



PROGRAM
Rethinking a Greenlandic House

Greenland Inhabited

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Rethinking a Greenlandic House
The Royal Danish Academy, School of Architecture
IBT - Architecture and Extreme Environments, spring 2015
Hannah Rosa Rasch



*Cover: Ilulissat in winter (own photo)
Above: Traditional house in Uummannaq (own photo)*

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*Polar projection
The Arctic*

SYNOPSIS

Based on a field trip to Ilulissat in West Greenland, I approach this project with previously conducted case studies in domestic and social structures, personal reflections as well as mappings of current Greenlandic statistics and phenomena. Three main challenges have generated from this:

PERMANENCY

A great amount of Greenlanders live in rental properties and do not own their homes. This means they don't change the basic structure or build-up of their environment, as the effort will not be repaid when they relocate.

DEMOGRAPHY

The Greenlanders move a lot within the country and even district borders, due to work opportunities or changing living situation. This means that there are unused square meters in some places, and meanwhile a lack of square meters in other places.

SEASON

The Greenlandic life style includes tremendous variation and shifts in seasonal behaviour; activity and movement patterns both indoor and outdoor. This means that people with a non-static lifestyle are living in traditional static home structures.

My goal is to create a design that challenges the Greenlandic home to become responsive to the season dependant social constellation of its users, that interacts with the diverse West Greenlandic climate, and is adaptable to the versatile needs of the modern Greenlandic inhabitants.

I base my project in the town of Ilulissat in the Diskobay in NW Greenland, which is a relatively modern and fast growing city that is inhabited by hunters, fishermen and businessmen alike, to evoke an investigation that aims for a versatile user profile.

I have chosen a site in the Northern part of town, where the latest expansions are currently being added, consisting of traditional Greenlandic family houses. The opportunity to connect with the infrastructure, in accordance with established urban planning, the location between seaside, inland and the hilly terrain makes this site the best spot to place my thesis project.



*Above: At home (Sebastian Trixier)
Below: Hunting on the ice (Sebastian Trixier)*



OFFSET

66° 33' 44" N (The northern polar circle). The region north of this circle is known as the Arctic region. Between the continents of America and Europe/Russia we find the great island of Greenland, an autonomous state under the Kingdom of Denmark.

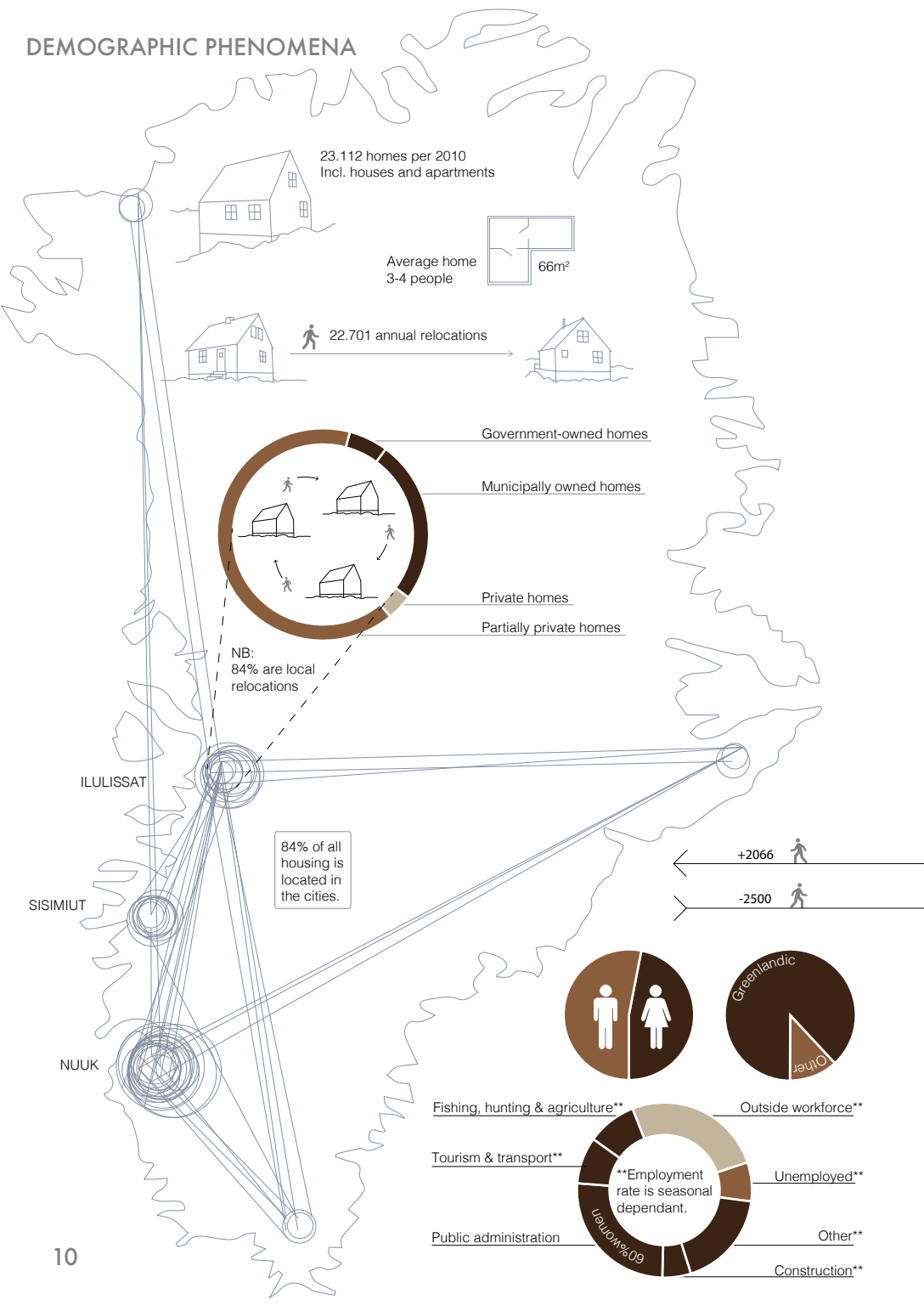
Based in the Diskobay my journey set off. The cities, towns and settlements of Greenland are extraordinary due to their location and climatic conditions. The society is not like any other, as it is a combination of inuit culture, Norse settlement structure, Danish colonisation and geographical challenges. The further north you go, the more extreme all of these parameters become.

Although geographically Greenland is an Arctic country, it is culturally, politically and historically connected with Denmark. In current Greenland we find a peculiar combination of Inuit and Western culture, that manifests itself in many ways - the snowmobile slowly taking over the traditional dog sledge, the huge amount of cars in a country with almost no roads and the "common example" of the business man taking his tie off after a day at the office to go hunt for reindeer. The inuit lifestyle has changed drastically in correspondence with Western culture, but yet I will argue that the traditional house have not seen major changes since the 1950s, or even since its introduction in the 1700s.

Personal offset: I have visited Greenland many times. Getting locally attached, both with the Greenlandic people, their culture, the environment and the contradictions of the country. Thus, I began my 6th visit in Greenland to research architecture as background for understanding how Greenland is habited.

In Ilulissat I found some helpful individuals and families that let me into their home, and agreed that I could for days snoop around and register exactly how they occupy them – with special interest in the domestic structure of the Greenlandic house.

DEMOGRAPHIC PHENOMENA



MOTIVATION & VISION

When mapping the Greenlandic living structure, I do not equate phenomena, but instead see them all as part of a complex cultural, social, infrastructural, historical and economical symbiosis.

