KANGIATA ILLORSUA – ILULISSAT ICEFJORD CENTRE





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'The visit to Ilulissat and the new Icefjord Centre are among the greatest experiences. The very fact that it is possible to build something so untraditional and beautiful, which is, at the same time, so well-suited and such an excellent way to present and explain the nature of the Icefjord and the story it tells.'

– Her Majesty Queen Margrethe

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AN EXTRAORDINARY BUILDING IN AN EXTRAORDINARY SETTING

The work of the philanthropic association Realdania is always guided by the overarching goal of improving quality of life through the built environment. We pursue this goal through many different means, for example by improving settings for community-building and by activating and engaging with local, site-specific potentials.

This is also exactly how we approached the creation of Kangiata Illorsua – Ilulissat Icefjord Centre, in a close, trusting partnership with the Government of Greenland and Avannaata Municipality. Inside this spectacular building, visitors can learn about the nature and culture of Greenland through the permanent exhibition, *Sermeq pillugu Oqaluttuaq – The Story of Ice*, and from the roof of the Icefjord Centre, they can take in the view of the magnificent landscape with the calving Sermeq Kujalleq glacier and see the local impact of global climate change.

The Icefjord Centre offers insight into the consequences of climate change as well as the area's fascinating history to the many tourists who come here to experience this unique Arctic destination. In addition, the centre is a meeting place for the townspeople of Ilulissat and, not least, a learning centre for schoolchildren to study ice, climate, nature and Inuit culture.

When Kangia – Ilulissat Icefjord was declared a UNESCO World Heritage Site in 2004, the status came with an obligation to tell the story of this unique place to visitors. In 2015, after several years of in-depth preliminary studies and analyses, the Government of Greenland, Avannaata Municipality and Realdania established a partnership aimed at building a visitor centre in Ilulissat that would match the magnificent surroundings without overpowering them. In my opinion, our collaboration in the partnership has been exceptional. In an international architecture competition, the choice fell on the Danish architect Dorte Mandrup's proposal. As the client, the Realdania subsidiary Realdania By & Byg was responsible for handling the difficult task of building in the Arctic. In the summer of 2021, Kangiata Illorsua – Ilulissat Icefjord Centre opened to the public. This accomplishment was possible, not least, thanks to a talented team of consultants, contractors and builders.

This book tells the story of the creation of Kangiata Illorsua – Ilulissat Icefjord Centre: the vision, the talks between the project partners, the architecture competition and the challenging task of realizing this exceptional building on a demanding Arctic site. The story is told by people who were directly involved and through photos of the Icefjord Centre, the Icefjord itself, Ilulissat and the breathtaking landscape.

In the book, Her Majesty Queen Margrethe speaks about her love for Greenland and its people. And some of Ilulissat's approximately 4,700 inhabitants share what it is like to live with the Icefjord as their neighbour and, for many of them, their livelihood.

I find the book an engaging read and beautifully illustrated and send my warm thanks to the editor, the writers, the photographers and the graphic designers for their work on this publication. I also thank everyone who took the time to share their experiences and stories from Greenland, Ilulissat and Kangiata Illorsua – Ilulissat Icefjord Centre. I very much enjoyed the stories and photographs. I hope that you will too.

Enjoy!

CEO Realdania























A HEARTFELT BOND WITH GREENLAND

There is a close bond between the people of Greenland and Her Majesty Queen Margrethe. For the Queen, this connection began as a fascination even before her first visit to Greenland. After fifty years on the throne and many journeys to the high north, the Queen's love of the country and its people has only grown stronger. When Her Majesty Queen Margrethe landed at the airport in Ilulissat on 8 October 2021, her visit was long awaited. Not least for the Queen herself, who had to change the original date due to Covid restrictions in Greenland in the summer of 2021.

The Queen later said that she had been looking forward to the visit, as excited as a child, and was sorely disappointed when it was clear that it had to be delayed. Now, her joy at being back in Greenland was similarly great.

The first stop on her journey was a visit to Kangiata Illorsua – Ilulissat Icefjord Centre. Here, the Queen was given a tour of the place, where the exhibition *Sermeq pillugu Oqaluttuaq – The Story of Ice* in particular captured Her Majesty's fascination.

'The visit to Ilulissat and the new Icefjord Centre are among the greatest experiences. The very fact that it is possible to build something so untraditional and beautiful, which is, at the same time, so well-suited and such an excellent way to present and explain the nature of the Icefjord and the story it tells,' said the Queen when she met the press at the end of her journey. In her speech at the gala dinner hosted by the Government of Greenland, she said, 'In particular, I was delighted to see the new Icefjord Centre in Ilulissat. It is a fine example of how a local natural phenomenon of international interest can be put into relief and bring further experiences and insight.'

After the guided tour, representatives of local associations were invited to a *kaffemik*, a coffee party, with Her Majesty in the café of the Icefjord Centre. The schedule



During her visit, Queen Margrethe showed great interest in the Icefjord Centre's permanent exhibition, *Sermeq pillugu Oqaluttuaq – The Story of Ice.*





After the tour of the Icefjord Centre, Her Majesty went on a tour on the Icefjord accompanied by Premier Múte B. Egede.

The Queen enjoying the view from one of Ilulissat Icefjord Centre's two covered spaces during her visit to Ilulissat. also included a tour on the Icefjord, during which two humpback whales came up close to the royal boat.

'That was quite something; sometimes, you just get lucky,' said the Queen after this experience.

Before Queen Margrethe left Ilulissat, there was time for a visit to the polar explorer Knud Rasmussen's birth home, which is now a museum.

LIFE-LONG LOVE

A unique bond exists between the royal family and Greenland, and the Queen has repeatedly expressed that the country has a special place in her heart. She first went there more than sixty years ago, at the age of 20, but her interest in the big country to the north was sparked long before.

The first royal visit to Greenland took place in 1921, when the Queen's grandparents went to the west coast. Accompanying them was Crown Prince Frederik – the later King Frederik IX, the Queen's father – and during this trip he met Knud Rasmussen, an encounter that made a big impression on the Crown Prince.

'My father was very fond of Knud Rasmussen and admired him deeply. And he got to know him quite well during the years before Knud Rasmussen's death in 1933. When I became aware of this, I was a young woman and had read Knud Rasmussen's *Den store slæderejse* (The Big Sled Ride). And it is something quite special when a person one has admired ... when it turns out one's own father knew and admired him, that makes it doubly significant,' the Queen later commented. The Queen was also rapt with attention when her own parents talked about their trip to Greenland in 1952, now as Queen Ingrid and King Frederik IX. Eight years later, when their travels once again took them north, they brought the young Margrethe. In an interview in the Greenlandic newspaper *AG.Grønlandsposten*, the Queen says:

'It was a huge experience. I was immensely excited about the trip. We flew to Søndre Strømfjord and went by ship from there. I remember how exciting it was to sail through Søndre Strømfjord. It was wonderful. From there we went north to Upernavik. I remember arriving at Upernavik and someone pointing: in there! All I could see was some large rocks, until I realized the town was situated above them. Just a few houses. That's how small it was back then. This was before the airport. It was amazing to come into Upernavik. There were lots of kayaks everywhere in the water when we sailed in. That was my first encounter with Greenland,' says Queen Margrethe.

In 1970, the Queen – then the heir to the throne – visited Greenland with her husband, Prince Henrik.

'That was a great experience, also for my husband. He was fascinated. Greenland made a deep impression on him. It spoke to him immediately. To him, our visits to Greenland have always been hugely significant,' says Queen Margrethe.

HEARTFELT WARMTH

The Queen finds it impossible to describe the soul of the people of Greenland without first describing the land,



In 1960, the Queen, then the successor to the throne, visited Greenland with her parents, Queen Ingrid and King Frederik IX. The journey was Queen Margrethe's first visit to Greenland but far from her last.



Queen Margrethe and Prince Henrik made numerous visits to Greenland together, including in 2004, when the Royal Couple came to Nuuk on Greenland's national day, 21 June. because the land is so vast and the people are so few and so small compared to it.

'When you come from Denmark, where a mountain is just a hill, where you can see whatever there is to see by standing on a molehill, and you come to Greenland, where you can see so incredibly far if the weather is clear. And where the mountains are so high. I've always loved walking on rocks and have done it a great deal. To see these big, towering landscape formations and the ice at the top and the snow and the ice floes and the icebergs on the water ... In clear weather, the colours are so unbelievably beautiful and the land is so vast that it defies comprehension,' says the Queen, adding:

'I have never encountered anything but deep heartfelt warmth whenever I have been to Greenland. It has always made a big impression experiencing the warm reception we are greeted with everywhere. How friendly people are, and so happy to see us.'

A LOVE PASSED ON

Her Majesty has passed on her love of Greenland to her son Crown Prince Frederik. In 2000, he took part in the 2,800-kilometre expedition Sirius 2000, a four-month journey by dog sled through North Greenland. The Sirius Dog Sled Patrol is an elite Danish naval unit that conducts long-range reconnaissance patrols and enforces Danish sovereignty in the Arctic wilderness of northern and eastern Greenland.

'That was tremendously important to him. To me, too, I must say. It gave him a chance to get much closer to Greenland than any of us ever have,' says the Queen, who was not worried about sending her son, the future king, on such a strenuous journey.

'Frederik was going with a group of men he had served with in the Danish Navy Special Forces, former Sirius people. I knew that if a couple of old Sirius hands invited Frederik, it was because he had what it took. There was nothing for a mother to add. That was the stamp of approval.'

Later, the Crown Prince invited his mother on a trip along the east coast. They were able to borrow one of the Sirius sleds and dog teams. They were accompanied on this trip by a lady-in-waiting and one of the Crown Prince's Sirius mates, but it was far from a luxury trip.

'It was five days by dog sled in the most amazing, beautiful weather. It was magnificent. So vast. We spent two nights at Hvalrosodden, a former trapper's station that is still used by Sirius. One night we spent in a tent on the ice. After another day's journey, we reached Aalborghus, another former trapper's station, with the most stunning location. Here we spent two nights,' the Queen recalls.

Over the years, Queen Margrethe has been to almost every corner of the vast country. All the major towns and many of the settlements have enjoyed a royal visit. Every time, the world's biggest island has impressed her.

'Visiting the west coast, it really does seem vast. When you then get to the east coast, that seems even bigger. And the strange realization that there is not a single person living in North-East Greenland. When we were at



In 2011, Crown Prince Frederik invited his mother on a tour along Greenland's east coast. They travelled by dog sled and spent the nights in tents and at former trappers' stations. Hvalrosodden, there were a few Sirius people nearby. A few days' journey away lies Danmarkshavn. Apart from that, there is no one until you reach Station North or make it down to Scoresbysund. Then there are two "belfry owls" in Mestersvig, as they call the two men who keep an eye on the tower. That's it. It's a stunning experience. Thinking back on the people who have managed to live and survive there, especially in the old times before modern devices, that is really impressive.'

A SHARED HISTORY

In Greenland, the relationship between Denmark and Greenland is a topic of open debate: whether Greenland should remain part of the realm, or whether it should be an independent nation. Underlying this, however, there is a strong desire to preserve a role for the royal house even in an independent Greenland. Queen Margrethe steers clear of that debate.

'That is not for me to comment on. That is a rather more complicated matter. But obviously, it makes an impression on me and on the Crown Prince that we matter up there. The feeling is mutual – that much I can say,' says the Queen, who also stresses Denmark and Greenland's shared history:

'First of all, we have a very long shared history. From the time when Greenland appeared as an unknown coast, with unknown people, to the present day, Denmark and Greenland have had a very strong, special connection.'

