenlanders have neglected their own society as well. Today the international community suddenly has a lot of political, national and energy resource related interests in Greenland, so we can only hope that the new focus on the country's commercial potential can contribute to reforming the social infrastructure and, in particular, the Danish handling of it.

BIG: *What is the potential of art in relation to changing the dynamics of the victim role? Could art and the different forms of art find some strategies aimed at changing this fossilized image?*

OE: Getting rid of the victim role is something that involves active inclusion—you need to show people that you trust them and work with systems that are confidence strengthening. The entire situation between Denmark and Greenland is dominated by the fundamental image Denmark has had of Greenland for so many years. Denmark needs to take an altruistic approach to Greenland that departs from the polarization inherent to the classically colonialist tendency to think in terms of "them" and "us." It's essential to address this and say that Greenlanders aren't "them"—they are us and we are them.

And this leads me to the role of art. What art and architecture have in common is that to a large extent they are concerned with transforming thoughts and feelings into action, building a bridge between thinking and doing. By taking a range of thoughts and giving them physical dimensions, it's possible to create a language that does not just consist of words but is also embodied and spatial—a

combination of the rhetorical and the emotional. What I find interesting is that the process of form giving—if it is good—integrates social, political, cultural and value related questions. That's why an architectural office or an artist's studio may be an amazingly resourceful system or organization. Nowadays, there is unfortunately a trend towards transforming feelings into forms independent of political, social and cultural issues But earlier there actually did exist a strong tradition for the transformation of feelings into form in Scandinavia, which wasn't just a utopian idea but was actually integrated into the political, social and cultural context. A chair by the Danish designer Hans J. Wegner was part of a social economy in which workers were provided with health care and insurance. This ethic was part of the idea behind a Wegner chair. The form of the chair and the knowledge that it was produced in a welfare state, where the manufacturers were responsible for the well being of the workers, were so tightly interwoven with one another that one could say the form of the chair embodied this content. To me, what is amazing about a work of art and about the way art works is its socializing qualities. Or, rather, it is not the work as such that is socializing; it's your ability as a user of a work, or a house, or a public square or an urban plan to work reflexively with this plan and actually evaluate the emotional and physical causal relationship you are a part of. In this manner, art has a spatial voice that is socially grounded and very activating.

BBJ: *If I could just return to the question of cultural hybridity and the possibilities of harnessing and reinterpreting the interwoven histories of Denmark and Greenland. The attempt to define an authentic cultural and ethnic identity has not been completely unproblematic, particularly not for the "lost generation" of*

PHOTO BY STUDENT FROM ASRCH

" I always enjoy being in the company of someone who looks at things differently in order to reflect on whether what I see is actually real or not, or whether I can see something new."

PHOTO BY STUDENT FROM AARCH

Greenlanders who, as a result of past education policy, do not speak Greenlandic. Is our historical fellowship a Gordian knot that must be loosened by a sword stroke, or are there other ways to develop and expand an interwoven common destiny? Does cultural hybridity, which also exists in Greenland, not have a vast potential?

Iceland is fifty years ahead in the process of breaking away from Denmark. There's no talk of lost generations, but a new, what I would call a very Icelandic and very global, very indigenous and very cosmopolitan culture—exemplified by a figure like Björk, and, in my eyes, by some of what you yourself stand for.

OE: Smaller societies and communities tend to have a very significant level of self-regulation, because the networks are so small that the response time is short. When the financial crisis hit Iceland, not much more than a week passed before we saw a flourishing of nationalism. Maybe they needed to lick their wounds and reconsider whether all the friendships they had formed across the world were actually good for them. Sometimes it may be good to withdraw a little and consider the basis on which we become part of an international society, and what the interchange of resources will be like. What will you give and what will you get in return? Of course, I know Iceland well enough to know that it did not give rise to a strong right-wing movement or some sort of nationalist trend. There was also a very strong need to reformulate caring and compassion, and that's of course a process that includes a number of hard processes such as evaluating your own egotism.

There's no doubt that it's incredibly important to know your own history and the origin of your language. Where does our way of orienting ourselves in space come from? What values are associated with having a certain history? This knowledge can of course be abused to create a hierarchy of what's right and what's wrong, in the sense that if you're not like us, you'll be excluded. Nationalism has a tendency to do this and that's what I was talking about in the case of Iceland. But it can also be used as a resource. To know where you come from and who you are can lend your voice—for instance, the voice of the Greenlanders—authority and make what you say much stronger. To be aware of the position you are talking from—the feeling of the particular place, the social context, specificity of family structures and empathy, community and the time you live in, of what's unique about your country—is enormously rewarding when it comes into contact with different political systems or cultures. It's unfashionable to speak from a locally

" One of the greatest challenges, and this applies everywhere of course, is to not take for granted what we take for granted."

grounded standpoint, and it may sound a little conservative, but I actually think it's very important.