During my stays in Greenland I have observed and been fascinated by many of these phenomena - I have tried to translate them in the diagram on the left.

One thing I've found, is that on an annual basis there's recorded 22.701 relocations between 23.112 homes (a relocation is constituted by a minimum of 2 months).

That means, that in one year there is almost as many people moving from one living situation to another, as there are homes in Greenland!

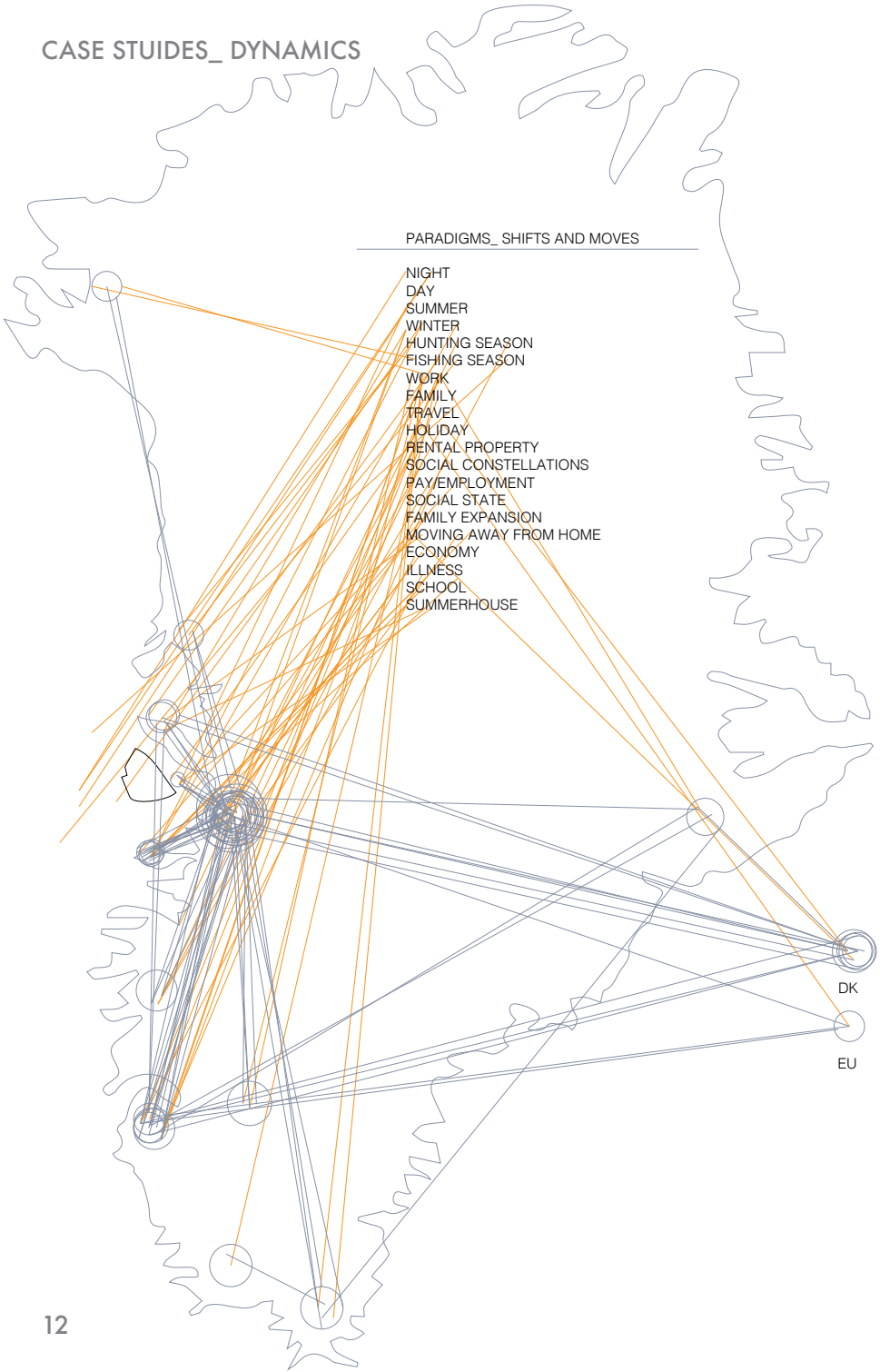
This doesn't mean, that everyone change houses once a year, but is reflecting an image of a people that have adapted to a cultural climate that demands of the individual to be able to move for shorter or longer periods at a time, leaving behind or bringing the family. It is showing that at any given time a year, there's someone who is leaving behind square meters to occupy other ones somewhere else in the country. It is too indicating, that the living constellations in some way has to be very elastic to accommodate a changing amount of people throughout the year.

This is interestingly enough also showing, when looking at statistics of field of employment. Public administration and unemployment is noted to be relatively location static, whereas the rest are in a more or less degree mobile fields, so the employment rate is affected by seasons which is affecting needs for relocation.

Another noticeable thing, is the unequal division between the genders, which is normally not detectable in a country's statistic. This uneven percentage is a reminder of an immigration pattern of mainly men, moving to Greenland to work in male dominated areas such as mining and construction. These too, are adding to the relocation statistics, as they are more likely to be moving around on a temporary basis for work.

So my vision for this project is to challenge the indoctrinated idea of what a Greenlandic home should be able to accommodate, and even more so - when and for how long at a time.

CASE STUDIES_ DYNAMICS



GREENLAND INHABITED

Greenland Inhabited is a program that aims to challenge the conventional static house type, that is currently preventing the users to impact spatialities in their own home.

The aim is to explore in what way architecture can become responsive to dynamic occupants. Therefore it is interesting provoke the idea of what a home can be, based on the knowledge of how the West Greenlandic people are actually using the spaces in various ways (depending on season or specific circumstances, such as increasing/decreasing number of occupants).

It should investigate means to make the annual Greenlandic relocations a resource and a potential, by designing a structure that can either be dissolved, fractioned or in some way offer an alternative type of architecture for a Greenlander that often moves. An offset could be how to activate the unused square meters that appears, when an individual for a shorter period of time relocates, or how to detach them temporarily in order to save energy and heat - or perhaps lend them to others.

The project seeks to investigate how architecture can shrink and expand in accordance with the demographic movements throughout the year. To research an approach in which the project can become physically elastic. Either by an additive methodology where items can be added or removed to a permanent structure, or looking into a facade system that can open or close depending on the urgent needs of the occupants. The investigations should include the handling of such elasticity - how it will impact the social and domestic structure of the inhabitants - and the idea of a home.

Also, the program will investigate how architecture can be adaptive and flexible towards the extreme West Greenlandic climate, thus testing wind specifications, light parameters, temperatures and site specific construction problematics, aiming for a sustainable solution, both technically and socially.

CURRENT GREENLANDIC HOME

Average total m² = 66

Daily routines-area average m² = 20

Average number of rooms = 3

Based on my mappings and research studies, the aim is to work with the average home sizes in current Greenland for an also average family structure of 2 adults and 2 children (+ closest family).