A UNIQUE EXPERIENCE TO TAKE HOME

Palle Jerimiassen, Mayor of Avannaata Kommunia



Mayor Palle Jerimiassen often walks along the harbour front, where fishermen and hunters land their daily catch.
Tourists visiting Ilulissat should take home a unique nature experience. And if someone would like to stay, they are welcome, as labour is in short supply, says Mayor Palle Jerimiassen. He grew up in Ilulissat and has been involved in shaping the town's development from primarily a fishing community to Greenland's number one tourist destination.

> When Palle Jerimiassen grew up in Ilulissat, the town was divided into four parts. One where the fishermen lived, one where the hunters lived, one for other locals and, finally, the part where the Danes and the Greenlanders who worked for the Danish authorities lived. Palle Jerimiassen's family lived in the latter part of town.

'My father was a foreman in a factory, and my mother was a midwife at the hospital. This gave us certain privileges. I saw this clearly in school, since all the children of Ilulissat attended the same school. Fortunately, the town is no longer divided that way,' says Palle Jerimiassen, who is now the Mayor of Avannaata Municipality.

This inequality in itself would have been enough to inspire the young Palle Jerimiassen to go into politics. And it did. In addition, he was born and raised in a family of politicians, so politics was in his blood from a young age.

'We have always debated politics in my family. My aunt was a government minister, my sister is a politician, and so is my nephew. So we have had many spirited discussions. While my mother was alive, she insisted that we not talk politics at the dinner table. We had to take a break until we were done eating. She had to impose that rule, since we often got pretty loud,' Palle Jerimiassen says with a laugh.

As a child, Palle Jerimiassen was a member of the student council in school and of various associations. At the age of 12 he became a sports coach, at the age of 14 he became an association board member for the first time, and as an adult he built a parallel career in associations and politics. He has been a member of the municipal council and served as chairman of the Greenland Handball Federation and the national association of Greenland's municipalities.

IMMIGRANTS ARE WELCOME

In 2017, he was elected Mayor of Avannaata Municipality, which includes four towns and twenty-three settlements in addition to the main town of Ilulissat. Avannaata is Greenland's northernmost municipality and extends more than 1,600 kilometres from north to south. Geographically, the municipality covers an area slightly bigger than Spain, but it only has 11,000 inhabitants, or 0.02 per square kilometre. The Mayor would like to see the population grow, as the area struggles with labour shortages. The growing tourism sector demands more restaurant and hotel staff.

'We already have quite a few residents who come from China, Indonesia and other Asian countries. They pick up Greenlandic surprisingly fast – probably the languages have some of the same sounds – and they engage in local association activities. We are not worried about welcoming new citizens; that's the way it has always been. In the past, we had many fishermen here from other countries,' says Palle Jerimiassen.

The Mayor welcomes the growth in tourism, although the visitor numbers did get slightly out of hand just prior to the COVID-19 crisis. At one point, all the hotels were full, and when 5,000 cruise passengers arrived on a single day, the balance tipped.

'First of all, you lose the unique experience of being alone in this magnificent landscape when there are so many people here. Also, it was more than our infrastructure could handle. So we now want a system that only allows 1,000 cruise passengers per day in addition to our hotel guests. That ensures a good experience for everyone. We are also looking to extend the season, because we do want to welcome more tourists. Especially the hotel guests,

money in our town,' says the Mayor. That is why he is so pleased to have the Ilulissat Icefjord Centre as a new attraction in town. He has been deeply involved in the process, right from the initial planning stage, and in autumn 2021 he welcomed

because they stay longer and spend more

Her Majesty Queen Margrethe to Ilulissat. Among other points on her agenda, she came here to see the Icefjord Centre and its exhibition. He is proud that it proved possible to construct such a unique building and, not least, of the skilled local workers who were involved in the construction.

THE ICEFJORD IS THE AREA'S LIVELIHOOD

The story of the Icefjord, the icebergs and climate change, which is told at the Icefjord Centre, plays a big role in the Mayor's everyday life in many ways, since the town's existence relies in large part on the fjord itself. Fishing and the fishery industry still make up one of the main livelihoods in Ilulissat, and the area around the port is bustling with activity. Historically, the main catch was large marine mammals, such as seals and whales; today, it is shrimps and Greenland halibut. Even though the quarry is new, many of the old fishing and hunting methods have been preserved and are being continuously developed.

'One in three inhabitants in Ilulissat is either a fisherman or works in the fishery industry. The fjord is our source of food, so it's tremendously important. When there are many icebergs, they act as a huge plug in the fjord that we need to look out for. And



As mayor, Palle Jerimiassen has a wide portfolio of responsibilities. When Queen Margrethe visited Ilulissat, he had the honour of welcoming Her Majesty and showing her around. when the plug breaks up, we have icebergs everywhere, and you have to avoid getting too close. Due to climate change, the sea ice actually disappeared from Ilulissat ten years ago. Now, our fishermen can go out all year, which is good for them. We have always adapted to nature. But I'm not blind to the fact that climate change is not a good thing, overall, and in fact it's causing problems for some of our buildings in town, which are built on the permafrost. When it thaws, the buildings shift,' says the Mayor.

Although Palle Jerimiassen is not a professional fisherman himself, he does have a boat in the harbour close to the town hall. Whenever he can, he goes out on the fjord. Or he spends time with the old fishermen, who are always happy to talk about how things used to be or the size of the fish they caught.

'We talk about everything and nothing. I'm not Palle any more, I am the Mayor, but down by the harbour they forget about that, and that's great. The great thing about living in Greenland is that you have the freedom to do what you like. That is the essence of living in a society that is so deeply connected to nature. I have been around the world and seen how people treat their fellow man. Here, we have a sense of unity, whether you are rich or poor, regardless who you vote for. We talk to each other as one human being to another.'



In Ilulissat harbour, nobody thinks about the fact that Palle Jerimiassen is the mayor. Here, he is simply Palle, and, like many others, he loves talking to the old fishermen and listening to their yarns.





















THE DOG SLED DRIVER

Ane Sofie Lauritzen, owner of Arctic Living Ilulissat



Sled dogs are Ane Sofie Lauritzen's passion. She runs the sled dog centre and looks after the thirty-one dogs together with her husband. They also both take tourists out sledding.

The thirty-one sled dogs in the dog enclosure in between Ilulissat town and the Icefjord Centre are howling and barking with excitement: they are working dogs, and they are about to go to work. A group of tourists stands ready to try a ride on a dog sled.

Ane Sofie Lauritzen sticks her head out of one of the log-cabin windows and shouts, 'Yes, yes, little piggies,' in Greenlandic. And laughs loudly as she tries to call them to order. One of the dogs is called Hilux, named after Ane Sofie's first car. There is also a Trump and a Putin.

The sled dog centre, the log cabin and the thirty-one dogs are her passion. She runs the place together with her husband, Flemming. He is Danish, and in addition to dog sledding he also works as a policeman.

'Visitors who come to Ilulissat might feel that there are a lot of sled dogs here. But in fact, their number has dropped drastically in recent years, from 3,000 to around 2,000. The snowmobile has taken over many of the tasks from the dog sleds. So our project is also about preserving the Greenlandic sled dog and important aspects of Greenlandic culture for the future,' says Ane Sofie, who grew up with dogs and has done a lot of sledding with her father.

Climate change is also having an impact on the size of the sled dog population. In the past, the fishermen could sled on the sea off Ilulissat. Today, with the sea ice gone, they need to travel deeper into the Icefjord, which involves camping overnight.

'Thirty years ago, we held dog sledding races on the sea ice by Ilulissat, and sleds came in from Qasigiannguit and Qeqertarsuaq. We can't do that today,' Ane Sofie explains while she readies her dogs for pulling a cart on wheels. They use the cart when there is no snow in the town.

A typical Greenlandic dog team area is often just a patch that has some exposed rock for the dogs to lie on, a little grass and perhaps a small waterhole. Ane Sofie and Flemming's dog patch is fenced in, and the dogs are tied up in a neat row, each with its own dog house and water bucket. Everything is deliberately laid out, down to the last detail.

'This is how we want it. We had to use a football field to do the measuring and calculate the length of the chains to make sure they don't get tangled up. And instead of baking cakes for my wedding, I was outside, mixing cement for the foundation of the fence,' says Ane Sofie with a big smile.

The couple also built a log cabin, a replica of a traditional Greenlandic cabin with a plank bed and a small ship's stove. On the plank bed, skins and *kamiks* (Greenlandic sealskin top boots) are laid out for people to see and touch. Tourists are invited into the cabin before they go dog sledding in order to stay warm and get properly attired for the ride.

'Often, the tourists just have skiwear, but that is far from sufficient, so we get them properly dressed. Dog sledding is a great experience but also a cold one,' says Ane Sofie.

Outside the cabin, there is a dog sledding tent to illustrate how people set up camp for the night when they go sledding for several days. The sled is placed inside the tent and covered with reindeer skins for bedding. A small board is used as an extension when it is time to turn in. When the dog sled moves on, the board is placed at the bottom of the sled. The dog sledding tent is one more element Ane Sofie and Flemming have added to give visitors an understanding of the original culture.

'In addition to tourists, we have also begun to have school groups visit, so the children can learn about the dogs. It is no longer a natural part of life, the way it was for me when I was a child. Today, some people want the dogs moved out of town because they are noisy and smelly. We think it's important to preserve the dog sledding culture,' says Ane Sofie.

When there is no snow in town, the dogs are harnessed to a cart on wheels.







THE AIRPORT MANAGER

Hans Christian Lyberth, manager of Ilulissat Airport



Airport Manager Hans Christian Lyberth was employed at the airport as a terminal worker in 1985. Today he is responsible for the airport's approximately 200,000 annual passengers, a number that has multiplied with Ilulissat's growing significance as a tourist destination. Four kilometres north of Ilulissat lies the local airport, consisting mainly of an 845-metre-long runway and a terminal building. The airport was constructed in the mid 1980s and remains largely unchanged today, both indoors and out.

Hans Christian Lyberth is the one in charge here. As airport manager, he is responsible for ensuring that some 200,000 annual passengers make it safely through the airport. Passenger numbers have multiplied six- or sevenfold since he began here as a terminal worker in 1985.

'I actually came to Ilulissat as a policeman six years before that. But the town was a little wild back then, so after my wife and I had children, I wanted a different occupation. So I applied to work at the new airport,' says Hans. Today, he and his wife have two adult children and six grandchildren.

The town is much calmer now, says the airport manager, who now considers Ilulissat his home town, although this is not where he grew up. When he is not at work in the airport, he is engaged in local community activities, and he is still deeply fascinated by the magnificent natural setting.

'But it's not as cold as it used to be. When our daughter was born in 1982, it was 42 degrees Celsius below. Back then, the entire Disko Bay was covered by sea ice, and the icebergs were much bigger than they are now,' says Hans.

Normally, the airport manager has the view of a car park from his office, but when Hans walks up the spiral staircase to the control tower, he has an immediate overview of the helicopters and planes taking off from and landing in Ilulissat. Today, the airport is only open to smaller planes, but in the future Ilulissat Airport is going to be both bigger and busier. A brand new, bigger terminal is under construction, and the runway will be expanded to 2,200 metres, so that medium- and long-haul planes can land here.

That will mean more planes and more tourists, especially because it allows for direct international flights to Ilulissat. The new airport is scheduled to open in 2024.

'The town is going to undergo dramatic development over the coming years, and of course the new airport project is exciting when you have been part of it from the start. So my outlook on the future is bright,' says Hans, although he does not expect personally to see the construction project through.

