

Entangled

*Adaptive reuse of a defunct smoked herring factory in
Sunnmøre*

Project description
and programme

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Diploma 2023

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Tutors:

APP: Pavlina Lucas

DAV: Hedvig Skjerdingsstad



This is a story that we know. It is the story of pioneers, progress and the transformation of "empty" spaces into industrial resource fields.

This is a story we need to know. Industrial transformation turned out to be a bubble of promise followed by lost livelihoods and changed landscapes. And yet: such documents are not enough if we end the story with decay, we abandon all hope - or turn our attention to other sites of promise and ruin, promise and ruin.

Excerpt from the book "*Mushroom at the End of the World: On the Possibility of Life in the Capitalist Ruin*" by Anna Tsing.

What

For my diploma project I am looking into the possibilities of adaptive reuse of a post-industrial site. Through transforming the defunct smoked herring factory into a sustainable food facility, living by and off the ocean manifests a restorative approach to food production and architecture.

By reprogramming the site and developing an already existing local business, this project seeks to weave together local natural and cultural resources to reinvigorate the area.

Where

The district Sunnmøre at the west coast of Norway is an area with long traditions of living by and off the sea. The name Sunnmøre comes from Norse language; "*Sunn-Mæri*," where "*møre*" comes from the Norse word "*marr*" "*ocean, sea*" and can be interpreted as "*the land by the sea*". The tradition of herring fisheries in Sunnmøre dates back to Norse times, and has been one of the most important food and income sources for people in the area. In the early 20th century, the fishing was industrialized, seeing the rise of large fish processing facilities all along the west coast.

The factory at Hesthomen island in the municipality of Herøy, Sunnmøre, was closed down 20 years ago due to the collapse of the local herring stocks, after being in operation since 1932. This site is interesting because of its position at the edge between land and sea, its food-related history and its proximity to the shift happening in the seafood industry in Herøy, a municipality heavily reliant on unsustainable fishing industry.

As a part of the *maritim klynge* (maritime cluster) in Sunnmøre, Herøy is working on making their maritime industry more sustainable. One prominent company that is already ahead of this development is *TANGO Seaweed*. Since 2016 they have been cultivating seaweeds according to nature's principles at their sea farm not far from Hestholmen island.

By relocating TANGO Seaweed to the buildings of the factory, they can be a part of redefining what it means to live off and by the sea in the future. Their knowledge becomes available to new groups of people.

How

The existing buildings are transformed in three steps:

- 1 The parts that are too neglected to be saved, and the parts that don't fit into the new programme are removed.
- 2 The remaining buildings are restored and adapted to new uses while retaining their historic features.
- 3 Three new structures are added to weave together the new programme.

The program is designed as an ecosystem in a feedback chain of exchanges, providing through architecture, a common ground that responds to the alienation between people and their food provisions. The program facilitates for mixed-use in accordance with the annual cycles of growth and harvest.

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Why

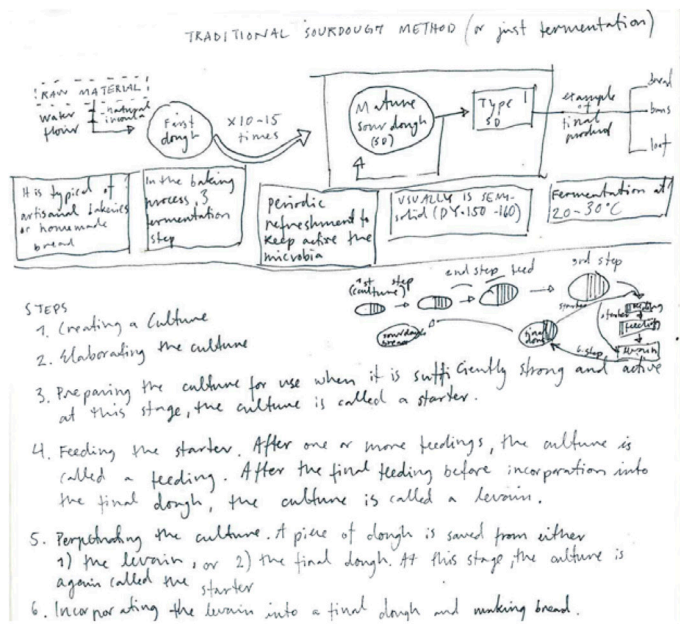
The defunct smoked herring factory provides a physical link to the past and evidence of the desire for progression in modern society. The systematic overfishing of herring can be read as a general expression of industrialization and modernity; the human being and human wants and needs are put first. Predation on nature can be said to be the dark side of industrialism and the belief in constant progress. The challenge today and in the future will be to conserve natural resources for future generations while improving resilience and adaptive capacity within the built landscape.