FUNCTIONAL PROGRAM

Daily routines	Kitchen Bathroom Entrance/hall
Living areas	Bedroom(s) Living room
Versatile user	Parking/storage Prep room/"bryggers"

PERMANENT POTENTIALS

Kitchen
Bathroom
Bedroom(s)

TEMPORARY POTENTIALS

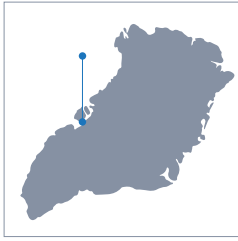
Bedroom(s)
Living room
Entrance/hall
Parking/storage
Prep room/"bryggers"

SCALE AND PROGRAM

Investigation of the site in a landscape/scenic context to understand and incorporate the city build-up and infrastructural situation in 1:5000 and 1:2000

Investigation of the near local site, such as the conditions of the terrain and the transition from inland to ocean in 1:500 and 1:200

Investigation of spatial functions and domestic organisations in 1:50 and 1:20.



Ilússat 1:20.000

SITE

I base my project in the town of Ilulissat located approximately 350 km north of the Arctic Circle. With the population of 4,541 it is the third biggest city in Greenland, and is growing.

Infrastructure; I will place the project in connection with a current established road, leading to the city centre in one direction and to the airport in the end of the city in Northern direction. As the terrain in Greenland is rural and hilly, and the infrastructure sparse, it is necessary in order to be in a urban context, to locate the project next to a road. As this location is currently being expanded, this also gives opportunity to connect to water and electricity.

I choose a site in a hilly terrain, in order to investigate a reference situation this is most common throughout the rural and rocky outline of Greenland, as close to all building spots in Greenland are defined by a various degree of inclination. I want the users to have the possibility to keep sled dogs and thus being directly connected to the inland sledding trails.

The contact with the ocean is vital in a low practical sense that locals are dependant on the sea for either work or transportation, thus being able to identify today's weather impact on the sea. Even more so the ocean is a big part of the national identity, and it is sentimentally imperative to relate the project to the ocean.

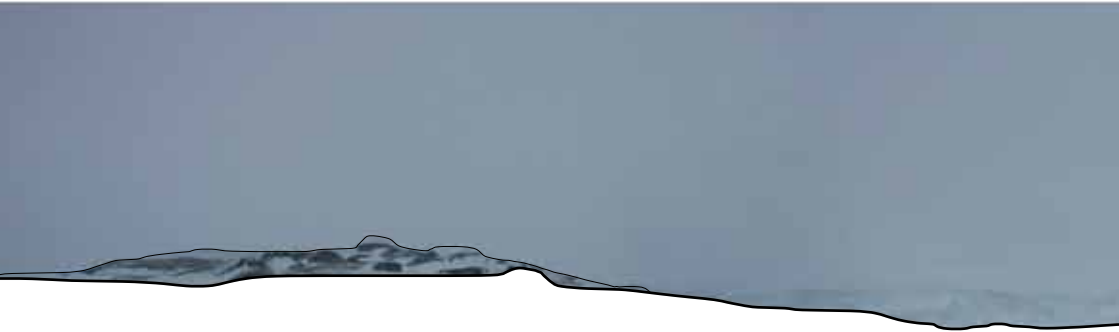


All: View from site (own photo)





Section cut AA 1:3000



Section cut BB 1:3000

SITE



Site 1:6000



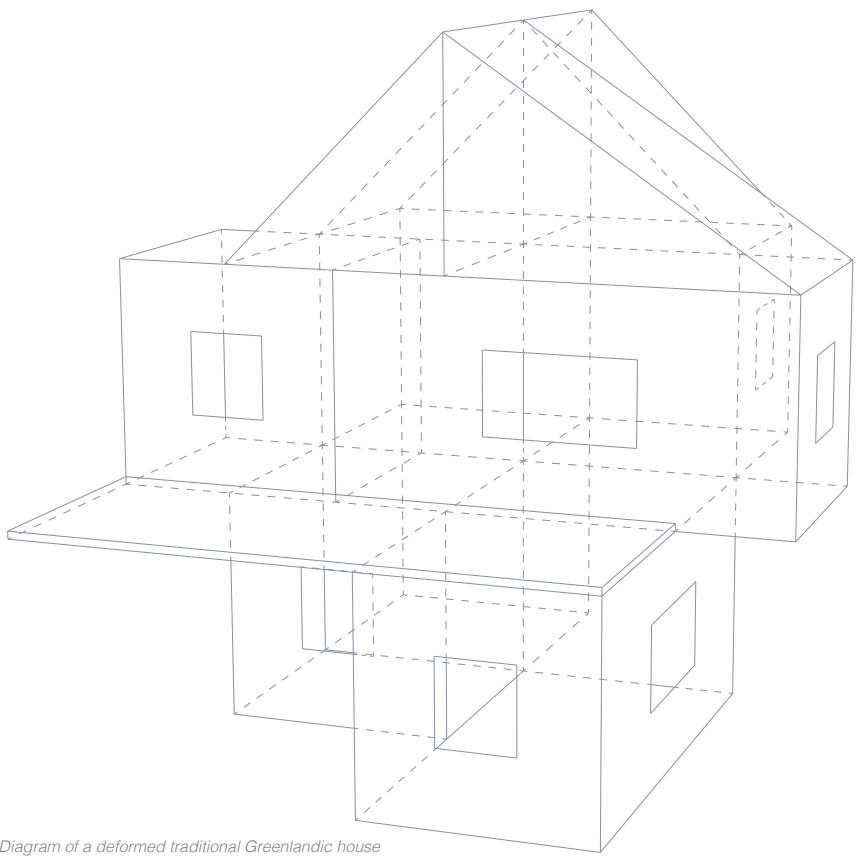
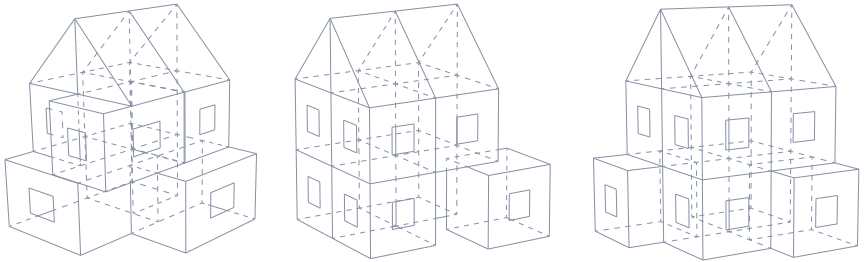


Diagram of a deformed traditional Greenlandic house

METHODOLOGY

CONCEPTUAL SKETCHING AND MODELLING

First sketching phase circulating the concepts and drawing loosely on the building program, at the same time doing model studies as volumes inspired by site and scale. Still not defining sizes but instead relations and conceptual investigations.

CONTEXTUAL MODEL

Investigating the situation the project inscribes itself in, and throughout the project process develop and use a context model for an empathetic understanding of the site and its situation, and testing the spaces that are produced or vice versa when the project in process is added/removed.

SCALE JUMPING

To study the variety of potentials that the project has by using the biggest scales to relate into the micro scale of the specific case and its local climate. To investigate through different scales, how a home is defined through a large context as well as the home being an isolated social climate in its own introvert scale - these always corresponding to each other.

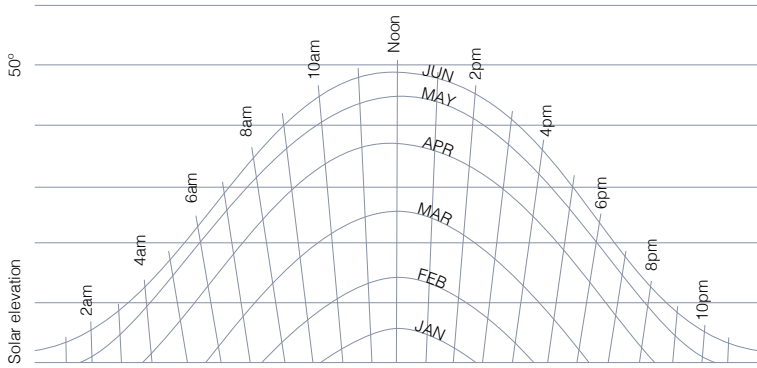
CROSS-MEDIA

Using dynamic shifts between sections, plans and models to work through thematics and problematics knowing that everything is not resolved at once or in a single media.