'By then I probably will have retired,' he says.

The airport in Ilulissat consists primarily of a runway nestled among the mountains just outside the town. In a few years' time, the airport will be even bigger, and the runway will be extended to accommodate larger aircraft from abroad.





When Ilulissat Icefjord was declared a UNESCO World Heritage Site, the Government of Greenland, Avannaata Municipality and the philanthropic association Realdania formed a partnership to realize the Ilulissat Icefjord Centre. The vision was to create an exceptional building with a focus on providing insight into the spectacular local nature and cultural history as well as the impact of climate change.

THE VISION



In 2004, when Ilulissat Icefjord was declared a UNESCO World Heritage Site, the status came with an obligation to tell the story of this unique place. This led to the decision to establish a visitor centre in this exceptional natural landscape. Icebergs were not exactly on the horizon when the UNESCO World Heritage Committee met in the Chinese city of Suzhou in summer 2004 for its 28th session. And yet: one of the many points on the agenda was the possible inclusion of Ilulissat Icefjord on the list of UNESCO World Heritage Sites.

If that happened, it would be the first time Greenland made the list, with a natural site of 4,024 square kilometres.

At the time, Ilulissat was already one of the top Greenlandic tourist destinations, with about 13,000 overnight hotel stays every year. The Danish Agency for Culture and Palaces, which is ultimately responsible for cultural heritage in Greenland, estimated that this figure would increase by about 40 per cent if the area earned World Heritage status.

In Suzhou, the committee decided to include Ilulissat Icefjord on the list, and indeed the number of tourists increased. In fact, by quite a bit more than anticipated. By 2013, the number of annual overnight stays in Ilulissat hotels had grown to over 21,000. In addition, there were a large number of one-day tourists who arrived on cruise ships. The town needed a visitor centre to tell the story of the Icefjord, the local nature and cultural history, and the impact of climate change.

To address this need, the Danish National Commission for UNESCO and the Government of Greenland reached out to the philanthropic association Realdania to discuss the possibility of funding to convert two historic houses into a visitor centre with an interrelated exhibition.

'The purpose of the Icefjord Centre was to offer tourists a wider range of experiences in Ilulissat and Greenland. In Ilulissat, many people make their living from fishing, which is the main industry, but tourism has development potential with the capacity to contribute to a more diversified economy and business opportunities that will benefit the town,' says Pele Broberg, Minister of Business and Trade in the Government of Greenland.

Realdania was already engaged in the area around Ilulissat. In the settlement of Ilimanaq, on the south side of the Icefjord, the association was a partner in a project







KANGIA – ILULISSAT ICEFJORD

Kangia – Ilulissat Icefjord and the huge glacier Sermeq Kujalleq make up the area listed on the UNESCO World Heritage List, here marked in blue. Sermeq Kujalleq is extremely productive. Every year, it calves more than 35 cubic kilometres of ice in the fjord and produces 10 per cent of Greenlandic icebergs.





'The purpose of the Icefjord Centre was to offer tourists a wider range of experiences in Ilulissat and Greenland. In Ilulissat, many people make their living from fishing, which is the main industry, but tourism has development potential with the capacity to contribute to a more diversified economy and business opportunities that will benefit the town.'

- Pele Broberg, Minister of Business and Trade in the Government of Greenland.

where two listed 18th-century houses were being restored and converted into a combined visitor centre, restaurant and shop. This project also included the construction of fifteen new tourist cabins and improvements in infrastructure. Based on these experiences, the association saw potential in a collaboration on a bigger scale.

'One of our key focus areas is the development of extraordinary places, and Ilulissat obviously has exceptional site-specific qualities in the form of the Icefjord. That provided a strong basis for growing tourism as a local trade, and the Icefjord Centre would promote this effort. Furthermore, climate change was becoming an increasingly important topic in the association's work at the time, so it made sense to establish a visitor centre in Ilulissat. However, we did not feel that the proposed project was quite right. So, in fact, we said both yes and no. No to the proposed project but yes to a joint initiative,' says Jesper Nygård, CEO of Realdania.

MUTUAL TRUST

After some preliminary talks, a meeting was arranged in the summer of 2014 between representatives of Realdania, the Government of Greenland and Avannaata Municipality, which covers an area the size of Spain and includes four towns and twenty-three settlements in addition to the main town of Ilulissat. The goal was to develop a common



In the centre's permanent exhibition, Sermeq pillugu Oqaluttuaq – The Story of Ice, visitors can learn about the life cycle of ice, the rich life on the Icefjord and human presence here over thousands of years. Ice prisms made of glass are a recurring feature in the exhibition design.







Thanks to a stable climate and many cloud-free days, it is often possible to see the northern lights from Ilulissat. The spectacular natural phenomenon is best experienced from September into early April.

UNESCO WORLD HERITAGE

UNESCO adopted the World Heritage Convention in 1972. The goal of the convention is to identify and preserve the world's cultural and natural heritage through inclusion on UNESCO's World Heritage List. The purpose of the list is to promote global awareness of our shared heritage and thus promote its preservation and care.

Denmark and Greenland ratified the World Heritage Convention in 1979. In 2004, Kangia – Ilulissat Icefjord became the first Greenlandic site to be included on the list. vision for an Icefjord visitor centre and discuss how it could be realized.

'As local politicians, we had long wanted an Icefjord Centre, and various possibilities had also been debated. But a strong sense of mutual trust developed between the three of us, because we spent so much time talking to each other. Based on these talks, I knew that this was going to become a reality. I think the others felt the same way,' says Mayor Palle Jerimiassen.

The three parties spent months discussing challenges, dilemmas and priorities, while preliminary studies and analyses were carried out to determine the economic basis of the Icefjord Centre and its specific siting, size and content.

The common vision that emerged from these talks was to create the Ilulissat Icefjord Centre –an extraordinary building in an extraordinary setting. And on 26 June 2015, the three parties signed the agreement to build a new Icefjord Centre dedicated to presenting the unique cultural and natural history of this World Heritage Site. The Icefjord Centre was to match the magnificent setting without overpowering it.

'The vision for the Icefjord Centre set a high bar for the architects who would realize it,' says Pele Broberg, Minister of Business and Trade in the Government of Greenland.



THE FISHERMAN

Eli Kristoffersen, fisherman



Fishing is the main industry in Ilulissat, where both large trawlers and small dinghies land their catch. Eli Kristoffersen has been fishing since he was 17 and goes out on the Icefjord every morning.

In Ilulissat Harbour, hundreds of small fishing boats lie close together, side by side. On one of them, a POCA 600 with a 225 horsepower engine, stands Eli Kristoffersen. He's just returned from Oqaatsut, where he sold and delivered the day's catch of Greenland halibut.

This is what he does every day. Eli has been fishing since he was 17 years old, and when he turned 21, he bought his own boat. Every morning at six, he readies the boat, and by seven, he is on the water, dropping his 500-metre, 1,000-hook long line. All he can do then is wait a few hours and hope for the best. In the summer, he makes a second trip in the early hours of the night but returns in time to sell the night's catch in the morning when the fish factory opens.

Long-line fishing is a method that has been in use for generations in Greenland. Once the hooks are baited, the line is lowered to the sea floor to reach the deep waters where the halibut live. A Greenland halibut can grow up to 1.2 metres in length and weigh more than 45 kilos, although the typical size of the catch ranges from 1.5 up to 6 kilos.

'I used to pull the fish up by hand, using my heart as the engine,' says Eli, as he pounds his chest. Today, he has a small engine to do the heavy lifting of pulling in the line.

To Eli, every day is a good day. Even though fishing is hard work, all year round. In the winter, he makes the two-hour journey by boat to Torsukattak, north of Ilulissat, to fish and returns before the end of the day. 'That's where I catch the big fish, so it's worth the trip,' he says and smiles as he extends his arms to demonstrate the size of the fish. 'I don't go into work the way others do; I am my own boss.'

Eli's workplace is out among the large icebergs, but he is used to them by now, after a long life at sea. Climate change is not something he has noticed much.

'Maybe the fish have become a little smaller, but then I just go farther out, where they're bigger. And this winter has been cold,' he says.

One change he has noticed is that there are more tourists in town. They also come down to the harbour.

'Some of them ask if they can go out fishing with me. But I always say no, because I don't speak all those funny languages,' Eli says as he laughs.

The boat is ready, and Eli climbs the steep hill up to the town's oldest grocery shop. The harbour quarter is the oldest neighbourhood in Ilulissat, and it still has the old houses from when the town was founded. It is a sunny day, but the air is freezing, so Eli buys a cup of hot tea and sits down with the other fishermen, who are also having a cuppa and a bite to eat. They talk about the catch of the day. They always do.

When Queen Margrethe was in Ilulissat to visit the Icefjord Centre, for once Eli was not out at sea. Instead, he went up to see the Queen. He is proud that her first stop on her visit to Greenland was Ilulissat and the Icefjord Centre. He has not visited the centre himself.

'It is definitely going to draw in more tourists. We can tell that the town is growing, and soon we will also have a bigger airport. That will make a difference, too, and that's good for the town. But for me, it makes no difference. My day is the way it is; I'll leave it to others to keep up with the changing times,' he says. Growing visitor numbers are good for Ilulissat, says fisherman Eli Kristoffersen, but they have little impact on in his everyday life. He continues to go out fishing as always.



THE KAFFEMIK HOSTESS

Carla Fussing, kaffemik organizer

When Carla Fussing welcomes tourists for *kaffemik*, she always serves freshly baked buns and several kinds of cake. During the *kaffemik*, Carla tells her guests about Greenlandic traditions and about living with icebergs for neighbours.

Carla Fussing was born and raised in Ilulissat, in a house directly across from the local police station. Her father, Tom, died last year, so now she and her husband have taken over her childhood home, settling in and making it their own. A home for two parents and two children. The eldest son has left for another town to attend upper secondary school, an option that is not available in Ilulissat.

The house has a view of the sea and the towering icebergs. A view that changes daily and varies from calm to storm. The tourists pass by on the street outside. Some in groups, others on their own and with rambling gear.

From time to time she invites tourists in for a *kaffemik*. *Kaffemik* is a Greenlandic word meaning 'to celebrate with coffee'. Traditionally, it is a day-long event, where people drop in, settle down to have some coffee and cake and then leave again, so someone else can take their place. A tradition Carla grew up with.

'It's something we have always done, so we don't need to think about whether we

are staying true to tradition or remembering to do things a certain way. It's just something we do, and it would be really strange if we stopped doing it,' says Carla of the *kaffemik* tradition.

Together with her father she began to organize *kaffemik* for tourists seven years ago. Others in town were already doing it, but they had difficulty explaining the tradition in other languages besides Greenlandic. And so, thanks to her language skills, Carla became a *kaffemik* hostess in addition to her day job as a bookkeeper.

'Dad loved hosting *kaffemik* and enjoyed talking about the old Greenlandic traditions and showing others what Greenland was about. He had an Arctic garden with alpine flowers and a greenhouse where he grew vegetables, so he could show the tourists that it was in fact possible to grow things in Greenland. That often surprised them,' Carla says with a smile.

When Carla hosts a *kaffemik*, she speaks about the traditions. How in the old days people used to show up with their own cup when there was something to celebrate. Later, people began to serve both coffee *and* cake, and by now the event has grown to include savoury foods, often reindeer meat. When she welcomes tourists, she serves buns, apple cake and two or three other traditional cakes.

'That is how my dad and I once decided we would do it. And I have kept it that way,' she says.