By taking care of nature and the species in it, we also protect the livelihoods and food security along the coast. A paradigm shift is needed - ecology is shaped by human interference and we as humans need to take other beings into the equation when operating in multi-species landscapes. As Eduardo Kohn writes on "the anthropology of life", this is a mode of thinking that exceeds a singular focus on human life, instead concerning itself "with the effects of our entanglements with other kinds of living selves" (2007, p. 4).

Entangled Species

Coexisting means "to exist together or at the same time." It can also mean "to live in peace with each other especially as a matter of policy."

["Coexist." Merriam-Webster.com Dictionary, Merriam-Webster].



Notes on traditional sourdough methods, 2022

1. Introduction

I have been thinking for some time about the possibilities of coexistence. That is; coexistence with the other living species and organisms. They have always been an integral part of human life, not only around us, but also within us. Unfortunately, we seem to have forgotten about them in this modern life we live, thinking that we are managing on our own, independent beings as we are. *Entangled Species* is an acknowledgment of the lively knottings that tie together the world we inhabit.

It all started some three years ago, with my first sourdough starter. The starter was a "hand me down" from my brother, who after a few attempts of making sourdough bread gave it up. It was too time consuming, he said, and the sourdough starter was very unpredictable. I tried my hand at baking some sourdough bread, but after a while I forgot all about the culture that was alive in my fridge, and it became moldy.

Some time later, I slowly started learning more about the workings of a sourdough culture and the fermentation process that happens through wild lactobacillaceae and yeast. Every starter consists of different lactic acid bacteria which is introduced to the star-

ter through the environment, water, and the flour used to create the starter. The lactic acid bacteria are a group of gram-positive bacteria capable of converting carbohydrate substrates into organic acids and producing a wide range of metabolites. The organic acids create an unfavorable environment for the growth of spoilage and pathogenic microorganisms. It is a perfect kind of symbiosis, if only one remembers to feed it once a while. My second attempt at keeping a sourdough has been a lot more successful, although it has been very close to dying a few times.

What my journey into sourdough has taught me, is that one really has to live with the sourdough culture - it becomes a coexistence. It wasn't before I learned about its needs and its fluctuations that I could really understand and take care of it, and in return I could benefit from it. The sourdough starter and I now have weekly rendezvous, and the lactic acid bacteria that come from the sourdough culture are both a part of me and my environment.

I explored this idea of coexistence, a mutually beneficial relationship, in a project that involved composting. The project *House by Food, for Food*, was based on the idea that different groups of pioneers would work together to create a symbiosis of mutualism.

The pioneers included different groups of start-ups that were dealing with food, bees and of course all the different microorganisms that live in the compost. The start-up groups were already at the site exploring food in different ways, from SunSeeker e.V who were experimenting with urban gardening and composting, Kollektiv Kalte Butter who were dealing with food preservation and Restlos Glücklich that run a community kitchen. In *House by Food, for Food*, all these different pioneers would work together to keep the circular system of growing food, harvesting, preserving, eating, saving seeds, composting, sowing seeds, planting seedlings, pollinating, watering and so on going. The system would only work if everyone were fulfilling their part of the work.

This project was imagined to take place on an empty plot in the city center of Berlin, in a building designed around this concept. This system would exist in a controlled environment, where all species would have been brought together for this exact reason. How would this coexistence work in more rural settings, where the wildlife would be much more unpredictable?

Donna Haraway writes: "Staying with the trouble means making oddkin; that is, we require each other in unexpected collaborations and combinations, in hot compost piles. We become - with each other or not at all."² Both the imagery of the compost pile and the concept of oddkin are red threads throughout her

work. Haraway emphasises connectedness, and *Staying with the Trouble* can be thought of as a continuation of *A Cyborg Manifesto* and *The Companion Species Manifesto*. Some view the book as a critique of the Anthropocene as a way of making sense of the present, de-emphasizing human exceptionalism in favor of multispeciesism.