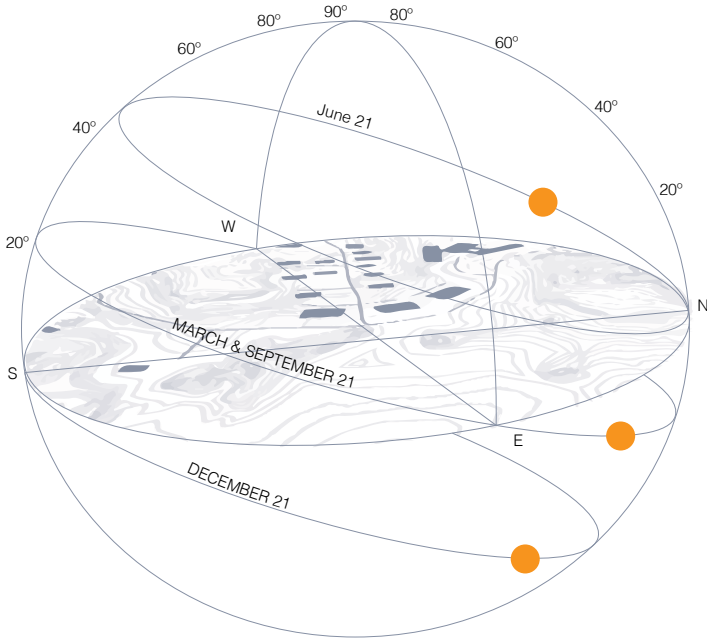
DIGITAL TECHNOLOGY

To challenge and enhance the design by testing the architecture climatically via digital simulations, and study a sustainable approach in an extreme and fragile climate.

YEARLY AND DAILY ELEVATION OF THE SUN



SEASONAL SUN PATH

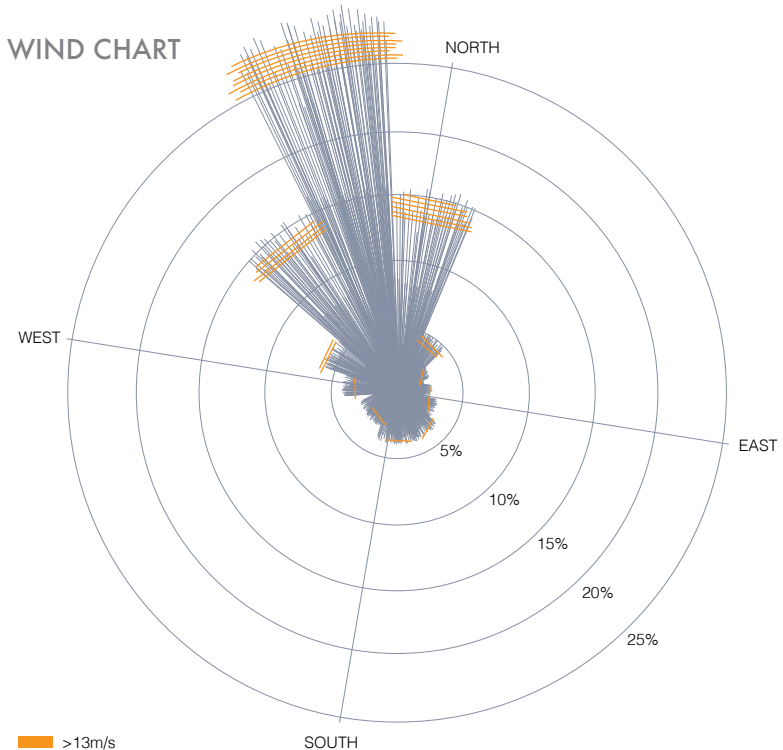


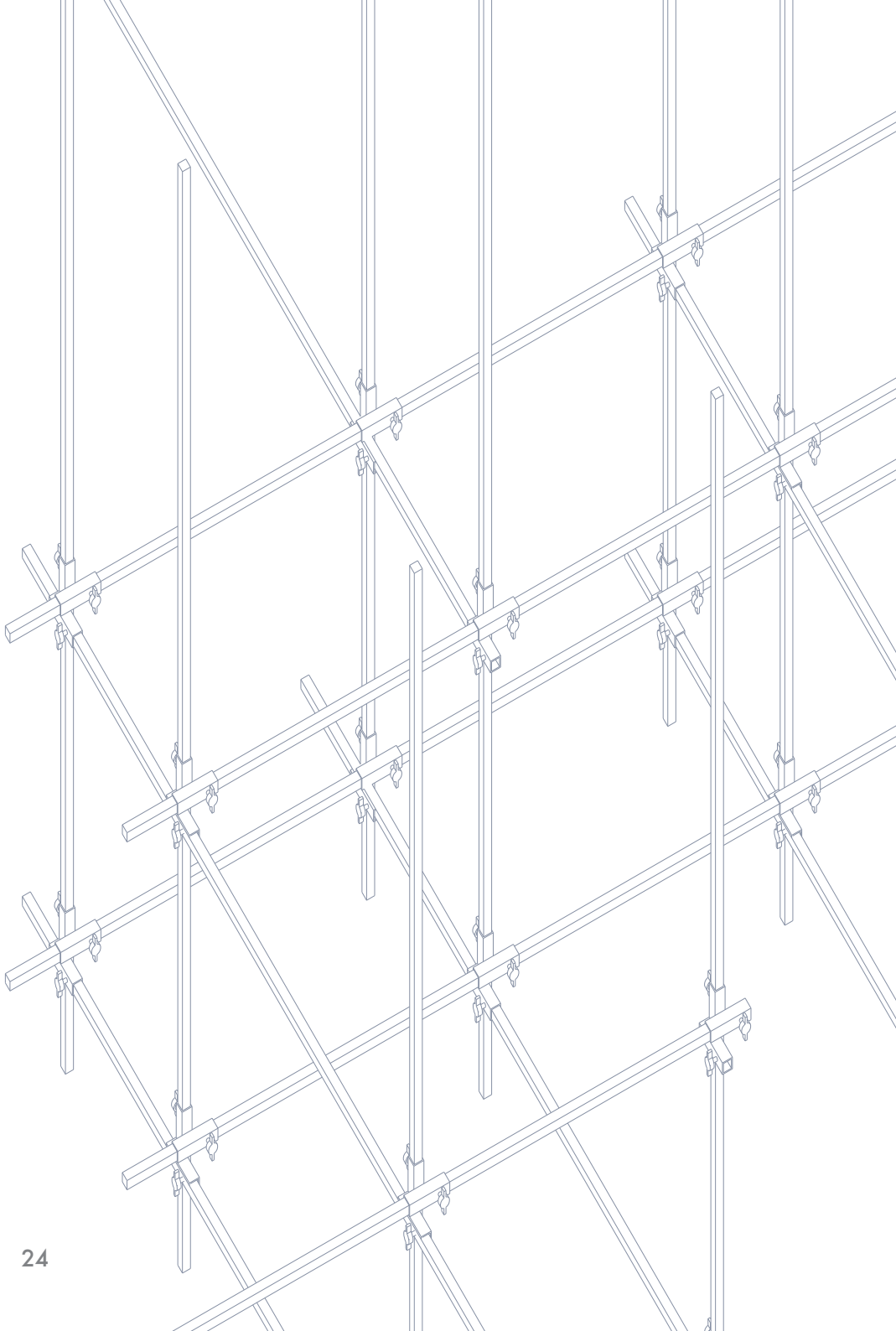
CONTEXT

As the project will be located in NW Greenland, the main research, besides the urban morphology, will be focusing on the extreme Arctic climate of the specific region.