The size of the groups who gather in the living room with its view of the icebergs varies a great deal. Sometimes, there are twenty-five guests, sometimes just two.

'But we always have a good time, and it's very different from one *kaffemik* to the next. Some tourists just come in and sit down for coffee and cake. Others lend a hand in the kitchen and stay afterwards to help with the washing up,' she explains.

Over *kaffemik* and washing up, there is also time to talk about Ilulissat, the icebergs, climate change and the balance between having a living, thriving town and accommodating the many tourists.

'We are happy to welcome so many visitors to our town, but it is not without challenges. On the first day of the school year, it can almost be difficult to get in, because there are so many tourists wanting to take photos. The same thing happens at christenings, funerals and other private events. I can understand that the tourists wish to take home a slice of authentic life, but on the other hand we would also like some privacy. So that is a balance we need to work out together,' says Carla Fussing.



On her right hand, Carla Fussing has traditional Inuit tattoos. On her thumb is a *napaattooq*, a plant that endures through the winter. On two other fingers, Carla has two lines, symbolizing the Mother of the Sea.


TIME

'In many regards, Greenland has become a symbol of climate change. Here, the impact is tangible, not least around Ilulissat. The icecap is melting, and the sea ice is gone, and to people in Greenland the loss of the sea ice in particular is hugely consequential, because the sea and the coastal areas are their livelihood.'

 Minik Rosing, Greenlandic geologist and Professor of Geology at the University of Copenhagen, Denmark 'Time is both a very concrete and a completely incomprehensible phenomenon. In geology, we operate with a time span of 4.5 billion years, which is how long the earth has existed. If we look at civilization, our time horizon shrinks down to 10,000 years. And in most societies, time governs everything we do and what we do next. If you ask a colleague to join you for lunch, they will probably check the time before they reply – as if time can tell us whether we are hungry. However, regardless of how we break time down, it has a direction.

In Greenland, time is intimately intertwined with the strong presence of nature. Many things simply cannot be planned. When people visit Greenland, I usually tell them to think about what they would like to see. Not when. The timing depends on the changing circumstances. The same is true when you live here, at least if you work in one of the traditional occupations or any business related to it. If the weather is bad, you cannot go fishing or hunting. Once it clears up, you have to go, even if you had other plans. If you make it, you make it. If you don't, that's just the way it is.

Once I was on Greenland's east coast with work, and we were supposed to sail to the former settlement of Skjoldungen. We ended up being trapped in the ice for five weeks. Time became relative, since there was nothing I could do, except wait for the ship to break free.

A generation ago, some people began to talk about climate change as a real issue. Few people listened, and even fewer took action. Most people – including



An important element in the exhibition is the authentic ice cores drilled from the ice cap. They tell the story of culture and climate dating back to 124,000 BCE. The ice cap is formed by layers of snow that have fallen year after year and have gradually become compressed by the weight of subsequent snowfall.







politicians and the CEOs of major companies – were focused on the next election, the next annual report. The timing was probably right, and yet it was wrong, because no one was truly ready to do what it takes.

Today, things are different. In large part, this is because the children from that time have now grown up and are adult consumers and voters. They are making waves, calling for action and taking action themselves, because they are the ones who will have to foot the bill for the overconsumption and complacency of my generation.

In many regards, Greenland has become a symbol of climate change. Here, the impact is tangible, not least around Ilulissat. The icecap is melting, and the sea ice is gone, and to people in Greenland the loss of the sea ice in particular is hugely consequential, because the sea and the coastal areas are their livelihood.

The disappearance of the sea ice has triggered cultural changes. In the past, people could travel from village to village on dog sleds. And during the winter, everyone had plenty of time on their hands. Now, the fishing boats go out to sea all year round. Also, large numbers of tourists are coming in, so fishing and hunting are no longer the only sources of income.

Ilulissat in particular has many visitors who come in from all over the world on planes and cruise ships. They want to come here to see the impact of climate change first-hand and visit the Icefjord Centre in order to learn about the story of ice.





I had the privilege of being invited to take part in the development of the Icefjord Centre by the architect who designed the building. We agreed that it should be a meeting place. A place for tourists and locals to meet as well as a place where different times – past and future – meet and are tied together. Here we can tell the story about what ice and the ice ages have meant and continue to mean for human beings. About the first Stone Age people who settled here 4,400 years ago, established the settlement of Sermermiut and are now known as the Saqqaq people. And how, by studying the layers of the inland ice, we can see volcanic eruptions, historical climate change and the amount of greenhouse gases in the atmosphere.

From a strictly selfish perspective, the current climate change has been a positive influence for Greenland. Times are good. But the vast majority of Greenlanders are well aware that on a global scale, climate change is a worrying development. Therefore, Greenland should not just be a symbol of this but part of the solution.

Over the past few years, I have been working with a team of scientists to collect so-called glacier flour: particles of rock that the glaciers create and carry with them as they scrape over the mountains in Greenland. Glacier flour is full of minerals that can be used as natural fertilizer on fields in other parts of the world, especially in tropical regions. In our test sites, the yield has increased by 30 to 50 per cent. Naturally, we should take advantage of this, just as we should seize the opportunity to use



'It is time to take action to address the profound climate change that is clearly visible on the Icefjord in Ilulissat. Greenland should not just be a symbol of the challenges but also a part of the solution.'



MINIK ROSING

Minik Rosing is a Greenlandic geologist known all over the world. Since 2000, he has been Professor of Geology at the Natural History Museum of Denmark, University of Copenhagen.

Rosing's work concerns the impact of life on the geological evolution of the earth's continents, oceans and climate. Among other contributions, he has identified traces of life in a 3,800-million-year-old Greenlandic rock, a discovery that proved the presence of life on earth, in the form of algae, 300 million years earlier than previously documented.

In addition to his work as a geologist at the University, Minik Rosing is the author of several books and is a popular speaker. He often operates in the borderland between science and art, which included his involvement in the architectural design of Ilulissat Icefjord Centre and his role as chief curator for Denmark's contribution – *Possible Greenland* – to the Venice Biennale of Architecture in 2012.

Minik Rosing's experiences were relayed in an interview with author Steen Breiner.

meltwater from the ice cap to build hydroelectric power stations that generate clean energy.

Human beings created the climate crisis, but we should not be too ashamed to seize the opportunities we have for solving the problems. That would be really stupid. And we do not have the time to be stupid.

Ten thousand years from now, when future geologists look at the layers in the inland ice or in a rock, they will be able to see that the concentration of greenhouse gases rose dramatically during our time. I hope that by then, they will also see the numbers levelling off or perhaps even dropping.'

AN ENGAGING INTRODUCTION TO OUR CULTURE AND NATURE

Pauline Knudsen, manager of the Greenland Visitor Center



As an archaeologist, Pauline Knudsen has spent much of her life in nature. Today she is responsible for communicating Greenland's nature and history to tourists as well as Greenlandic children and youth. Both tourists and local schoolchildren should have a fascinating and engaging experience when they visit the Ilulissat Icefjord Centre or one of the other five visitor centres that are currently being established in Greenland. Pauline Knudsen is responsible for realizing the ambitious plans.

All the children's senses are engaged when school groups from Ilulissat visit the Icefjord Centre. The goal is not just to teach young people about Greenland and about nature but also to spark their interest in the topic to encourage them to choose the communication of cultural and natural history as a profession.



There can be many reasons to change course in life. For Pauline Knudsen, the deciding factor was her realization that there comes a time when it is not so easy to carry out archaeological fieldwork in the Greenlandic landscape and to be skipping about in the mountains.

'Age was probably the main reason why I began thinking about doing something else. And when I saw that the Government of Greenland was looking for a director of the Greenland Visitor Center, an inner voice told me this could be the job for me,' says Pauline.

The Greenland Visitor Center is a new national institution that, in time, will be responsible for operating six visitor centres: one in each of the five Greenlandic municipalities and an additional one in East Greenland. The centres are being established in response to Greenland's growing significance as a tourist destination.

'To meet this demand, we need to develop good destinations and experiences for tourists. We should not compete with private businesses, so we won't be running a restaurant or a conference venue; instead, we intend to offer something supplementary, an added reason to visit,' says Pauline.

The Ilulissat Icefjord Centre is one of the six visitor centres, and the first to open. Here, visitors can travel through time in the exhibition *Sermeq pillugu Oqaluttuaq – The Story of Ice.*

LIVING EXHIBITION

Kangia – Ilulissat Icefjord is home to the largest and most productive glacier in the northern hemisphere, Sermeq Kujalleq. The glacier calves icebergs that float majestically towards the mouth of the fjord at Ilulissat. Every year, the 7-kilometre-wide glacier produces 35 cubic kilometres of ice.

The glacier has always been the lifeblood of the people living on Disko Bay. Historically, when the ice retreated during the summer and the animals came in close to the coast, the Inuit would travel to their summer camps to catch reindeer, trout and Greenland halibut. Both fishermen and



hunters found a livelihood in the rich natural landscape, and now that the sea around Ilulissat is ice-free, the main catch is Greenland halibut and shrimps.

On the Icefjord, manmade climate change is clearly visible. The melt-off from Sermeq Kujalleq is accelerating, and the glacier has retreated many kilometres. Since 1850, temperatures have risen twice as fast in the Arctic as in the rest of the world.

These two topics, ice and climate change, are the main themes of the permanent exhibition at the Icefjord Centre. The exhibition, which was developed and designed by JAC Studios, is based mainly on digital and audiovisual elements that stimulate the senses and encourage reflection, both during and after the visit.

'The exhibition represents a renewal of the conventional way of presenting Greenland's past, which typically involved objects lined up in a row for people to look at. At the Icefjord Centre, we wanted to create an exhibition that is more dynamic and accessible. With our culture, nature and climate, we have a lot to offer that many people may not know much about. They come to Greenland to see the impact of climate change and the melting ice, and we capture that in the exhibition. We want people to understand that this is serious,' Pauline explains.

In addition to passing on new knowledge and insights to tourists, the Icefjord Centre also has a school service, which organizes visits for all schoolchildren in Ilulissat. As a former teacher, the director is particularly delighted with the interest from this group. 'It is so rewarding to see children and young people take an interest in what you tell them, to have the opportunity to pass on your interest in topics that you're passionate about. That is why we should also demonstrate to young people that the presentation of our cultural and natural history can also be a livelihood, not least in a future with more tourists who are keen to learn about Greenland,' says Pauline.

AN UNFORGETTABLE EXPERIENCE Pauline was born in Upernavik and has worked in lived in several different towns in West Greenland. Today, she has her office in the capital, Nuuk, but over the past couple of years she has taken numerous flights to Ilulissat to follow the construction of the Icefjord Centre.

'It's so fascinating to see the ice flow through the fjord and the whales feeding near the ice. This was where I realized that ice is not an inert substance. The currents around the icebergs create turbulence, which stirs up the sea floor and increases the production of phytoplankton, which whales and other species feed on. So an iceberg is not just an iceberg. It is a source of life in many ways,' says Pauline, who has some recommendations for the tourists:

'Visit the exhibition and then take a walk along the fjord. Hear the whales blow and see the large icebergs as they float by. If you're lucky, you might see one of them flip over. These are experiences you will never forget.'



At first glance, an iceberg may seem like an inert substance, but in fact it is a basis for life. The currents around the icebergs create turbulence, which stirs up the sea floor and increases the production of phytoplankton, which whales feed on. That is one of the reasons why whales are a fairly common sight in the Icefjord.























A snowy owl flying low over the landscape. The Dorte Mandrup architecture firm has translated grand visions and ambitions into a building that tells the story of the Icefjord, local nature and cultural history and the impact of climate change while also serving as a meeting place for the local community.

