## PROJECT DESCRIPTION+ DIPLOMA PROGRAM

## ARCTIC SHELTERS

Investigations into alternative accommodation at the North Cape

Spring term 2020 Hanne Ødesneltvedt

Tutors: Sverre Aaker Sondresen Eva Kun

Bergen School of Architecture Sandviksboder 59-61 a, 5841 Bergen admin@bas.borg

#### **INDEX**

Project description 18.06.20

Diploma program 06.02.20

## WHERE/CONTEXT

This Diploma project takes place at the northernmost part of mainland Europe, the island of Magerøya in Northern Norway. Each year the island is visited by several hundred thousand tourists. A vast majority of these tourists come to the island with one goal in mind: visiting the North Cape Plateau. The Plateau is widely known as the northernmost point, and is an icon circulating social media and the internet in general.

At the same time, Magerøya has more to offer than just the northern location and the iconic plateau. The island has a unique arctic climate, animal wildlife and a bizarre and violent history. This combination makes Magerøya an island where one may experience lots of interesting things – but many people seem to be unaware of the possibilities. Among those tourists who actually choose to visit other parts of Magerøya, hiking in the plains and outskirts is a popular activity, and there are several established paths on the island. Based on several interviews with local experts on tourism and infrastructure, it seems that there are very few places where tourists can actually experience nature, wildlife and history over time in these places, and at the same time stay safe from the harsh climatic conditions. Weather may change in a heartbeat, and local rescue operations are often carried out because of stranded tourists. The island is notoriously known for sudden avalanches, fog, heavy precipitation and wind. These conditions can be guite surprising and dangerous for an unprepared hiker.

## INTENTION

The intention of this Diploma is therefore to present proposals for infrastructure that facilitates an alternative way to experience the island closer to nature, but also to be able to control the destruction of nature to a certen extent.



Hikers using the path, Knivskjelodde Photo: Steinar Hansen

## HOW/PROCESS

The foundation of the diploma is a thorough analysis based on interviews with local experts, review of relevant literature, a physical field trip, a written essay, gathering of maps and photos, production of sketches and more. The analysis has resulted in two final proposals, one as an accommodation for overnight stays and the other as a small shelter for hikers.

During interviews with locals, two specific locations emerged: *Langnes and Knivs-kjelodden.* 

#### KNIVSKJELODDEN

Knivskjelodden is a rock formation on the northern part of the island, and the most popular hiking destination on Magerøya. Most people think of the North Cape Plateau is the northernmost point, but in reality Knivskjellodden is about 1 600 meters farther north. This is probably one of the reasons for its popularity.

The hike is 8,6 km and is estimated to take 2,5h *one way*. This makes it a whole-day trip where one are out in the bare nature for at least 5 hours. This means that most people would like to have a small break during the hike, to eat, drink and enjoy the landscape. As of June 2020, there is no place to get shelter from changing and difficult weather.

During the interviews, several experts mentioned this exact spot and the need for supporting infrastructure because of the high number of yearly visitors. Because of this the proposal for this location is a shelter in which hikers can take refuge.



Hikers who have a break at Knivskjelodden looking at the North Cape Plateau Photo: Steinar Hansen

#### LANGNES

Langnes is a location on the west coast of Magerøya, close to the fishing village *Gjesvær*.

This area is known for its rich wildlife population, specifically nesting birds on Gjesværstappan with over a million birds. This makes it a popular location for wildlife enthusiasts. Bird safaris by boat is a popular activity among tourists, but there are few places where one can actually stay the night and experience this wildlife and climate upclose over time.

Langnes is situated between Gjesvær and the mountain Lilletuva. It is a 2,7 kilometer long hike which is estimated to less than 1h *one way*. The terrain is flat and humid, and is easily accessible from both land and sea. At the same time, the area surrounding Langnes is rich in historic locations, including ruins and signs of the destruction during World War 2. In 1944 the Germany Nazis burnt the whole region to the ground, and many locals fled for the mountains. In this location it is possible to experience two pre-war houses that the Nazis "forgot" to burn and one of the caves that was used as makeshift homes by locals during this period.

For these reasons, there seems to be a possibility to construct an accommodation where tourists can experience both history and wildlife up close.