Here taking into consideration aspects of temperature, wind profiles and light conditions, as they are extremely important parameters in order to create a sustainable and functional structure in an otherwise fragile geographical zone (flora and fauna). The sun charts are clearly describing this for us, how huge the variation is from winter to summer and even more so, that the sun when at the highest will not exceed 47°.

The terrain is hilly and mainly made of hard rock bed and lichen. In winter the entire site is covered in thick layers of snow. Approximately 80km from the site, the Inland Ice is located.





FIELD STUDY

Approach:

A site specific methodology.

To investigate an urban morphology through fieldwork (case studies) and personal connection to gain in-depth knowledge on demographic processes in a local context and within local traditions - with the end goal not to design a type house but to design a site specific house type.

Mapping

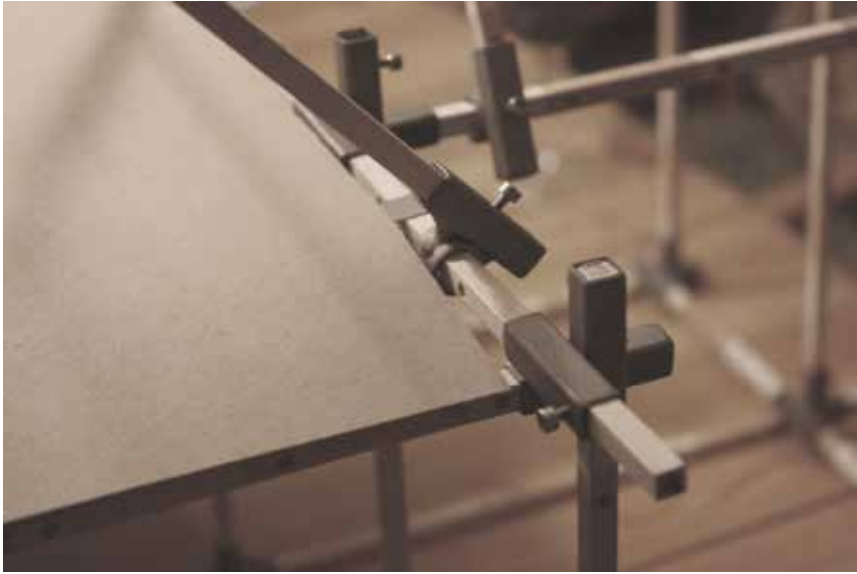
Seeing tendencies and constellations and being able to identify them as either a collective phenomenon or a stand-alone parenthesis. Thus using mapping as a tool to categorise as well as defining attributes - this way to engage in a responsive dialogue that aims to see potential and resources instead of weakness and intersect this in a final sustainable solution.

I completed a research field trip to Greenland, and with me I brought a device that works as a tool for communication to give people who are not architects, or even in the building industry, a way to firstly show and then understand their home. At the same time, it is also a tool, that gives model building a different approach to analysing.

It works as a physical representation of a case study's home. Their home is build up in scale, and all rooms are represented in the small scale model of their home. Via interviews we move through the house, the daily usage and the way the different rooms are programmed and where different functions are placed.

I introduced the device to four research subjects in four different kinds of housing types, in order to collect information about how the modern Greenlandic family occupies their homes. As the device functions as an interview tool, it meanwhile opened for talks about wishes for changes and thereby added to a mapping research about the movement and life structure on the specific four case subjects.

The information gathered from the device I have used for programming and mapping, and will also play an important role in my thesis project, thus I have included a summarised version in the following pages.



*Above: Detail of a joint (own photo)
Below: Device packaging (own photo)*



FIELD STUDY



*Above: Playing the game (own photo)
Below: Recording a play (own photo)*





*Above: While we play (own photo)
Below: Making roof slopes (own photo)*



FIELD STUDY



Above: Making walls and floors (own photo)
Below: Detail junction (own photo)



Domestic structures

Case study	A	B	C	D
Sqm.	100	63	72	37
Rooms	3	3	4	2
Age <12	0	3	0	0
Age >12	1	4 (+1)	4 (+2)	1
Average sqm/person	100	9 (7,8)	18 (12)	37
Seasonal displaced occupants	1	3 (+1)	3 (+2)	1
Seasonal staying visitors	Yes	Yes	Yes	No
Rental		●		●
Owner	●		●	
Additional home structures	Yes	Yes	Yes	No

RESEARCH

In the diagram to the left I have tried to sum up the investigation findings from a low-practical view.

The square meters registered in the four case study homes are with an average of 68m² comparable with the average across Greenland (p.10), and architecturally this means that the Greenlanders are not that unfamiliar with living in relatively small spaces. "Relative" being the key word, as the diagram is also showing the average living area per person is highly varied from home to home ranging between 8m² to 100m².

All of the case studies (except D) are expecting staying visitors at some points during the year, mainly in summer. This means, that the domestic structure in these periods radically change in order for them to accommodate extra temporary occupants. It is only subject A that has the needed extra room for expected or unexpected visitors. This pose the question of how it is solved internally, as none of the other houses have extra rooms for such visitors even though it is a common seasonal phenomenon. In these depicted cases, it was solved by letting visitors stay on the couch, or restructuring the distribution of rooms/beds among the home's permanent residents. This is also expected in a reversed situation, where it is the subjects who are temporarily staying in other households.

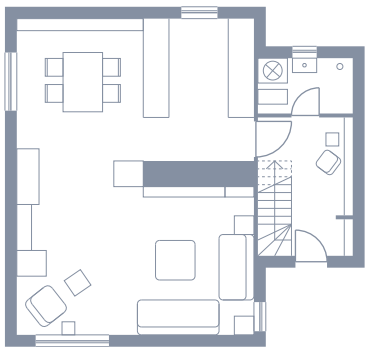
It makes sense in an architectural approach to notice how many square meters each case study member has on an average (21m²), but even more so the intimate social constellation derived from a relatively small home size; as one of the rooms in the diagram is representing the living room, this means that the case studies on average are between 2 and 3 members per bedroom. In subject B's case they are 9 members sharing 2 bedrooms and a living room.

The additional home structures are referring to respectively A) work related accommodation at disposal B) governmental appointed quarters for the adult children and C) summer cottage. It depicts an image of how the dynamic living structure is currently being dealt with in three different approaches.