THE ARCHITECTURE



'Our basic concept was to design a building that would bring together all the site-specific qualities and both underscore and elevate them. The site and the content were to determine the design of the building,' says Dorte Mandrup about the process of designing the Icefjord Centre in Ilulissat. To the internationally acclaimed architect Dorte Mandrup, it is a special feeling every time a building that she and her team designed begins to take shape on the construction site.

'Then I know for certain that the project is going to be realized. Until that point, any number of things can go wrong. We have been involved in competitions that we won, and then something happens which means the project is never realized. And we have taken part in even more competitions that we didn't win. With the Ilulissat Icefjord Centre, we were up against a field of exceptional studios,' says Dorte Mandrup.

She has been running her own architecture firm in central Copenhagen, which now has about 75 employees, since 1999. Over the years, the firm has designed many distinctive buildings. In recent years, Dorte Mandrup has undertaken a number of projects, including the Wadden Sea Centre in West Jutland, Denmark, which is also located at a UNESCO World Heritage Site.

Thus, the studio had the necessary experience and competence when it was approved in the prequalification procedure, in 2015, as one of six participants in the architecture competition for the Ilulissat Icefjord Centre. The competition was organized by a partnership consisting of the Government of Greenland, Avannaata Municipality and the philanthropic association Realdania. Ambitions were high; the partnership wanted a unique work of architecture and had secured a total budget of more than 150 million Danish kroner (approx. 20 million euros).

Situated right where the Icefjord runs into Disko Bay, Ilulissat is an absolutely exceptional destination. However, the preliminary analysis commissioned by the partnership found a correlation between the number of tourists and the availability of attractions in the area. Thus, the Icefjord Centre was not just intended to support the Icefjord as a destination; it was to be so exceptional in its own right that it would inspire more tourists to come to Ilulissat and stay longer.

KNOWLEDGE, TOURISM AND MEETING PLACE

The new Icefjord Centre was to meet three purposes, all of which should be incorporated into the architecture: providing and presenting knowledge about the Icefjord, the local nature and cultural history, and the clear impact of climate change; promoting the local and national tourism strategy and serving as an arrival site for visitors to the Icefjord; and, equally important, functioning as a meeting place for the local community.

The partnership also wanted a building designed with great respect for the unique site and a focus on sustainability.

Not included in the architecture competition was the exhibition inside the building. In a separate process,









At either end of the Icefjord Centre, there is an open, covered space where visitors and passers-by can find shelter from the wind and snow. Along with the roof, the two sheltered spaces also serve as meeting places for both tourists and locals. the partnership chose to initiate the development of the exhibition at an early stage in collaboration with the Danish exhibition architecture firm JAC Studios, which specializes in exhibition design around the world. In their proposal, the architects were asked to demonstrate how they would achieve a symbiosis between building and exhibition.

The architecture competition was divided into two stages. Stage one included all six architecture firms, from which just three would go through to the second and final stage. First, the six teams were invited to Ilulissat, where Dorte Mandrup and her team focused mainly on developing an overview of the area and a sense of what was possible.

'We were not able to measure the scale on-site, because there were no trees or houses, which meant we had no reference points. Instead, we gathered all the information we could and arranged a fly-over to get a proper impression of the landscape. We used this information to build a model of the landscape back in our studio, checking it against some 100 cross-sections from the area to make sure our vision did not obscure the sight lines from the UNESCO site. We carried out analyses and tests and made numerous models to find a solution. It is always important to be very humble and open towards the information we gather and then respond to it,' Dorte Mandrup explains.

One of the considerations was whether the Icefjord Centre should be buried within the terrain. However, the architects abandoned that idea because it would mean blasting a large part of the bedrock. They also considered a low building with a tower that would offer views of the Icefjord. That idea, too, was abandoned because a tower would be too visible in the landscape.

Ultimately, the firm settled on a building the shape of a boomerang with a dynamic three-dimensional expression, where the roof was used as a viewing platform overlooking the Icefjord.

INSPIRED BY A SNOWY OWL

'Our basic concept was to design a building that would bring together all the site-specific qualities and both underscore and elevate them. The site and the content were to determine the design of the building, so we chose to design a unique building that virtually clung to the edge of the cliff. We did not want to create an iconic work of architecture that could have been situated anywhere in the world, but of course we didn't mind if it would develop into an icon over time. In addition, it was a natural choice for us to construct a one-storey exhibition and café building. An exhibition flow works best when everything is on the same level,' says Dorte Mandrup.

In the design of the building, the architecture team was inspired by a snowy owl with its wings spread out. The snowy owl is a large, strong bird that breeds in North and 'This was the first time I discovered the role of architecture in relation to nature, which includes providing protection for people. That is an aspect I had never worked with before, since Danish nature is not dangerous. You also can't truly get lost in Denmark, while it's easy to get lost in Greenland. If you go off course, you could perish.'

- Dorte Mandrup, architect

THE SEVEN MEMBERS OF THE COMPETITION JURY

Lars Autrup, head of project, Realdania

Thue Christiansen, artist, representative of the Government of Greenland

Ono Fleischer, representative of Qaasuitsup Municipality (now Avannaata Municipality), Greenland

Hans Peter Svendler, special adviser

Jan Søndergaard, professor, architect, partner, KHR Architecture

Torben Schønherr, landscape architect, senior partner, Schønherr A/S

Carsten Rode, professor, engineer, DTU Civil Engineering




'One of our key priorities was to make sure the Icefjord Centre was for everyone. And I think we achieved that. I have been told that the locals originally called it, in Greenlandic, "the tourist place" but that they now call it "everyone's place". That is a huge difference, which I am tremendously proud of.'

- Dorte Mandrup, architect

North-East Greenland, among other places, and flies low over the landscape. In another design feature, the building was raised up from the ground to give the visual appearance of floating above the rock. In addition to the snowy owl reference, this solution was also based on another consideration, says Dorte Mandrup:

'It takes a long time to re-establish flora and fauna in Greenland. It's a fragile landscape. So in order to do as little blasting as possible and minimize our impact on the landscape, we rose above the site and put the building on piles,' she explains. 'The key is to approach the landscape with humility and respect for the huge amount of time it took to evolve. Human beings have only been here a short amount of time, and we should be humble in our interactions with nature. The landscape is permanent, the building is secondary.'

During the process, the team learnt how big a role snow plays in relation to the architecture. Usually, an entrance is a sheltered spot, but sheltered spots are precisely where snow settles and builds up. Thus, the entrance had to be placed in a wind-swept spot, which was tested by placing a model in a wind tunnel. The experiences from this trial were also used to create and position two open, covered spaces, where visitors and passers-by could find shelter from the wind and snow. 'This was the first time I discovered the role of architecture in relation to nature, which includes providing protection for people. That is an aspect I had never worked with before, since Danish nature is not dangerous. You also can't truly get lost in Denmark, while it's easy to get lost in Greenland. If you go off course, you could perish.'

During the sketching phase, it became clear that wind and snow were not the only challenges nature threw up. The building was designed with a huge glazed facade, and for sustainability purposes it was important to harness the passive solar heating. On the other hand, it was also important to avoid overheating in summer, when the sun never sets. This was achieved by rotating the building slightly.

'In the early stages of the sketching process, we had a clear focus on functional issues, but we also tried to cover all the details that involve some sort of dilemma. What is the transition between indoors and outdoors in the winter time, when indoor and outdoor temperatures are so different? What are the possible technical solutions? How can we deal with dew points and prevent condensation in a highly insulated building when it is minus 30 degrees Celsius outside? For example, we could not have the timber constructions go from indoors to outdoors, as we would do in other parts of the world; that would create a condensation point, and the timber would rot. I am well aware that many people think an architect's work is primarily about designing something that looks beautiful or impressive, but we dedicated a lot of time to making this building as technically safe as possible,' says Dorte Mandrup.

A ROOF TURNED MEETING PLACE

The brief for all six firms in the competition specified that the IIulissat Icefjord Centre was not just to be a tourist visitor centre; it should also be a meeting place for local residents and others who might not necessarily visit the exhibition inside. Since the Icefjord Centre would be situated as a hub for the area's rambling trails, Dorte Mandrup chose to make the building's roof a part of the trail system.



Situated in between the town and the Icefjord, Ilulissat Icefjord Centre forms a hub for the area's rambling trails. Therefore architect Dorte Mandrup chose to make the building's roof publicly accessible and integrate it into the trail system. From the roof, visitors can enjoy panoramic views of the fjord and the towering icebergs.









Dorte Mandrup has visited Ilulissat and the UNESCO World Heritage Site of the Icefjord outside the town several times and is proud of the Icefjord Centre. She is particularly pleased to see how the local citizens have embraced the building.

'We wanted to make the roof part of the walk. The idea was that when people stepped down from the roof on the other side, they had left the town behind and could then continue out to the Icefjord along the established trails. At the same time, we wanted the roof to be a place where everyone – locals and visitors alike – could meet, take photos or simply enjoy the view. A public space in the best sense of the word. Of course, we also scaled the café to be able to accommodate local celebrations, talks and events outside the tourist season,' says Dorte Mandrup.

In spring 2016, the competition jury met in Kangerlussuaq. The seven members and a number of advisers were tasked with assessing the six proposals, designed by architects from Iceland, Norway, Germany, Japan and Denmark. The jury consisted of three architects, one landscape architect, an engineer with extensive experience in Arctic construction projects, an artist and an expedition leader. The diversity of backgrounds was a deliberate choice aimed at ensuring a nuanced assessment.

It did not take the jury long to select the three projects to move forward to the second and final stage. The three finalists entered into a dialogue with the partnership where architectural choices were challenged and modifications were debated, before the studios finalized their proposals.

A few months later, the jury met again in Kangerlussuaq to make the final decision. This time too, they were fairly quick to agree on a winner. In the words of the jury, Dorte Mandrup's proposal for the new Ilulissat Icefjord Centre won because it is 'a poetic and forward-looking project with an architectural expression that beautifully frames and supports the larger vision. With respect for the natural setting, the new building will engage in an excellent interplay with the spectacular landscape.'

Dorte Mandrup still recalls the feeling when the phone rang and she was notified that she and her team had won.

'I was really happy. It was one of those competitions we really, really wanted to win. A dream project that has huge importance, for myself and for the studio, and a project that had been a long time in the making. We had our annual summer party a few days after the call came, and I can assure you we celebrated in style,' says Dorte Mandrup with a smile.

When she looks at the finished building today, it is with a sense of pride. Not just in seeing that the snowy owl landed as she wished and hoped but also in noting that it has accomplished the other goals that were defined from the outset.

'One of our key priorities was to make sure the Icefjord Centre was for everyone. And I think we achieved that. I have been told that the locals originally called it, in Greenlandic, "the tourist place" but that they now call it "everyone's place". That is a huge difference, which I am tremendously proud of.'





A MEETING PLACE FOR TOURISTS AND LOCALS ALIKE

Elisabeth Momme, director of Kangiata Illorsua – Ilulissat Icefjord Centre



Elisabeth Momme was born in Greenland, but as a teenager she moved to Denmark for her education and spent her entire adult life there. Now she has returned to the country where her roots are and is happy to play a role in shaping the content of the Icefjord Centre. When you create something as unique as Kangiata Illorsua – Ilulissat Icefjord Centre in a small community, the place should be in use all year round. The building should be full of life and possibilities for the local townspeople when the dark winter months set in and the tourists have left, says Elisabeth Momme, its director. The job has brought her back to Greenland, which she calls home.