BBJ: *The second of the three themes I would like us to talk about has to do with nature as a resource for artistic expression and consequently cultural change. Nature is of course a very integral part of Greenlandic culture, but I'm sensing a change in the understanding of natural resources. People are waiting for big, international companies to arrive and start extracting unexploited natural resources like minerals, gold, oil, gas, etc., while the country's natural panoramas are increasingly promoted for tourism purposes. But nature is also another kind of resource, a spiritual motor, and I think that this is evident in some of your projects, such as* Your rainbow panorama, *which may be regarded as a landscape or a nature spectacle installed in the city. Or* The weather project, *which again places the basic or simple natural phenomenon in a cultural setting. The same goes for* The New York City Waterfalls. *But in Greenland, you sense nature everywhere. Even in the center of Nuuk, you have a sense of being in the middle of nature. In Greenland, you are always surrounded by something greater, more powerful, incredibly beautiful and scary at the same time. You always feel like you're in the middle of a "weather project"! Could one harness the experiential resources of nature as a cultural motor?*

OE: I agree that nature is omnipresent in Greenland, but at the same time it's hard to walk through a Greenlandic village—with its high incidence of alcoholism, child abuse, poor education, etc.—and then chatter on about their special sense of nature. It can seem very paradoxical. In a traumatized society, nationalist issues will usually be predominant—those things that are ultimately totalitarian and exclusionary. But if you can work with the resources, having a historical identity will necessarily also include the subconscious; what you could call "that which we don't know that we know." And in that lies potential. In Greenland there is of course also an inherent knowledge that cannot be readily put into words. It's what makes Greenland an amazingly poetic society too. And the poetry arises, of course, from people's relation to their surroundings. It's clear that if your society is traumatized, you have to cut the link to your subconscious in order for you to just survive, but this link has to be revitalized. The subconscious and the tradition of the unconscious mind also help define what we do when we walk through a room, when we express our politics, when we act as a member of a society, etc. It all starts with a sense of time. I feel sure that there are a lot of people in Greenland with strong resources, even though we very often hear about the ones who commit suicide. If I, as an artist, wanted to do something in Greenland, then I would ground my work in the resources available and in the context I was working in. I would try to articulate the need for an experience that supports an inclusive sense of self. Inclusive of others and, as such, anti-totalitarian, you might say. I actually think that this is what art always does. It's a very basic property of art. And this is where this phenomenon of collectivity arises.

One of the greatest challenges, and this applies everywhere of course, is to not take for granted what we take for granted. The hardest part may actually be to re-evaluate what seems to be straightforward and how this "straightforwardness" is constructed, since it includes a considerable degree of self-criticism. What if nature is not natural at all, but actually cultural? The idea that reality is relative, that reality is a construct, is of course a well-known idea and a popular theme in art. There is also the fact that historically speaking

the contrast between man and space, the surrounding shell, the human and the clothes, the house surrounding the clothes and the urban sphere and the natural sphere, these relations are firmly and very closely connected to survival, to much more extreme weather conditions. If you can't go to your neighbor's house, and you can't heat your own, your life may be in danger. And this means that it is a huge challenge to re-evaluate your most basic conditions. Often being able to leave the place you live in feels incredibly liberating, in the sense that you then suddenly start to evaluate your own values and contemplate the fact that you can feel that you miss a certain space, even though when you are in it, it does not appear to be particularly valuable, because you take it for granted. Probably going away is a way to do things. Another way is to get other people to come and look and then, being with them as they look, to see it through their eyes. When I visit art museums and look at pictures I've seen a number of times, I always enjoy being in the company of someone who looks at things differently in order to reflect on whether what I see is actually real or not, or whether I can see something new. That's something we all know. When people try to communicate the feel of Greenland outside of Greenland, I think there is a tendency—and I've seen this a bit in Iceland—to only communicate it to the eyes, visually.