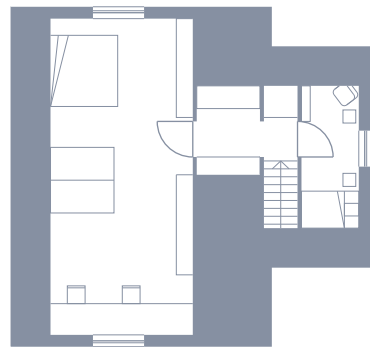
100	3	0	1	100	1	Yes		●	Yes
Square meters	Rooms	Age <12	Age >12	Average sqm/person	Seasonal displaced occupants	Seasonal staying visitors	Rental	Owner	Additional home structures

Domestic structures CASE STUDY A

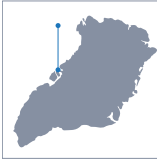
CASE STUDY A



1st floor_plan 1:200



2nd floor_plan 1:200



RESEARCH

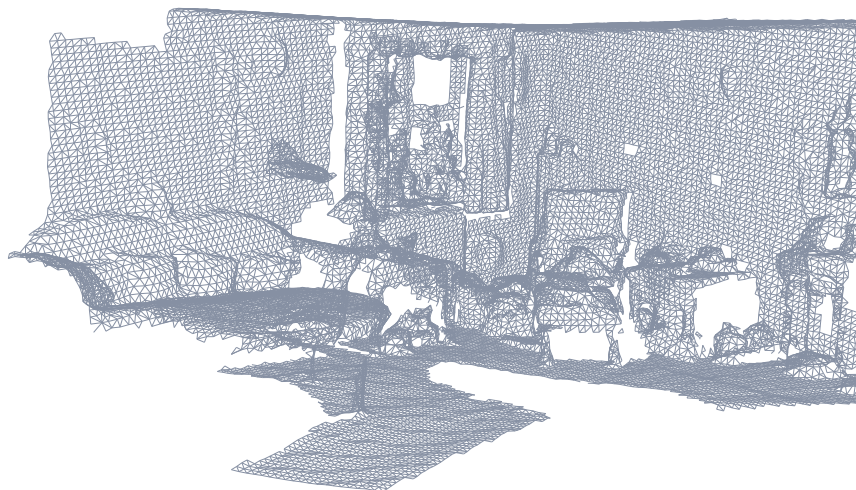
Subject A lives alone in a small town called Uummannaq. She works in the tourist industry and is representing an Ilulissat based office. This means that she travels to Ilulissat several times during the year, especially in peak season in summer. She has family living in town and her son has moved to Denmark for school.

The house is quite big, and she only keeps part of it heated during the winter season, the bedroom and the living room. When she on occasion moves to Ilulissat for work, she closes down the entire house. She has previously rented it out during her absent.

Subject A partially owns the house, but with support from the Government (40-60%). This means, that she will have to pay back the money in case she moves. She is considering moving to Denmark to be with her son. Her father built the house in the 1960s, and she has a very affectional relationship to it.

The domestic structure manifests itself with a lot of decorative objects, spaces for display and lack of room for storage. She moves mainly within the same three spaces, the handicraft corner, the kitchen and her bedroom. The only renovation she has performed on the house, is to install a bath. The toilet has no drainage, and is emptied once a week by the municipality.

Architecturally this means, that there are programs in the house that differentiate in connection with A's work situation and in relation to the seasons. Logistically there are parts of the house which is not in use during winter both in regards to save energy on heat, but also because she goes abroad to visit family. It also concludes that even though A partially owns the house, she is not driven to change the basic structure of it, as it will not necessarily be repaid in case she moves. Subject A wishes for storage space and entrance space during the winter season - there is potential in using the same storage space during summer when she relocates to Ilulissat for work - thus making A able to rent out the house.



Spatial analysis_ 3D scan of the place A spends the majority of her time making handicrafts

CASE STUDY A

The 3D scans of subject A's home is a testimony to the fact, that no matter how many square meters A has, she will fill them out. The scanner translates, not only the functional decorating of the rooms (furniture, windows etc), but even more so all the objects filling the walls in every single room, and thus giving and understanding of a life style and not just a domestic structure. Subject A had enormous issues with storage, using the otherwise unusable spaces under the roof pitch, but then loosing wall spatialities. This is conveyed in the 3D scans, but is not noticeable in the plan drawings.

The scan above shows a specific situation. The space in the scan is where A is spending most of her time making handicraft. As there is no storage spaces on the first floor, everything she uses on a daily basis is left up against the walls or in wooden baskets on the floor. Architectural this means, that even though A has the most square meter per person, the rooms appear small. As the scans don't relate to hierarchy, texture nor colour, but only to size and locations in relation to neighbouring objects, they are able to identify this type of issue and thus evoke an approach to a solution.

RESEARCH



CASE STUDY A



Case Study A's home in context

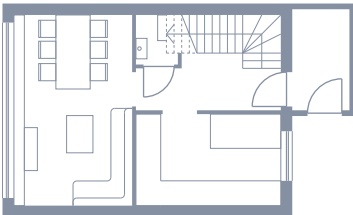


Device introduction and registration (own photo)

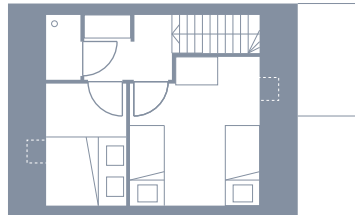
63	3	3	4(+1)	9(7,8)	3(+1)	Yes	●		Yes
Square meters	Rooms	Age <12	Age >12	Average sqm/person	Seasonal displaced occupants	Seasonal staying visitors	Rental	Owner	Additional home structures

Domestic structures CASE STUDY B

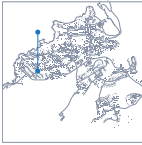
CASE STUDY B



1st floor_plan 1:200



2nd floor_plan 1:200



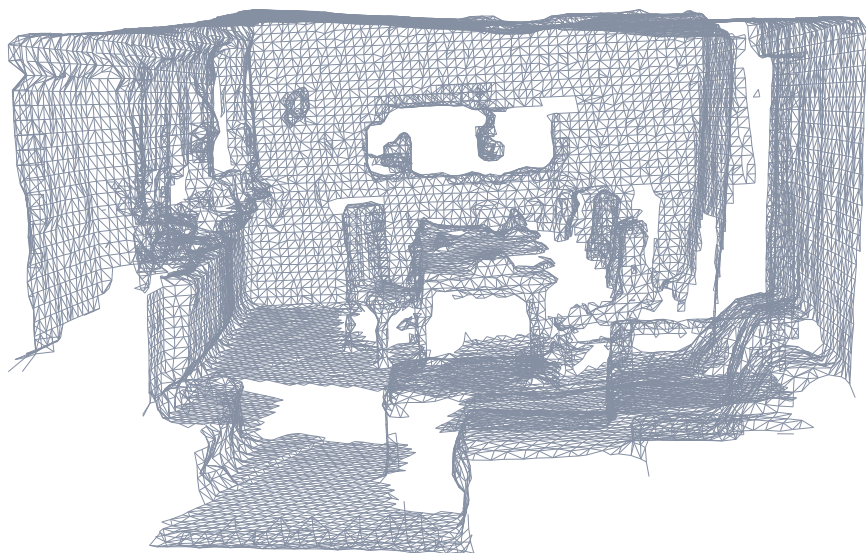
RESEARCH

Subject B is a large family of 8 in a 3-bedroom house of 63m². The uncle has come temporarily to Ilulissat for work (fishing) and is staying with them.

The mother works in public administration, and is currently not part of the work force, as she is completing a course. The father is a fisherman and is not home at night, where he's out fishing. The house is a rental property and they have lived there for three years. The two oldest teenage girls are studying, and this requires for them to move back and forth between Aasiaat and Ilulissat, as there is no high school in town. They have been appointed a room in the student facility in Ilulissat by the municipality to confront the issue of the small housing. Both the girls are although still living in the house. They are home in weekends and during holidays. The family have always lived in Ilulissat, but in six different houses since they got married. On occasion and in between season shifts, the fishing industry is on a stand still, which means the father finds other types of work (construction) or stays at home. For now the mother's work situation is stable. It is unknown for how long the uncle is staying with them.