The fishing village around Langnes before 2. WW Owner of photo: Steinar Hansen



How the area looks today, two pre-war houses Photo: Steinar Hansen

## THE PROJECT





Knivskjelvika / Knivskjelodden Photo: Steinar Hansen

#### **KNIVSKJELODDEN**

On Knivskielodden the proposed solution is a simple shelter primarily to be used as a day-time shelter where hikers can sit down, eat their food, enjoy the view and be protected from the weather. The shelter serves on a free-for-all basis and shall be open at all times for those in need. If necessary, it will also be possible to seek refuge for longer periods until weather conditions change for the better. Other elements such as toilets and information board by the parking area will make the shelter collaborate with the existing infrastructure and give the user a coherent experience of the area.

#### LANGNES

On Langnes the proposed solution is a small accommodation with facilities for overnight stays for small groups of people. The accommodation is to be served on a book-to-use, short time basis. The objective is to locate it close to historic sites, but at the same time close to wildlife populations without causing disturbance to animals or cause harm to the historic locations or nature. On this basis, users are able to experience the unique wildlife and history during an overnight stay.

#### Some of the historical elements will be clarified though signs. The pre-war houses will serve a museum, gallery and toilets. The intention is to make the area available to experience whether one are a shelter-visitor or a hiker for the day.



The Northern Light / Aurora Borealis above Langnes and Lietuva Photo: Steinar Hansen

#### COMMON AND DIFFERENT ATTRIBUTES

Due to severe weather and climate conditions on Magerøya (and the arctic coast in general), construction principles and the use of specific materials are of importance.

An important aspect is that these constructions need to be designed to withstand heavy wind, rain and snow, while also giving the user the ability to enjoy nature, nearby history and wildlife.Because of the different locations and purposes, the shelter and accommodation have different challenges and qualities. Therefore, they are developed differently in both form and materials.

At the same time, both constructions bear resemblance to traditional building techniques from arctic indigenous populations as well as newer theories of climate adaptation, such as an open space with elevated sleeping area, protected entrance and walls at a certain angle to make the most of the sun. Another area of focus in the design are natural light phenomena such as the midnight sun and northern lights (Aurora Borealis).

For both constructions it is also of importance to keep interference with nature as low as possible. The main reason for this is the climatic conditions in the arctic which makes it harder for plants and vegetation to grow.

Interference such as heavy foundations and excavations may cause geological scars that may be difficult to fix should there be a need to remove the constructions in the future. An answer to this is using stilts and similar techniques to anchor the building.

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FEBRUARY 2020

INDEX

WHERE ..... WHAT..... WHY..... HOW..... TIMELINE..... CLIMATIC FAC WILDLIFE..... THE TOURISM CONSEPT MC FRAMEWORK SITE VISIT..... CV..... REFERENCES

• • • • • • • • • • • • • • • • • • • •	8
•••••	9
	10
•••••	12
• • • • • • • • • • • • • • • • • • • •	14
CTORS	16
	18
Л	
DDEL	
<	24
	26
S	



## WHERE Nordkapp municipality 71° 01' 00" N / 25° 47' 00" E 892 km<sup>2</sup> 3. 178 inhabitants Administration center: Honningsvåg County: Troms og Finnmark About 300 000 tourists each year



Honningsvåg, Magerøya 70° 58' 33" N / 25° 58' 59" E 436.6 km<sup>2</sup> Magerøya 2484 inhabitants

THE PLACE



## WHERE

Honningsvåg, a town on the island Magerøya in Nordkapp county in Finnmark, Norway. It is the northernmost town in mainland Europe, located above the arctic circle at 71 degrees north. Honningsvåg has 2 484 residents but people also live in smaller areas on the island such as Norvågen, Gjesvær, Skarsvåg and Kamøyvær.

As many other seaports Honningsvåg's main industry was traditionally fishing, but in recent years tourism has grown to become a big part of the daily business.

Due to its location, the area has an extreme weather change



from midnight sun in summer to the polar nights during winter. Its proximity to the Barents Sea means heavy weather all year including blizzards, extreme wind and rain, fog and rough seas.

The town is connected to mainland through a tunnel under sea, a tiny airport and several international cruise docs in the centre of the town. But at the same time all of them are often shut down during heavy weather. This means that the island is frequently isolated up to several hours or days during winter.