All visitors to Kangiata Illorsua – Ilulissat Icefjord Centre are asked to take off their shoes before going inside. That may seem odd, almost intrusive, but the policy is for a good reason. In Greenland, everyone traditionally leaves their shoes outside, including invited guests.

'It's simply done to avoid dragging dirt inside. In the winter, the floors would be a mess of snow and slush. In the summertime, tiny stones, gravel and sharp objects get stuck in the soles of shoes, which would scratch the floors,' says director Elisabeth Momme.

At work she wears felt slippers. And when she goes to a *kaffemik*, a traditional Greenlandic coffee party, as she regularly does, she leaves her shoes in the hallway like everyone else. If it is a big party, it may take some time to find your own shoes when it is time to leave. The Icefjord Centre has a dedicated shoe room to make that task easier.

'In fact, there are additional benefits to asking the visitors to take off their footwear. In addition to conserving resources, we save a fortune on cleaning and maintenance of our beautiful oak floors, and the visitors enjoy the clean, quiet space. Walking around on stockinged feet gives a homely feel. You can wiggle your toes while looking at ice,' says Elisabeth Momme.

THE TOWN'S HOUSE

Most directors of a big, new attraction would probably be beyond frustrated to see a pandemic suddenly require the cancellation of the official opening with prominent attendants, including the Queen. Not so Elisabeth Momme. In summer 2021, the official opening of Kangiata Illorsua – Ilulissat Icefjord Centre had to be cancelled due to COVID-19, but Elisabeth Momme describes the cancellation as 'luckier than lucky'.

'Instead it became an opening for all the people of Ilulissat. The Mayor gave a short speech, and then we had a *kaffemik* and an open house. About 1,000 people showed up, more than a fifth of the townspeople. So now it's a community venue because the locals were the first to come here. That is essential for the future of the place,' says Elisabeth Momme.

Kangiata Illorsua – Ilulissat Icefjord Centre is designed to tell the story of ice: the life cycle of ice, the rich life on the Icefjord and the history of human presence here over thousands of years as well as climate change and the impact it is having on the area's ecosystems.

'Above all, the exhibition is a presentation of facts with the aim of helping people understand what is happening and that you can't ignore the fact that the ice is melting, even if you don't live here. That global warming has set processes in motion that affect us all. The exhibition does not address the topic of climate change explicitly, but we have models showing that the big glacier Sermeq Kujalleq, which calves



When the Ilulissat Icefjord Centre opened, Greenland was closed to outside travellers due to COVID-19, so the invited guests from abroad were unable to participate. Instead, the townspeople were invited to a local opening event with coffee and cake as well as a speech by the mayor. About 1,000 people showed up. in the Icefjord, has retreated 70 kilometres over the past 6,000 years. Back then, the glacier extended all the way to the mouth of the fjord, where the Icefjord Centre is situated today, but now you have to go deep into the fjord to see it,' says Elisabeth Momme.

'Perhaps 6,000 years sounds like a long time, so maybe it's difficult to grasp the full scale of the problem. But it's important to note that the process was very slow until 150 years ago, and now it's progressing very rapidly. That is what we show in the exhibition,' she adds.

With the exhibition, the Icefjord Centre aims to make complicated research accessible to a wider audience, so that ordinary people can take it in and understand what it means for them. Understand that as human beings, we cannot control nature, and that our presence is part of the climate challenge that we need to work together to minimize.

One of the very popular elements of the exhibition is a collection of large books.

'The visitors love the books. All the knowledge they contain is now being incorporated into teaching materials. We need materials that are produced in Greenland, which relate to our natural setting and draw on the knowledge that generations of Greenlanders have amassed. That is essential for our national identity,' says Elisabeth Momme.

I WANTED TO COME HOME

Although the director of the Icefjord Centre has spent most of her adult life in Denmark and has Danish parents, she says 'we' and 'us' when she speaks about Greenland and Greenlanders. We need to go more than sixty years back in time to find the explanation. Back then, Greenland was struggling with a tuberculosis epidemic, and Elisabeth Momme's young parents left Denmark to help establish Dronning Ingrids Sanatorium (Queen Ingrid's Sanatorium) in Nuuk. They ended up staying in Nuuk until their retirement.

'I consider myself lucky that my parents happened to settle in Greenland and to have me and my sister here, and that I was able to spend my entire childhood and youth in this wonderful country. For a child, it was an amazing experience of freedom and a place where you were allowed to do all the things you probably couldn't get away with in a Danish suburban neighbourhood. It was like living in an inventor's office, because we couldn't always buy everything we needed, so we helped each other out and learnt to turn the bits and pieces at our disposal into the spare parts we couldn't get,' says Elisabeth Momme.

To her, the most important thing she took away from her upbringing was the sense of having a role to play as a child. Handling tasks, such as getting the boat ready or helping out during hunting or fishing. Being needed. 'I learnt how many skills have to be added to the pool to make things work. Sometimes it takes an entire community. It was also a gift to be close to my parents, both in our everyday life at home and in their working life,' she reflects.

When Elisabeth Momme started school, the children were divided into Danish- and Greenlandic-speaking groups. The Danish-speakers did not receive any lessons in Greenlandic, even if their family was Greenlandic. The policy at the time was that everyone had to speak Danish in order to move on to higher education, which was offered exclusively in Danish. As a result, Greenlandic gradually lost ground, and Elisabeth Momme never learnt to read, understand or speak it.

However, despite her many years in Denmark, her soul has always been Greenlandic. Thus, even though Elisabeth Momme has reached an age when most people might consider retiring, she chose to uproot her life and say goodbye to her job of twenty-one years in order to settle in Ilulissat when the opportunity presented itself.

'I wanted to come home. I always knew I had to do that. It was an easy decision, and I never worried that things might not work out. Ilulissat is a friendly town, and I feel that I belong. Also, I have my sister, my brother-in-law and many friends in Nuuk from when I lived here. They were kind enough to warn me that everything had changed, but as soon as I arrived at the airport, I could tell that everything is just as it used to be. My body memory kicked in immediately. The country and its natural landscape are so vast that the changes barely make a dent,' she says.

A TOWN IN RAPID DEVELOPMENT

However, the Icefjord Centre itself is evidence of the change that Ilulissat is rapidly undergoing. Over the course of a few decades, the town has become Greenland's leading tourist destination, and even though Ilulissat remains primarily a fishing community, there are now more and more jobs in the tourism sector. New hotels and other accommodation options are opening continually, and cruise ships dock daily during the tourist season, from June to September.

Summer is peak season for the Icefjord Centre, but it stays open all year, also during the dark winter months when there are no tourists, Elisabeth Momme underscores.

'We have school activities, concerts, talks and other events. We wish to be a part of a positive development and give something to the town. We see ourselves as a gift, and I think the townspeople share this view,' she adds.





















The visions for Kangiata Illorsua – Ilulissat Icefjord Centre were in place, so too the architectural drawings. However, erecting a building with so many unique features is no easy task. Achieving it in the Arctic requires careful planning, a great deal of patience and a unique partnership.

CONSTRUCTION





The construction of the Icefjord Centre began in 2019 with a ceremonial blast. Jesper Nygård, CEO of Realdania, Jess Svane, then Minister of Industry, Energy and Research in the Government of Greenland, and Palle Jerimiassen, Mayor of Ilulissat, jointly pushed the button.

Traditionally, the building client, the contractor, the architect and other key actors gather for a groundbreaking ceremony on the first day of a major building project. In Greenland, the actual groundbreaking is not done using ceremonial shovels: since most of the land that is not covered by ice is rocky ground, the event is instead marked with a ceremonial blast.

Thus, in summer 2019, Palle Jerimiassen, Mayor of Ilulissat, Jess Svane, Minister of Industry, Energy and Research, and Jesper Nygård, CEO of Realdania, jointly pushed the button and blasted the first hole in the rock that would become the site of Kangiata Illorsua – Ilulissat Icefjord Centre. A vision the three partners would realize together.

THOROUGH GROUNDWORK

This initial blast occurred three years after architect Dorte Mandrup won the international architecture competition for the visitor centre. Over the course of those three years, the project had been meticulously planned and designed. It takes careful planning to build north of the Arctic Circle, where distances are long, the building season is short and the climate is unforgiving. Moreover, Kangiata Illorsua – Ilulissat Icefjord Centre is far from a standard building. All the materials, including the steel construction, the glass panes for the facade and the custom-made battens for the walls and ceiling were produced in Denmark and shipped to Greenland.

The partnership placed the responsibility for the overall project management in the hands of the Realdania subsidiary Realdania By & Byg, which has extensive experience with the construction of innovative architecture and had previously overseen the restoration of two historical houses in the Ilimanaq settlement across the Icefjord from Ilulissat.

'The first thing we did was to go through the entire project with Dorte Mandrup's architects and engineers to ensure it was feasible in technical, practical and economic terms.







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In order to minimize interference in the landscape, the Icefjord Centre rests on steel columns cast into the rock. The steel columns were produced in Denmark and shipped to Ilulissat, so it was crucial that the holes were placed with great accuracy. Even a minor deviation would delay the construction by weeks. Ultimately, however, everything went to plan.





One of the challenges I saw, based on my experience in Greenland, was that the use of laminated timber in load-bearing components would not be optimal for technical and aesthetic reasons. Climate change has made the climate in Greenland more humid, and that is not a good environment for laminated timber. These components were therefore replaced with steel,' says Frants Frandsen, project manager at Realdania By & Byg, who was responsible for bringing the project to completion.

The decision to use steel was also made for sustainability reasons. Steel lasts longer and requires less maintenance than wood, and it was possible to use 80 per cent recycled steel.

ARCTIC EXPERIENCE

With the initial decisions in place, another major decision was who would handle the task of transforming the architectural drawings into a finished building. Few companies have experience with construction in the Arctic, which involves building on rocky ground in a harsh climate where it is cold and dark much of the year.

A handful of construction firms in Greenland and Norway were interested, but ultimately the contract went to the construction and mining firm KJ Greenland, which is based in Ilulissat.

'It was key for us that the company is based locally in Ilulissat, both because this provides local jobs and because it means the company is used to operating with the degree of flexibility that is required when building in Greenland. For example, you can't have everything stop because temperatures plummet or there is a storm. Then you have to do something indoors instead. In the Arctic, you can't construct a building on a single, predetermined timeline but need to have several contingency plans in play at once,' says Frants Frandsen.

The contract was signed in 2018, when construction was scheduled to begin, until an unforeseen problem emerged. When the architects had inspected the future building site a few years earlier, it had been covered by snow, so some of the information about the rocky ground that the planning was based on proved inadequate. New studies were required, and the project had to be delayed by a year. The extra time was spent planning even more carefully and revisiting every single process.

That was a good decision, which helped bring the deeply complicated project across the goal line. For example, the steel components had to be the right length and width to fit inside a shipping container. When they arrived in Ilulissat, they had to be cast into holes that had already been drilled into the rock. The whole thing was one big assembly kit, and if we had got our calculations wrong by as much as half a centimetre, the pieces would not have fitted together and adjustments might have taken weeks. This also applied to the facade, which consisted of about 450 glazed sections. Each of these sections was unique, had its own specific measurements and had to fit in between the steel columns with millimetre precision. That required intense focus on tolerances, planning and production,' says Frants Frandsen.

THE BUILDING TAKES SHAPE

In spring 2019, Mads Nørgaard, site supervisor for KJ Greenland, was developing an overview of the building site in Ilulissat, reviewing the project material together with an engineer and carefully studying the calculations and lists of materials. Their first task was to develop a delivery schedule extending one year into the future.