As the house is a rental they haven't done any changes or renovations on it. There's no storage space, and only two closets for all their belongings. The bathroom is separated from the toilet in two different stories, which is complicating the basic daily routines with the two youngest children of 2 and 6 years. The house is connected with the two neighbouring properties which positively affects the heating resources in winter time.

Architecturally this means that the social constellation of the house is very dynamic, between night and day as well in between season shifts, thus impacting the hierarchy of the rooms. These will need to be much more adaptable to a variety of activities rather than limited to residential uses (such as inactivity like sleeping/watching TV compared to activity like playing/social interactions). A home like this, also need to have the flexibility to quickly change, once it has been revealed how many of the occupants are going to be using the residential facilities and who are not at a given time. Such a fine-grained mix of uses and states has implications for the kind of innovation the project seeks to investigate.



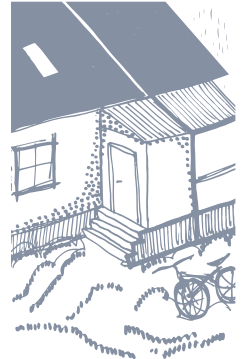
Spatial analysis_ 3D scan of the dining room where the family of 8 struggle to make room during dinner

CASE STUDY B

The 3D scans of subject B's home have helped to understand how it is possible to live so many people in such a small total of square meters. The scans are showing that in order to accommodate flexibility, the interior of the home has been carved down to the absolute bare necessities. Architecturally, the plan drawings in combination with the scans are not that different from each other - if you see two beds and a closet in a bedroom, then that's it. There is a clear lack of storage spaces, and this manifests itself as small indefinable bumps (of "stuff") in the otherwise smooth mesh surfaces of the scans.

The space depicted in the scan is the family room. This room is a peculiar constellation of furniture that can be moved around according to the time of day (and thereby needs). Logistically it means that during dinner, the coffee table functions as an extra seating device, and during TV-time the dining chairs can be added as extra seating. The scan is adding to a fuller picture where spatiality is understood as a three dimensional division of the room - thus showing how the level shifts are used as a programmatic tool.

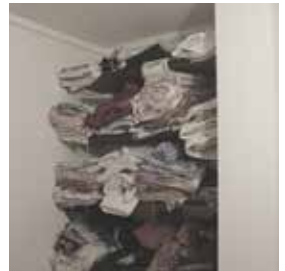
RESEARCH



CASE STUDY B



Case Study B's home in context



Device introduction and registration (own photo)

72	4	0	4(+2)	18(12)	3(+2)	Yes		●	Yes
Square meters	Rooms	Age <12	Age >12	Average sqm/person	Seasonal displaced occupants	Seasonal staying visitors	Rental	Owner	Additional home structures

Domestic structures CASE STUDY C

CASE STUDY C



1st floor_plan 1:200

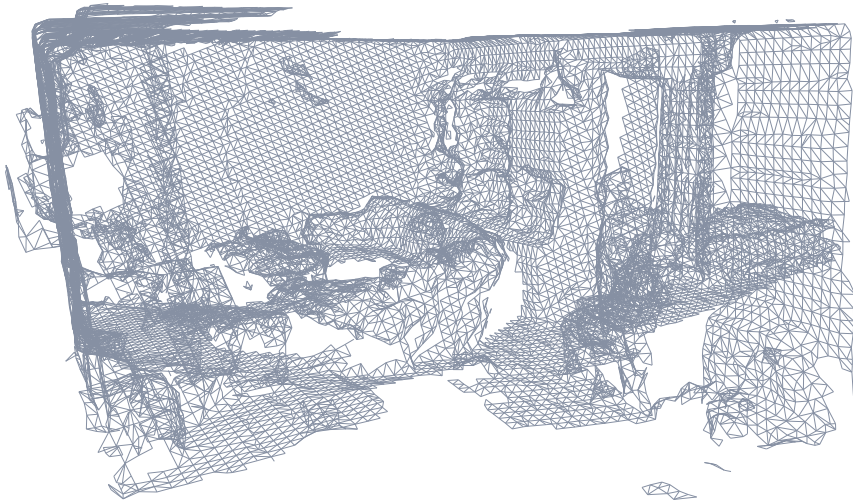


RESEARCH

Subject C lives in a row house in the far back of the town. They both work in the tourist industry, he has his own tour company and she helps out. The father is not originally from Greenland, but moved to Ilulissat 40 years ago for work. The family consists of 4 adults, 2 teenagers and 2 children. They are not all blood relatives. The two teenagers live at home, but are currently away for school in Aasiaat. The oldest son still lives at home and his girlfriend is also staying at the house. The two grandchildren are also on occasion staying at the house for shorter periods. From time to time relatives visit from Italy to stay with the family.

The father of the house spends most of his time at his tourist office, especially during the peak season of summer, and does a lot of travel with the business throughout the year. The oldest son and the daughter in law are working for the father and during summer he is stationed at a former hunter settlement where he takes care of visitors. This means that they are not in the house during summer. When the summer season closes down, the family takes a holiday abroad or somewhere else in the country and leave behind the house for a period of a month. The home shows a dynamic relation between being overcrowded and completely empty from season to season. It has a small outdoor storage and a small boiler room also used for storage. The kitchen is original and quite small for such a big household, but the living area is otherwise quite large in comparison with the room sizes, which the family appreciates. They dream of an outhouse for growing vegetables and to enjoy the view in summer and the northern light in winter.

Architecturally this means, that because of the large amount of adult residents, it's important that the social spheres are accessible both in a daily context as well as in a larger social situation, where the kitchen/living room area in particular will be centralised. An expressed problematic concerning the close connections of the bedrooms is a paradox, as seasonal- and occasional circumstances require togetherness but should relatively fast and at times simultaneously also offer privacy. This speaks for an investigation of a program that spans between a zoning of activities, which can foreclose acoustic but not necessarily visual contact or vice versa, and in a different situation offer total openness.



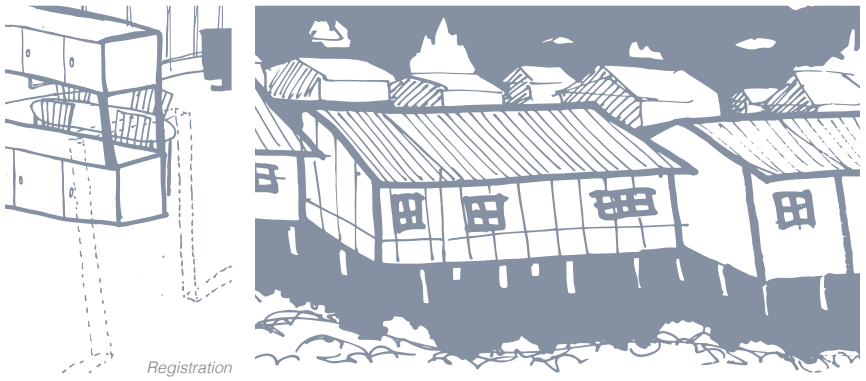
Spatial analysis_ 3D scan of the sofa corner where the family is dreaming of an additional outhouse with a view.

CASE STUDY C

Programmatic it seems unrealistic to create a too modifiable home for 4-6 adults of different needs, as their daily routines must come first and not work against each other in an attempt to make everyone happy. How this solution should inscribe itself architecturally might become apparent once you start challenging the spatial archetypes and their relation to a program.