#### WHAT

Small cabins/lodges that can nou accommodate small groups of 1. people for short term stays in a pl the arctic nature. A cabin built to withstand the extreme artic climate and give the users a special experience close to nature without damaging it. The cabins will be shaped by the qualities 2. and challenges of the various a si sites. A wish is that the cabins merge with the terrain and provide the most important, shelter. a ro

#### SHELTER

noun

a place giving temporary protection from bad weather or dan-

"huts like this are used as a shelter during the winter"

a shielded or safe condition; protection. *"he hung back in the shelter of a rock"*<sup>3</sup>





#### SAMI

The Sami are indigenous who have their traditional settlements in Norway, Sweden, Finland and Russia. The land that the sami traditionally inhabit is called Sápmi. The Sami population lives in all the countries that have divided Sápmi between them, both inside and outside the traditional settlement area.<sup>6</sup>



## WHY

"the northernmost point in Europe except from Svalbard", but in reality Knivskjerodden is ca. 1600 meters further north. But because of The North Cape Plateau's majestic steep cliffs and easier access makes the plateau the main tourist attraction in the area. The fact that Honningsvåg is the closets town to The North Cape Plateau results in 250-300 000 tourists each year.

At peak seasons during the summer months, several cruise ships and tourist busses enter the city. This means that the

Honningsvåg is located only 30 number of tourists suddenly outkilometers from The North Cape number the local population by Plateau which is famous of being far. The high number of tourists ans that most tourists do not generates extraordinary income for the tourism industry, which is predominantly owned by pri- unding it. vate corporations. The cruise passengers are often routed directly from the dock into rented

busses and then shipped to the North Cape Plateau. This meget to experience the life in Honningsvåg and the nature surro-

With this project I would like to present an alternative to this "tourism machinery" and give both tourists and locals the ability to experience the spectacular area of Magerøya.

I have chosen Magerøya and gives room for the project to de-Honningsvåg as the location for my diploma for several reasons. ons which I regard as a quality. First and foremost, I want to challenge myself when it comes to building in extreme weather. I want to go back to the first part of the study where we learn to arrange for the most needed - shelter, sleep, eat, toilet etc. How to have few facilities but still be able to maximize the experience. Some of the challenges will be to create something that works both summer and winter because there are big contrasts were some of the important ones are light and landscape. The island as a tourist attraction

velop in several different directi-

Together with the rest of Finnmark and Nord-Troms, Magerøya also has a different war history than the rest of the country. When Soviet troops entered into eastern Finnmark in 1944. the Germans razed and burned down almost all the villages of North-Troms and Finnmark. This led to a major restoration project, which included Honningsvåg.<sup>7</sup>

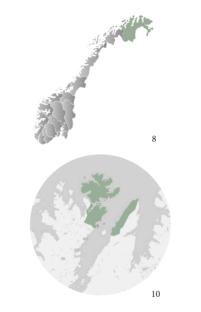
#### HOW

In the process of the diploma I want to work in three different scales. I will work with them at the same time, but the main focus will vary throughout the semester.

The macro scale will be to get an overview of Finnmark's war history. Where the reconstruction of the cities is particularly interesting.

The Meso scale will be about understanding the qualities and challenges in Nordkapp municipality. Tourists (tourist gaze), inhabitants, climate, materials, infrastructure etc.

The micro scale deals with how the design of the project is to be facilitated specific plots, how the cabins are connected to each other and the function of them.





and wildlife.

Mapp local materials.