Humans and wildlife have always lived together, both in conflict and coexistence. We continue to be closely linked with nature and gain many benefits from it, despite becoming increasingly urbanised over time. Some communities, especially of Indigenous peoples, still live relatively harmoniously with wildlife and have long-established cultural practices and traditions that enable them to coexist.

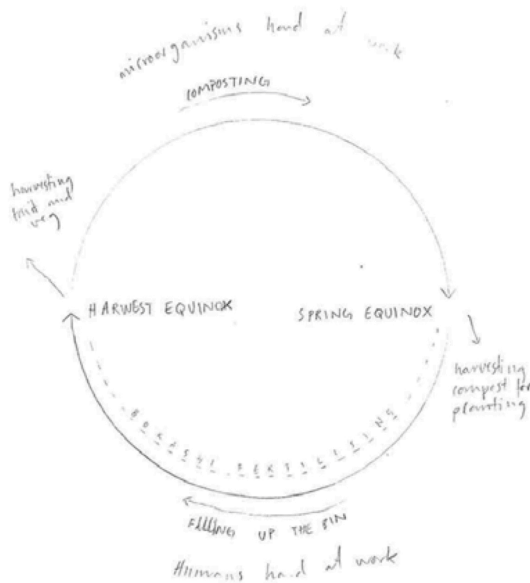
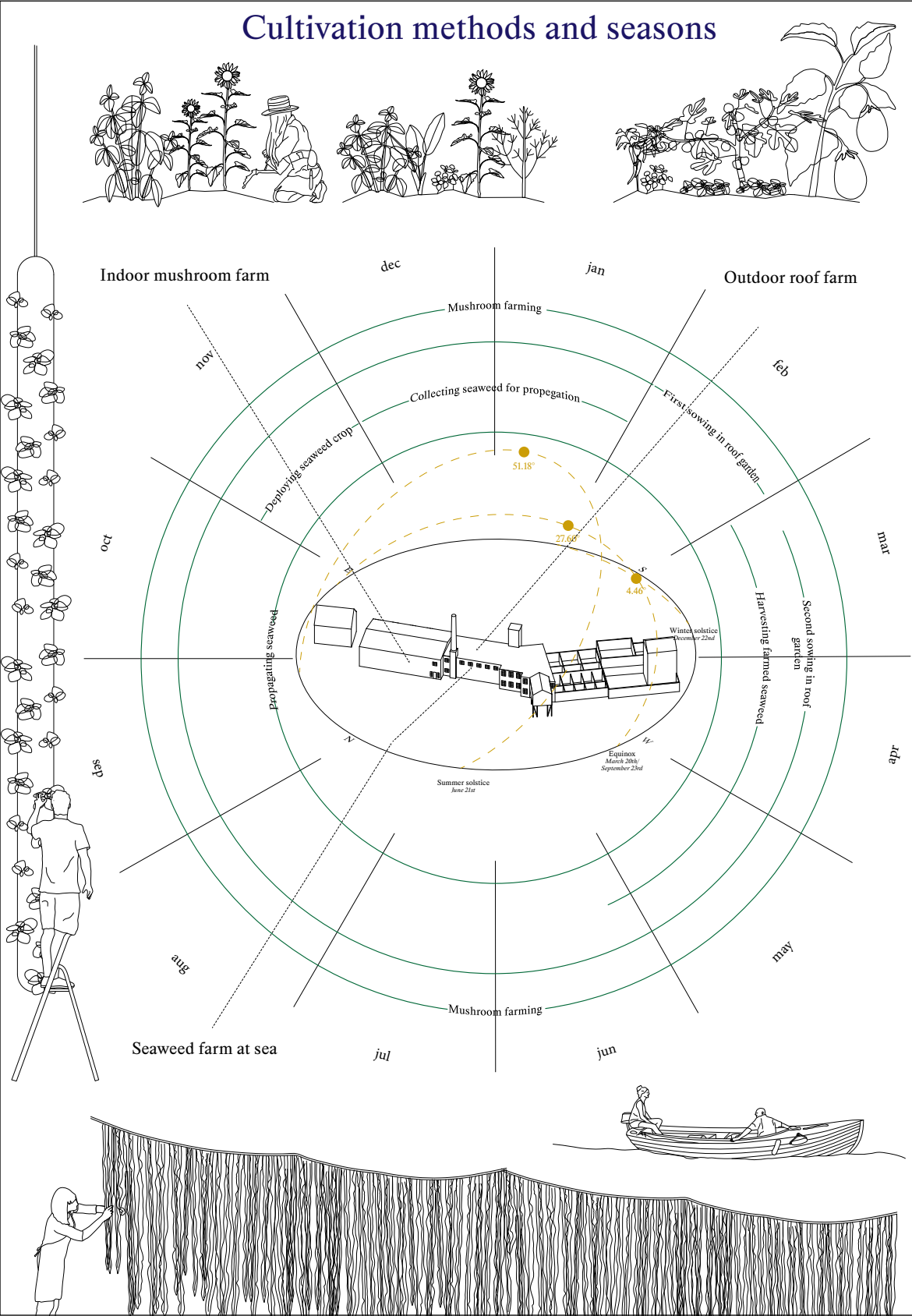
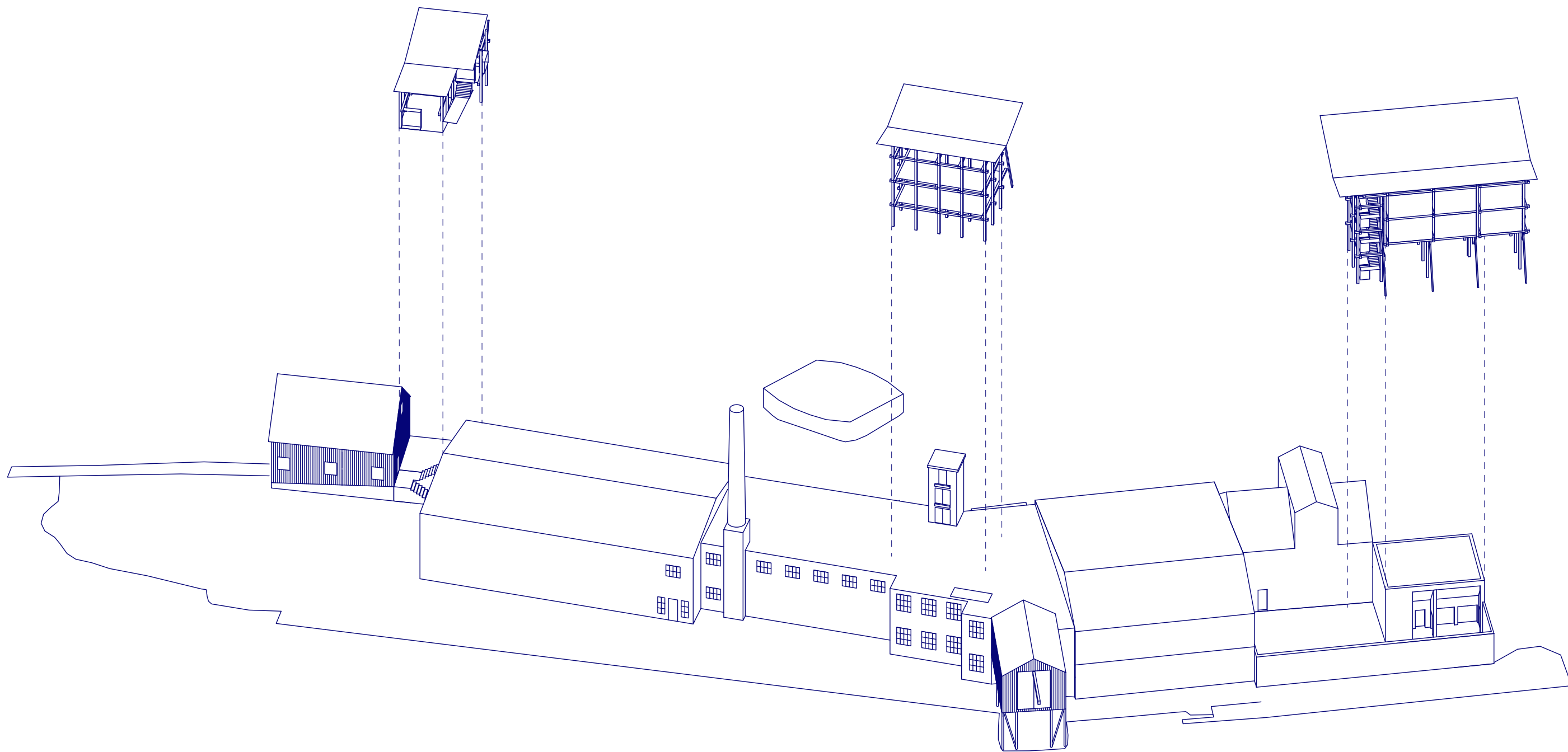