The scan above shows a specific situation where the living rooms space is used for two different activities simultaneously - although the TV is centralised surrounded by the sofas, two subjects are using the space in a different way - thus being together visually but not interacting. Architecturally, the scanning is pointing at a possibility to investigate this type of zone and the activities incorporated - could these be closer connected, depending on each other and share square meters, without compromising any actual ongoing activity.

RESEARCH



Registration

CASE STUDY C



Case Study C's home in context

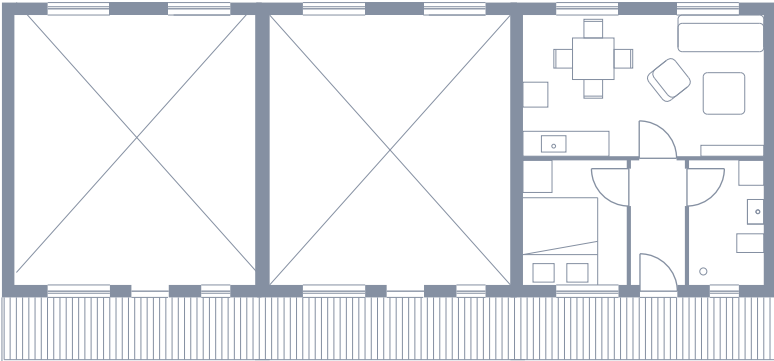


Device introduction and registration (own photo)

37	2	0	1	37	1	No	●		No
Square meters	Rooms	Age <12	Age >12	Average sqm/person	Seasonal displaced occupants	Seasonal staying visitors	Rental	Owner	Additional home structures

Domestic structures CASE STUDY D

CASE STUDY D



1st floor_plan 1:200



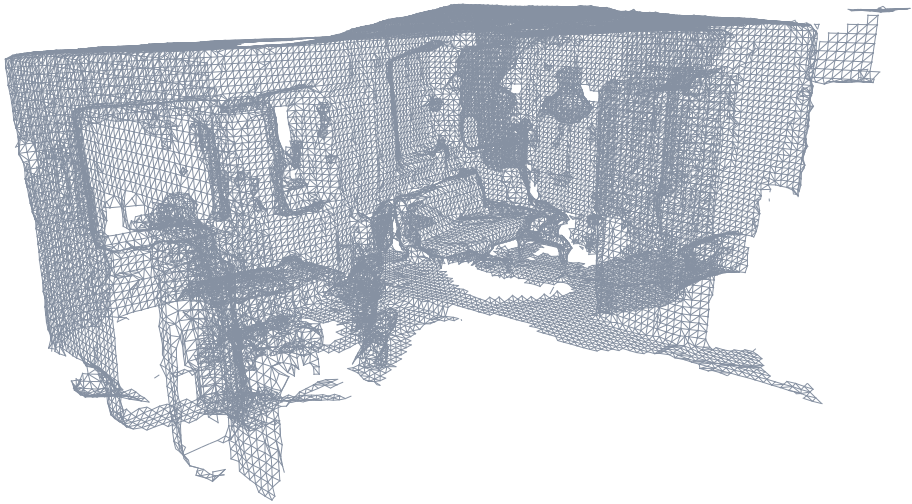
RESEARCH

Subject D is a single male. He has just moved from a house to an apartment building. He moved to Ilulisat one year ago from Nuuk, and has lived many places around the country for work. He is a flight engine mechanic and is therefore hired on contracts, and he is sent by his employer to the airports he is needed. His family lives in Nuuk. He decided to move to the new apartment, because the house was too big for him and also too expensive to heat during winter. He works odd hours, completely dependent on the given days flight traffic.

The apartment is a 1-bedroom flat, on the first floor of a building with 3 apartments in total. It's a rental property and he has rented it with furniture from the previous inhabitants. He plans to move to another place within the next year. His work contract expires in two years, where he hopes to be sent to another airport where he can learn a different engine type in order for him to move back to Nuuk, where he has dreams of starting a family.

In the entire apartment there is only one closet, which has been causing a lot of low functional problematics. He has no furniture of his own as it is very expensive to ship, instead he has a lot of work gear and of course his daily clothes. The home is very neat except for his bedroom, where he stores all of his items. Since he is not planning to stay long, he seems detached from the place. He mentions that it seems odd to him, that the bathroom occupies so much of the living space, when it is a single-room apartment.

Architecturally, this means that even though D programmatically has a lot of space, he nevertheless found no incentive to adapt further. It bears witness to the fact that the segment of the population who relocates often but in more permanent constellations develops a demand for privacy, but not a significant architectural need for spaces of their homes to be able to accommodate large social gatherings. D observes that the division of the rooms is not optimal. Taking this into an architectural consideration, observed by a case that doesn't own any furniture as a general, it is showing a lack of possibility to dominate the home's static barriers without having to be a major intervention. Comparing it with the demographic mappings (p.10) it makes sense in this context to investigate a system where walls can be dissolved and spatialities can be offered in another way.



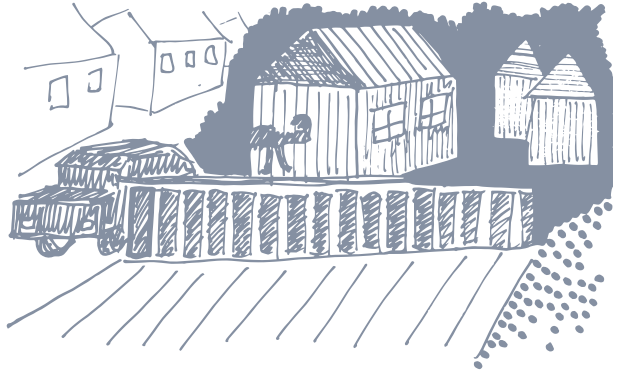
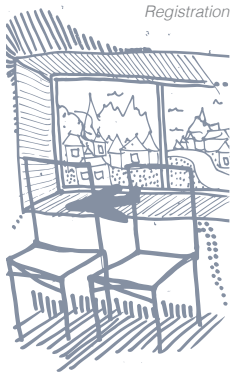
Spatial analysis_ 3D scan of the living area where none of the decorating or furniture are personal.

CASE STUDY D

The scans from subject D's home does not evoke a greater understanding of the architectural spatialities any more than the plan drawings are. On the other hand, the scans are offering an insight to a domestic reoccurrence in the Greenlandic settlement structure, where it is quite expensive to buy or even ship furniture from town to town, in this case a generic interior floor plan in a program outline that has not been decided by the user D. Everything (the objects) has its place in a, by the architect, predetermined hierarchy in this becomes even more obvious in a 3D media.

The space of the joint living room and kitchen is not so much showing us what it is capable of, rather than what it's not. The floating structure in front of the dining table is a refrigerator added by the tenants. The scans open a discussion about rigid structures, for what seems to be working well (enough) in a plan drawing, immediately shows to be inefficient in a 3D context. The scans in combination with photo-registration are portraying an architectural situation, where it could ad to the domestic flexibility to be able to for example move walls or to have "incorporated but movable furniture" build-ups.

RESEARCH



CASE STUDY D



Case Study D's home in context



Device introduction and registration (own photo)

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Arkitektur DK 04 2012

Greenland Revisited

Publikation



Above: Container home (No author)
Below: New Arctic Building Approach (Vandkunsten Tegnestue)



PROGRAM
Rethinking a Greenlandic House

Greenland Inhabited