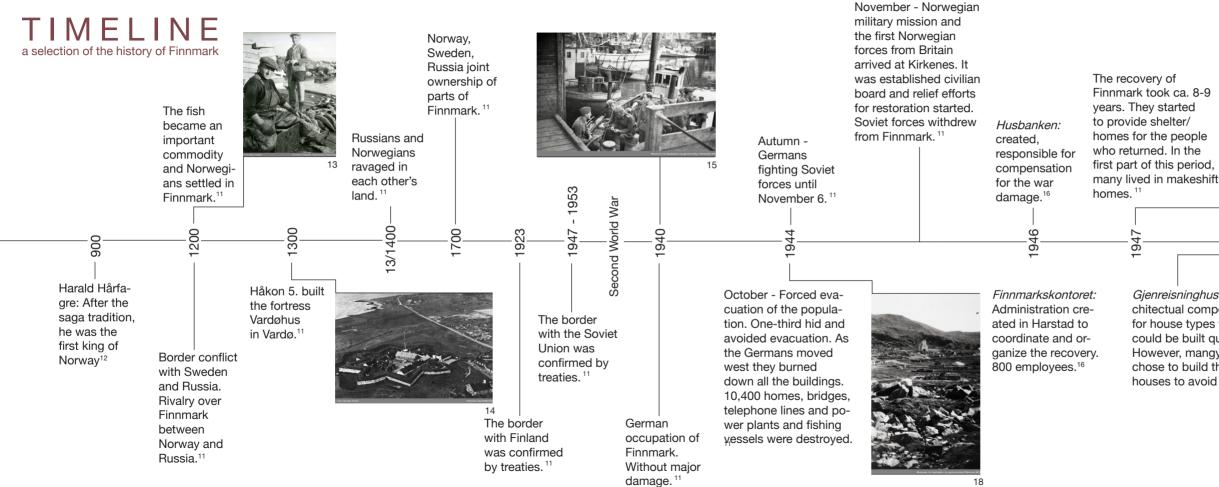
conditions.

Visit the site for a deeper understanding of the place and the people. Interview, pictures, excursions, 1:1.

Study the existing tourism that explores the landscape

Study the climate and ecology of the area, how to build with nature and not against it.

Explore in models in different terrain and weather





17

The establishment of the Saami parliament nordsamisk: Sámediggi.11

õ

Gjenreisninghus: Architectual competition for house types that could be built quickly. However, mangy people chose to build their own houses to avoid loans.<sup>11</sup>



## CLIMATIC FACTORS

#### MIDNIGHT SUN:

The midnight sun signifies that the sun is over the horizon all day. This occurs north of the northern polar circle and south of the southern polar circle.<sup>20</sup> Days of midnigth sun in Nordkapp: 81 date: 12.05-01.08

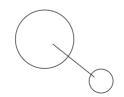
#### DARK SEASON:

The Dark season is the time of year when the solar center (sometimes counted as the upper edge of the sun) does not cross the site's horizon at noon.<sup>21</sup>

Days without sun: 66 Date: 19.11-24-01

#### NORTHEN LIGHT:

The Northern Lights are a light phenomenon that occurs when energy-rich particles are thrown from the Sun to Earth.<sup>22</sup>



The place is known for its complicated coastline, deep fjords and large plains. The vegetation is poorer than in inner parts of Finnmark. There are over 200 plant species, most of which are Arctic. There is no productive forest in the municipality, but in some places it can grow mountain birch and willow grove. <sup>23</sup>

The Norwegian Atlantic current makes the coast normally ice free even in winter. The bedrock The mainland in the Northern Cape: mainly sandstone and shale. Magerøya: sandstone and slate but also smaller areas with gabbro and granite.<sup>24</sup>



#### WILDLIFE

Birdlife: At the Gjesværstappan Nature Reserve has a diverse bird life during the period April to September. There are millions of birds and some of the species you can see are sea eagles, puffins, ales, cormorants and thieves. Reindeer: In summer the reindeer are grazing on Magerøya. Normally you see them by the road or futher out in the landscape. But it can also happend that some of them walks in to a garden or in Honningsvåg center. The king crab is originally from the Pacific Ocean. In the 1960s, the crab species was introduced to Murmansk by Soviet biologists. Today, the crab species has spread along parts of the Norwegian coast. It is undesirable in Norwegian waters but has become a commercial species for Norwegian crab fishermen in the Northern Cape region.<sup>26</sup>

## THE TOURIST GAZE

## THE TOURISM

In my social science essay, I wrote about : How the concept of "The tourist gauze" has described the development of tourism in recent decades, and how can this help to interpret today's tourism in Northern Norway?

gazes Romantic gaze Collective gaze tourist Spectatorial gaze Reverential gaze of Anthropological gaze es B typ( Environmental gaze Different Mediatised gaze Family gaze