'To supervise a construction project in the Arctic, you need to be able to visualize the end result before you





The unique design of the Icefjord Centre was a big challenge for the builders. Most of the building components had to be specially adapted, cut and angled. That took a great deal of patience and the willingness to accept that things take time.





begin. It's not enough to be able to determine when a timber panel is needed, for example; you also need to know the delivery time is six months, that it will need some time to acclimatize once it arrives in Greenland, and then it needs to be finished. This means we have to order the timber a year before it is scheduled to be installed,' says Mads Nørgaard, who in addition to being a trained carpenter is also a constructing architect, a dual background that served him well during the construction of the Icefjord Centre.

With a bespoke project and no access to any other building materials than the ones that arrived in containers from Denmark, there was no room for improvising new solutions on-site. Thus, the focus was on determining how the ideas in the sketches and plans could be realized – and how they would be communicated to the people who would later put it all together but who did not have the full picture of the project.

To make matters more complicated, Kangiata Illorsua – Ilulissat Icefjord Centre is not a rectilinear design. Due to the shape of the building, most building components have to be individually adapted, each piece requiring a different cut, a different angle, a different length. That takes patience and the willingness to accept that things take time.

'This was a challenge to some of our workers, who are used to a high rate of productivity and seeing progress from one day to the next. When you are installing 20,000 metres of oak battens, each measuring about 2 metres, on a curved ceiling, and you have to do it from scaffolding, working with your hands above your head, it may seem like the goal is a long way off when you first set out,' says Mads Nørgaard.

In order to minimize the intervention in the landscape, the Icefjord Centre is not built on a conventional foundation. Instead, the building floats above the rock, carried on steel legs cast into thirty-eight holes drilled into the rock. No one on the building site had any experience with that type of foundation, so there was considerable excitement when the steel constructions arrived from Denmark – but everything fitted. The thorough and lengthy preparation combined with high-precision execution paid off.

The summer of 2019 was not only spent erecting the huge steel skeleton and installing the glass facades. The building section designed to house the exhibition and other facilities was also insulated and closed, so when winter set in, work could be moved indoors, while work on the two patios and the rooftop was scaled down to a minimum.

'It is difficult to explain how tough the wintertime is in Greenland, especially to those of us who did not grow up with it. We had 30 degrees Celsius below, and it was dark. The only light came from the lamps and spotlights on the construction site. The cold also made it necessary to include more breaks during the day for the people who were working 'It is difficult to explain how tough the wintertime is in Greenland, especially to those of us who did not grow up with it. We had 30 degrees Celsius below, and it was dark. The only light came from the lamps and spotlights on the construction site. The cold also made it necessary to include more breaks during the day for the people who were working outdoors, if outdoor work was even possible. Otherwise they wouldn't be able to stay warm.'

- Mads Nørgaard, site supervisor

outdoors, if outdoor work was even possible. Otherwise they wouldn't be able to stay warm,' Mads Nørgaard explains.

INAUGURATED BY THE TOWNSPEOPLE

Like the rest of the world, in 2020 Greenland was hit by COVID-19. Above all, this meant a four-month lockdown, when workers could not enter the country, and, subsequently, a policy that allowed essential workers in following an application procedure. In addition to time-consuming paperwork, this also required Danish builders to begin their employment with a two-week quarantine in a local hotel, a challenge that at one point threatened to delay the completion of the project.

Delays were averted, however, as a pragmatic arrangement was worked out in late summer in cooperation with the Greenlandic Covid office: builders who were in quarantine were allowed to work at night, provided they worked outdoors, that no one else was present at the building site and that they continued to quarantine at the hotel during the day. This way, the builders were able to make up for the delays, and over the course of 2020 Kangiata Illorsua – Ilulissat Icefjord Centre really began to take shape.

With the building project in its final stages, the design of the heated part of the Icefjord Centre began in spring 2021, including the 400-square-metre exhibition space.






The permanent exhibition, *Sermeq pillugu Oqaluttuaq – The Story of Ice*, which features both a cinema and art installations, was installed, and in July 2021 the Icefjord Centre was ready to welcome its first visitors.

According to the original plan, the Icefjord Centre was to be opened by Her Majesty Queen Margrethe. However, Covid restrictions and the closure of Greenland's borders made that impossible. Instead, the townspeople were invited for *kaffemik*, a traditional Greenlandic gathering with coffee and a selection of cakes.

Mads Nørgaard was also present at the opening. To him, the event marked the completion of a project he looks back at with great professional pride, both as a project manager and as a builder.

'When you're inside the building, you don't really notice what a huge accomplishment it is. It has been an incredible journey. First, to stand inside the holes drilled into the rock surface, removing building waste while also keeping track of this huge project. Then to see it take shape, first the major elements – the steel construction, the glazed facades and the roof structure – and then the finishing of all the exceptional materials that were used in the project. And then, of course, to complete the project on time. That was only possible due to the skills and talent of everyone involved,' says Mads Nørgaard, adding:

'To many of us, being involved in creating something as spectacular as the Icefjord Centre has been an absolutely unique experience, and to me it is definitely a memory for life.'

Frants Frandsen of Realdania By & Byg also looks back at the construction of the Icefjord Centre with fond memories. Despite the challenges along the way, he misses the construction period.

'I was not present all the time, but every time I went up there from Denmark – about once every six weeks – I was excited to go. Greenland and Ilulissat have got into my blood, and I miss it like crazy,' he says.



THE MECHANIC

Jesper Sandgreen, a mechanic with Ilulissat Marine Service



There are not many cars in Ilulissat. Instead, there are hundreds of dinghies and boats, so Jesper Sandgreen has made the switch from car mechanic to boat mechanic.

When Jesper Sandgreen moved back to Ilulissat after spending nine years in Denmark, the first thing he did was to drink a big glass of water.

'And then I breathed in the air from the Icefjord. It was just amazing to be back in Ilulissat. The air is different; the water tastes different. Much more fresh and clean,' says Jesper, who is a trained car mechanic.

He had no hesitation when Ilulissat Marine Service rang him in Denmark to hear if he might be interested in returning home and working for them. His girlfriend, who is a mechanical engineer, was also keen to go, and today the couple live with their two children in a house in the middle of town. Once again close to family and friends.

'There aren't many cars in Ilulissat, so now I'm a boat mechanic instead of a car mechanic. This means I am learning a lot and expanding my professional skill set, which improves my options, also in the long run,' says Jesper, as he gazes out over the sea ice. 'That's bound to put a smile on your face, wouldn't you say?' he says.

Back in Denmark, he found less reason to smile. He also had less time for family life in the city. He had a half-hour commute to work and did not get off early enough to pick up his children from day care. All in all, this way of life was sapping his spirit and his energy.

'I was becoming increasingly pent-up and unhappy about my situation. That, too, convinced me that coming home was the right choice. Now everything is within walking distance, I can pick up my kids, I'm close to nature and the people I care most about. In fact, I don't even own a car any more because I can walk everywhere. And people in Ilulissat are so friendly, always waving hello to each other, so much so that your arm gets tired with all the waving,' he says with a big smile.

This warm and welcoming community is one of the things Jesper hopes the tourists will experience too. And he has no doubt that the Icefjord Centre is going to draw more visitors to the area. Something he looks forward to.

'I would love to show off my town; there is so much to see and experience here. An increase in tourism might also convince more people to return home, as we have done. That would be great. The more, the merrier,' says the mechanic. Jesper Sandgreen is happy that he chose to return to Ilulissat. He hopes that the tourists, too, will sense the warm and welcoming spirit of the town.



THE QAJAQ CHAIRWOMAN

Pia Jensen, chairwoman of Qajaq Ilulissat



Pia Jensen learned to *qajaq* as a child. Now she is teaching the techniques to her son, and in her spare time she coaches children and young people from Ilulissat.

At the top of one of the mountains in Ilulissat there is a little, blue house. Overlooking the red-and-white hospital, the black church, the local houses and, not least, Disko Bay and the icebergs. The house is the home of Pia Jensen and her boyfriend, Karl Peter, their three-year-old son, Knud, and the family's best friend, Kaspaaraq. But family life only takes up part of her day. She is also the passionate chairwoman of the local *qajaq* club, which numbers fifty active members.

While most of the world knows a kayak as a small, narrow boat made of fibreglass, carbon fibre or plastic, a Greenlandic *qajaq* is traditionally constructed of wood and canvas. For generations, this boat type has been an essential tool for Inuit hunters in Greenland and Arctic North America. Today, it is mainly used for sport and play.

'I was virtually raised in a *qajaq*. My father told me to watch what he did, and that was how he taught me to sail. I don't recall whether I found it easy or hard, but I participated in my first competition at the age of three, in Paamiut. Now I am teaching my own son, but I think my approach is a little different,' says Pia, laughing. In addition to training her own son, she also trains other *qajaq* enthusiasts, mainly children aged 4 to 16 years. The club is seeing a renewed interest, especially from children, and she puts a great deal of effort into the training, which takes place on the water during most of the summer.

'In the *qajaq*, we have to make the most of the brief summer. During the winter, we focus more on training strength, endurance and balance on two suspended

ropes,' says Pia, who puts great emphasis on teaching the young prospects to have respect for the icebergs. A respect the experienced rower shares.

'I don't like to get too close, because we never know when they are going to roll. And when that happens, human beings are tiny in comparison to the giant icebergs.'

The wall in the living room is decorated with medals from the many *qajaq* competitions that the Jensen family, including her parents and siblings, have participated in. From Uummannaq, some 200 kilometres north of Ilulissat, to Nanortalik in the southernmost part of Greenland. Every year, clubs from all over the country meet to compete in the Greenlandic *qajaq* championship.

'Next year, the championship takes place in Ilulissat, so as chairwoman, I am busy,' says Pia, as she walks down the steep stairs from the mountain with the blue house to the *qajaq* club house in Kirkebugten (Church Bay).

Winter time is also a time for maintaining the *qajaqs* and building new ones. This is done in accordance with the ancient traditions that Pia also learnt from her father.

'I can't build a *qajaq* myself, but I know how it's done. I have seen my father do it so many times that it's like having a film in my mind. That enables me to instruct others and tell them exactly what to do,' she explains.

When Her Majesty Queen Margrethe visited Ilulissat in October 2021, Pia was invited to the *kaffemik* – coffee party – at the Icefjord Centre in her capacity as chairwoman. When she learnt that she would be seated at the Queen's table, the normally calm *qajaq* woman felt a little jittery.

'But it worked out okay, and it was a great experience. I am happy to represent the *qajaq*, which means so much and is such a big part of my life. And the Queen was very interested. I think she was surprised that we use the traditional *qajaq* and not the plastic kayak,' says Pia.



The Greenlandic *qajaq* was previously an essential piece of hunting equipment for Greenlandic Inuit. Today it is mainly used for sport and play or for pleasant trips under the setting sun.

THE HOTEL DIRECTOR

Anders Okholm Gadeberg, managing director of Hotel Icefiord



From the restaurant at Hotel Icefiord, the guests and the hotel director have an exceptional view of Disko Bay and the large and small icebergs gliding by on their way from the Icefjord to the sea. The view from the picture window in the restaurant at Hotel Icefiord is almost indescribable. The hotel is literally on the edge of Disko Bay, and just outside the window large and small icebergs glide by on their journey from the head of the fjord to the sea.

For the tourists, the sight is an experience of a lifetime. For the two local hunters sitting at one of the tables, it is commonplace in everyday life – if a view such as this can ever become common.