BBJ: *That it's reduced to a postcard.*

OE: Yes. Unfortunately, the tourist industry is about the most dumbed-down business you can find, in the sense that that's exactly what it's about. The physical is not conveyed. So then, and I know this from Iceland, there is this tendency to work with a whole lot of visual stimuli in line with much more conservative or old-fashioned ideas of what space is, and it actually often ends up cementing what you were trying to get away from, i.e., the romantic, idyllic relationship between urban structure and the natural surroundings. Whereas what is really interesting is not at all how the space between the house and the mountain looks, but rather how it feels to walk from the house and up the mountain. And that feeling is, well, you could call it a bodily feeling, a physical feeling that isn't just good but often also incredibly liberating. So the great challenge may be that such an experience is something you remember physically in the same way that you remember dance moves. The same applies to walking up a mountain from A to B where the space between A and B may be much more engaging physically than the idea of A and B. This delves into some of the things that Minik [Rosing] talked about too, about how we manage to relate to our surroundings. Here again, you could talk of the subconscious because our sensory experience system, the way we feel our body in relation to time and surroundings, whether natural or architectural, is an experiential memory—it is bodily—which is much more emotionally attached to our body than what we experience when we go by bus to a vista for instance, where you can look out over a panoramic mountain landscape and then return to the bus. Through awareness of the global climate crisis, however, tourists, driven by the desire to see for themselves that the theories are true, act differently. They have established a travel activity that in a way underlines that if you want your feelings to be part of what you say, you also have to act physically. It's similar with our lax attitude to the drought in the Horn of Africa. We would be less lax if we'd actually tried living without water or been to the Horn of Africa. That's why the attacks by Anders Breivik in Norway seemed so absolutely aggressive to us, because we could physically place ourselves in the situation of the victims. You could at once understand how horrible it was, but you could also identify with the spatial setting, the situation, the social setting, the camp, the island, everything. It was physically recognizable, which meant that it was a much more traumatizing event for us in Scandinavia than the drought in the Horn of Africa. And it's a bit similar with Greenland.

PHOTO BY STUDENT FROM AARCH

COLOPHON

Editors
Joana da Rocha Sá Lima
Tor Inge Hjemdal
Anders Melsom
Boris Brorman Jensen
Terroir

Editorial board
Björn Ehrlemark
Danish Architecture Centre

Art direction and design
Skin Designstudio / www.skin.no

Cover
Photo by Boris Brorman Jensen

Typeface design
Corvus Corax by Ellmer Stefan / Skin Designstudio

Infographics
Arctic Engineer at Sanaartornermik Ilinniarfik in Sisimiut,
Greenland and the Technical University of Denmark,
DTU Management Engineering
Aarhus School of Architecture (AARCH)
CEBRA Architects
Transform Architects

Web editor
Gísluinn Halfdanardottir

Copy editor
Evan Switcher

Photographer
Nina Hauki

Print
Fladby AS

Editorial office
Conditions Magazine
Fjordveien 3, 0159 Oslo, Norway

Buy single issues
www.conditionsmagazine.com
150 — shipping and handling

Subscription
www.conditionsmagazine.com
subscription@conditionsmagazine.com
4 issues: 600 — shipping and handling

Cancellation policy
Cancellation of subscription to be confirmed in writing 1 month after receiving the last issue of your subscription period. Subscription not cancelled on time will be automatically extended for 4 new issues.