Mutual gaze

occur þ gaze tourist ( the for Elements

# Unique object Typical characters Everyday chores

#### Specific characters

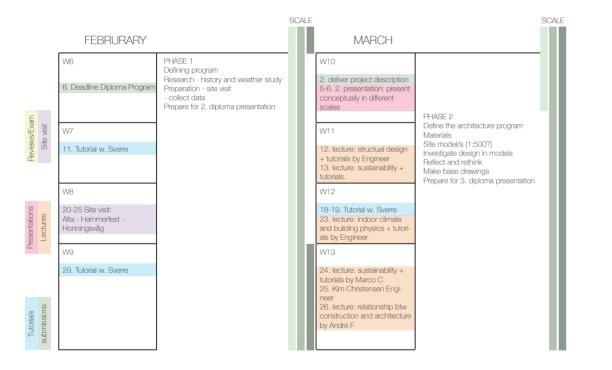


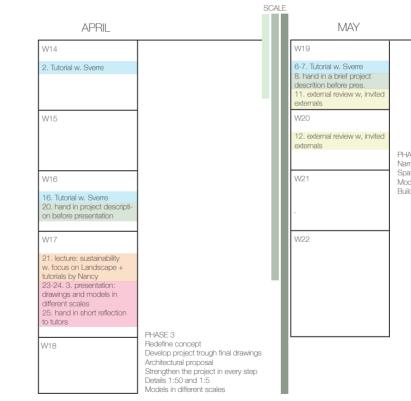
## CONCEPT MODEL





## FRAMEWORK





	SCALE		SCALE
		JUNE	Ш
		W23 W24	
ASE 4 rative tial illustrations fel photos d exhibitions		11. Tutorial w. Svere 15. hand in project des- cription W25 18. exhibition preview, CA,TC	
		W26 24. exhibition must be completed by 17:00 27. EXAM 30. Consensus meeting	
		W27	



20. Bergen ..... Alta ..... Hammerfest

21. Hammerfest

22. Hammerfest •••••Honningsvåg (Hurtigruten)

23. Honningsvåg

24. Honningsvåg

25. Honningsvåg ....Alta .....Bergen

#### **EDUCATION** CV

2015 - 2020

2018





Hanne Ødesneltvedt 2014 - 2015 2013 - 2014

Bergen School of Architecture Master in architecture (MNAL), 5th year student

Universitat International de Catalunya School of Architecture Exchange student, 1 semester

University of Stavanger Economy and administration, 1 year

University of South-Eastern Norway Mathematics and Physics, 1 year

## MASTER COURCES

Semester 3 -	Complex Context	PROFESS	SIONAL
Autumn 2019	Tutors: André Fontes and Tom Chamberlaine		
BAS	Exploring the complex of an aging city - a city suitable and usable for all ages and cultures - regardless of people's abilities or disabilities. The project shall have an urban understanding, in Bergen - in suruban	Summer of 2019	Børve Borchs
	territories. understanding the relationship of a building and the urban context.		Architecture
Semester 2 -	Open Space - universal design Tutors: Vibeke Jensen and Charlotte Erckrath		Asplan Viak A
BAS the whole semester. (1 2. Body mapping -Stu understand others.	<ol> <li>Making a book about the theme universal design. Mapping our observations and learnings throughout the whole semester. (The book will be published)</li> <li>Body mapping -Study how our body works with focus on joints. To understand the body to be able to understand others.</li> </ol>	Summer of 2018	Architecture
Semester 1 -	<ol> <li>Action in space/Space mapping - Study a movement on the mezzanine to discover its qualities.</li> <li>Making a ramp on the mezzanine from one floor to another. The goal was to make a universal space which has as many possibilities as possibly.</li> </ol>	Summer of 2017	EFD induction Induction heat Service secret
UiC	Computational Design (Rhino)		
	Lectures, assignments and exam in the software History of Art and Architecture		
	Greek - Today		
	English II		
	Learning outcomes: How to present and write about architecture in English.		
	Design Studio III		
	The task consisted of creating a project in the area by the historic Romanesque wall from 15-10 BC in Barcelona, Barri Còtic.		

## PROFESSIONAL EXPERIENCE

- nsenius office
- AS office
- on eating technology retary logistics

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