The two hunters are at the hotel to deliver 350 kilos of musk ox meat to the hotel's managing director, Anders Okholm Gadeberg, who is about to meet them to pay for the delivery. That is just one of his many diverse tasks.

'To me, everyday life at the hotel is a little bit like being out on the water in the Icefjord, where you have to navigate sheet ice, ice floes and large icebergs. You never travel in a straight line from point A to point B when you're out there. First you have to navigate around all the ice and decide whether to tack this way or that. Is the other way better, or did we just manage to squeeze by? That's not a bad metaphor for the job of managing a hotel here in Ilulissat,' says Anders.

The young director's journey began with a thirst for adventure. At the age of 24, he signed up for a tour guide course, which led to a job as a tour guide in Ilulissat. He was offered the position as managing director of the hotel just as he had decided to return to Denmark to finish his studies.

'I literally had to get my head underwater a few times,' says Anders, whose main hobby is wakeboarding. A passion he has taken with him to Ilulissat and now pursues in the fjord during the summer.

Eventually, he accepted the job, and in December 2018 the newly appointed director left family, friends and acquaintances behind in favour of a life in Greenland, which he had only seen a small fraction of at the time. Anders soon discovered that the Arctic is very different from Europe. He had barely taken up his new position before there was a break in the undersea cable connecting North Greenland to the rest of the world and securing a reasonable internet speed.

'Suddenly, we had hardly any contact with the outside world. Our guests could not go online, and we could not communicate with guests who were planning to visit. We had to get up at three in the morning to send emails. For months, Greenland was connected to the rest of the world via a radio chain, which made the internet connection really sluggish. At that point I truly realized I was a long way from home and from everything I had taken for granted,' says Anders.

The hotel director also had to get used to living in a small community, for better and worse. On the plus side, everybody greets and knows each other; on the down side, there is also no way to avoid someone you might not get along with. Or employees you had to let go.

None of these challenges caused Anders to lose heart. On the contrary. Over the past few years, he has developed a range of new experiences for tourists in the town. He has a particular interest in possible gastronomic experiences for tourists and locals alike.

'We have a unique opportunity to go all in on "field to table" with the culinary resources all around us. Mussels, seaweed, musk ox and a wealth of other ingredients. Sea urchins are a new thing, which we recently tried for the first time,' he says.

As tourism provides the economic basis for the fifty-one rooms at Hotel Icefiord, the director is happy about the Icefjord Centre, which he sees as one more part of the total package needed to attract more visitors.

'None of us can stand alone. Of course, the Icefjord is the reason why people come here, but without good accommodation, good food and, now, the stunning Icefjord Centre, where they can learn about the area, the visitor numbers would drop, and that would change life in Ilulissat,' says Anders.



Hotel director Anders Okholm Gadeberg has his own personal favourite spot for taking in the view of the Ilulissat Icefjord. This area is also where some of the ingredients for the hotel kitchen are sourced.

























FACTS

THE PARTNERSHIP BEHIND KANGIATA ILLORSUA – BUDGET ILULISSAT ICEFJORD CENTRE

Kangiata Illorsua – Ilulissat Icefjord Centre was developed and funded by a partnership consisting of the Government of Greenland, Avannaata Municipality and the philanthropic association Realdania. Together, the three partners established the Icefjord Centre with the goal of strengthening the local community and promoting tourism in Greenland. The construction was handled by the Realdania subsidiary Realdania By & Byg.

GOVERNMENT OF GREENLAND

In 2009, Greenland Self-Government replaced Greenland Home Rule, which was established in 1979. Naalakkersuisut is the Government of Greenland, elected by the legislative body, Inatsisartut. The current Naalakkersuisut consists of nine members, led by the Premier.

AVANNAATA MUNICIPALITY

Avannaata is the northernmost municipality in Greenland and consists of 4 towns and 23 villages. It covers an area the size of Spain and is home to about 10,600 people.

REALDANIA

Realdania is a philanthropic association with about 175,000 members. The association's goal is to improve the quality of life through the built environment, the physical settings of our everyday life. Its focus includes urban development, construction and the conservation of important cultural environments. Sustainability is a key issue in much of Realdania's work. Since 2000, Realdania has donated more than 20 billion kroner (approx. 2.7 billion euros) in total to approximately 4,300 projects. Membership of Realdania is open to anyone who owns real estate in Denmark.

ADDITIONAL CONTRIBUTORS

The permanent exhibition *Sermeq pillugu Oqaluttuaq – The Story of Ice* at the Icefjord Centre was created with funding from Nordea-fonden, Augustinus Foundation, Bloomberg Philanthropies and OAK Foundation.

The total budget for the Icefjord Centre was 152 million kroner (approx. 20 million euros).

The Government of Greenland and Avannaata Municipality contributed 23 million kroner (approx. 3 million euros). Realdania contributed 108 million kroner (approx. 14.5 million euros).

The exhibition and the learning activities inside the Icefjord Centre was funded by Nordea-fonden, 16.45 million kroner (approx. 2.21 million euros); Augustinus Foundation, 3.8 million kroner (approx. 0.5 million kroner); Bloomberg Philanthropies, 750,000 kroner (approx. 100,000 euros); and OAK Foundation 350,000 kroner (approx. (50,000 euros).

TIMELINE

- 2004: Kangia Ilulissat Icefjord is designated a UNESCO World Heritage Site.
- 2014: Based on extensive analysis work, a report is presented on the possibility of establishing and operating an icefjord centre in Ilulissat.
- 2015: The Government of Greenland, Avannaata Municipality and the philanthropic association Realdania establish a partnership to construct Kangiata Illorsua – Ilulissat Icefjord Centre.
- 2016: Dorte Mandrup A/S wins the international architecture competition.

2019: Construction begins.

2021: The Icefjord Centre opens its doors to the first visitors on 3 July.

KANGIATA ILLORSUA – ILULISSAT ICEFJORD CENTRE: A FEW FACTS

- Kangiata Illorsua Ilulissat Icefjord Centre is the first of six planned visitor centres to be established in Greenland over the coming years. Realdania is only involved in the establishment of the Icefjord Centre.
- The building is functional throughout. The roof offers an open public vantage point overlooking the Icefjord during spring, summer and autumn. The building houses the exhibition *Sermeq pillugu Oqaluttuaq* – *The Story of Ice*.
- The exhibition Sermeq pillugu Oqaluttuaq The Story of Ice describes the unique landscape on the Icefjord and the area's more than 4,000-year-old cultural heritage, as well as climate change, which is now leaving now leaving its clear mark on the surroundings of this UNESCO World Heritage Site.
- As part of the exhibition, the Icefjord Centre also features two art installations and a cinema as well as a shop and a café.
- The Icefjord Centre has a total floor space of just under 1,500 square metres, of which 900 square metres is heated. The exhibition covers 400 square metres, including the art installations and cinema.
- The centre is operated by Greenland Visitor Centre, an independent institution under the Government of Greenland.

THE PARTNERS WHO DESIGNED AND BUILT KANGIATA ILLORSUA – ILULISSAT ICEFJORD CENTRE

- Client: Realdania By & Byg A/S.
- Architect and full-service consultant: Dorte Mandrup A/S.
- Consulting engineers: Søren Jensen Rådgivende Ingeniørfirma A/S.
- Developer consultant: Rambøll Danmark A/S.
- Construction manager and site supervisor: Rambøll Grønland A/S.
- General contractor: KJ Greenland A/S / consulting engineer: Torben Melgaard.

Subcontractors:

- Painter Niels Erik Bro, Jenses Malerforretning ApS, Ilulissat.
- VVS & El Firmaet A/S, Ilulissat.
- Kai Andersen Engineers and Contractors A/S, Holte
- Landscape architect: Kristine Jensen Landskab & Arkitektur ApS, Aarhus.
- Preliminary analyses and project development: BARK Rådgivning A/S, Copenhagen.

THE EXHIBITION WAS CREATED BY JAC STUDIOS

• Johan Carlsson, founder architect/designer (MA, MDD).

ADVISORY GROUP FOR THE EXHIBITION

The exhibition *Sermeq pillugu Oqaluttuaq – The Story of Ice* was created with assistance from an advisory group consisting of:

- Klaus Nygaard, director of the Greenland Institute of Natural Resources.
- Olav Orheim, glaciologist and climate researcher, Norway.
- Kirsten Hastrup, Professor Emeritus of Anthropology, University of Greenland.
- Erik Bjerregaard, former general manager of Hotel Arctic in Ilulissat and a former board member of Visit Greenland.
- Ólafur Örn Haraldsson, former director of Thingvellir Visitor Centre, Iceland.

PHOTOS AND TEXT

PHOTO CREDITS

Adam Mørk: Cover, pages 6-7, 10-11, 12-13, 14-15, 16-17, 18-19, 36-37, 38-39, 52, 55, 57, 58, 59, 60, 62, 63, 71, 72-73, 76, 80, 83, 84, 85, 86-87, 88-89, 90, 92-93, 94-95, 96, 99, 100-101, 102, 104-105, 107, 108-109, 110, 112, 113, 116, 117, 118, 119, 120-121, 122-123, 124, 125, 134, 138-139, 140, 141, 148-149, 150-151, 152-153, 154-155, 156-157, 158-159 Steen Brogaard/Post Greenland: Page 20 Christian Klindt Sølbeck: Pages 23L, 24, 34, 82, 98, 111 Aller Media/MEGA: Page 23R Allan Moe/Ritzau Scanpix: Page 27L Karsten Schnack/Biofoto/Ritzau Scanpix: Page 27R Kongehuset/Ritzau Scanpix: Page 30 Bjarke Ørsted: Pages 32, 35, 40, 41, 42-43, 46, 47, 48-49, 61, 64, 65, 66, 67, 79, 114, 115, 142, 145, 146, 147, 162т Frants Frandsen: Pages 44-45, 136 Nina Jul Larsen: Page 50 Morten Rasmussen/Biofoto/Ritzau Scanpix: Page 51 Jens V. Nielsen: Pages 54, 74, 143 Henrik Saxgren: Page 68 Visit Greenland/Julie Skotte: Page 91 KJ Greenland: Pages 126, 129, 130, 131, 132, 133, 135 Bolatta Silis-Høegh: Page 128 Poul Hard: Page 144 Claus Bjørn Larsen: Page 162B Dorte Mandrup A/S / Kristine Jensens Tegnestue: Pages 166-167



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STEEN BREINER, self-employed editor, author, journalist and communication consultant, primarily within the built environment. Former editor-in-chief at the newspapers *Dato*, *Urban* and *B.T.*, editor and journalist at the newspaper Berlingske, and head of communication at the Bolius Homeowners Knowledge Center and the design company Vipp.

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Like a connecting link between city and fjord, Kangiata Illorsua – Ilulissat Icefjord Centre lies at the mouth of Ilulissat Icefjord. The permanent exhibition *Sermeq pillugu Oqaluttuaq* – *The Story of Ice* offers visitors an understanding of Greenlandic nature and culture, the rich life on the Icefjord and the history of human presence here over thousands of years, as well as insights into climate change, which is having a clear impact on the Icefjord.

The Icefjord Centre is a spectacular attraction in its own right. Designed by the internationally acclaimed architect Dorte Mandrup, the building overlooks the landscape of this UNESCO World Heritage Site, and from its rooftop locals and visitors have outstanding views of this magnificent scenery.

This book describes the creation of the Icefjord Centre, from initial thoughts and visions to the opening day. Local citizens from Ilulissat describe daily life on the Icefjord, while Her Majesty Queen Margrethe speaks of her love for Greenland.