Advertisement
advertisement@conditionsmagazine.com

Distribution
Interpress, IPS Pressevertrieb GmbH

www.conditionsmagazine.com

ISSN: 1891-3822

This publication is made possible by a donation from Dreyers Fond

ABOUT THIS PUBLICATION

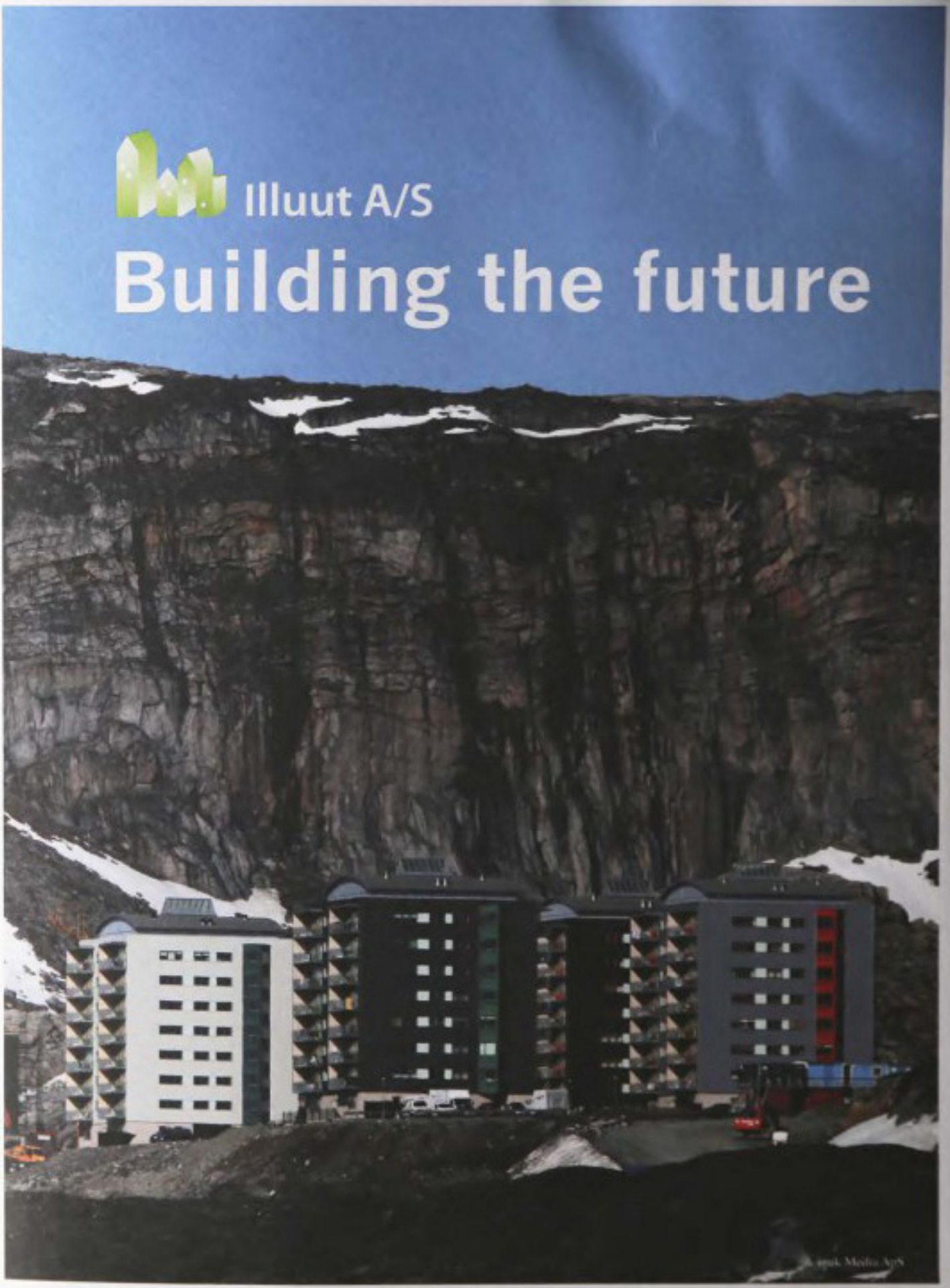
This publication is not about Greenland, but made together with Greenland for Greenland. It serves as a catalog for the Danish pavilion of the Venice Biennale, documenting and presenting a context for the exhibited works, but also an odyssey in the sense that it is neither revealing nor providing solutions. It offers different perspectives and insights into challenges. We try to communicate a kaleidoscopic document to offer an impression of the situation today. The goal of the publication has been to provide a platform for debate, supporting the continuous dialogue needed to shape the future Greenland.

Greenland cannot lean back and wait for a glamorous future of oil and mineral riches. The changing of the country is now and there are a number of things that can be done or initiated now. Greenland is unique, and where urbanism may have, or did work for other situations or sites, the challenges and problems Greenland are facing cannot be fixed with architecture and urbanism alone. Measures and interventions taken in the built environment has a certain potential, but needs to be approached or exploited in a specific way in response to the specific conditions of Greenland. This publication aims both to address this uniqueness of Greenland as well as give fresh perspectives to place Greenland in the middle of global issues.

Enjoy the publication,
Conditions, Terroir & Boris Brorman Jensen

Illuut A/S

Building the future



Royal Arctic Line

– when experience and flexibility counts

- Ships and equipment designed for Arctic conditions
- Weekly service from Europe to Greenland
- Own facilities, locations and personnel in 13 Greenlandic harbours
- Many years of experience with navigating and operating in Arctic waters

As the national shipping line, Royal Arctic Line plays a role in all the possible futures for Greenland. That is why we are a proud sponsor of Possible Greenland. Greenland holds a bigger role down the line than we can possibly imagine. The future therefore lies in the cooperation with the world around us.

Jens Andersen, CEO of Royal Arctic Line

ROYAL ARCTIC