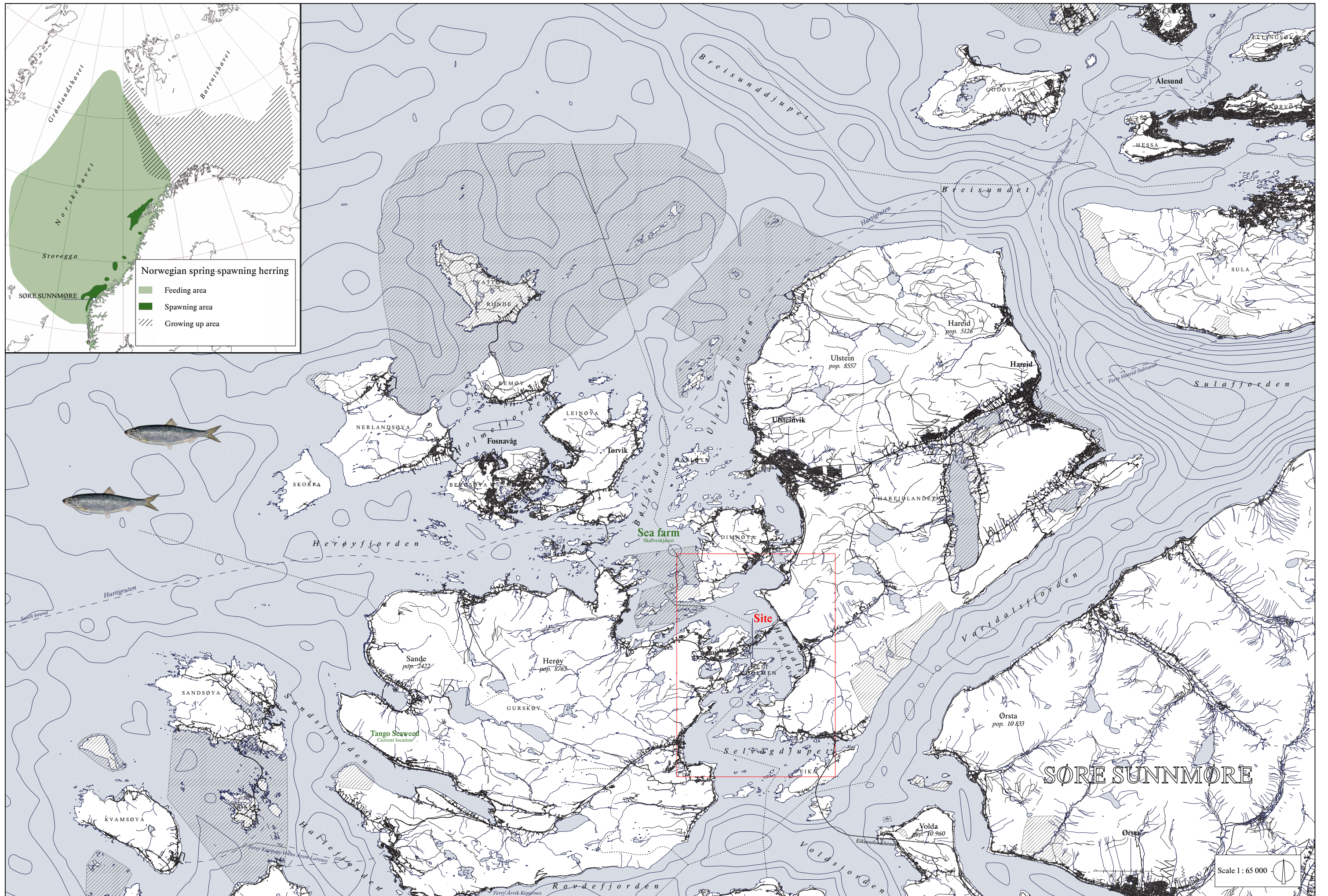
Diagram exploring annual rhythms of *House by Food, for Food* (2022)

Concept: weaving together the land and the sea





Axonometric drawing of original and new buildings



Herring fishing and processing

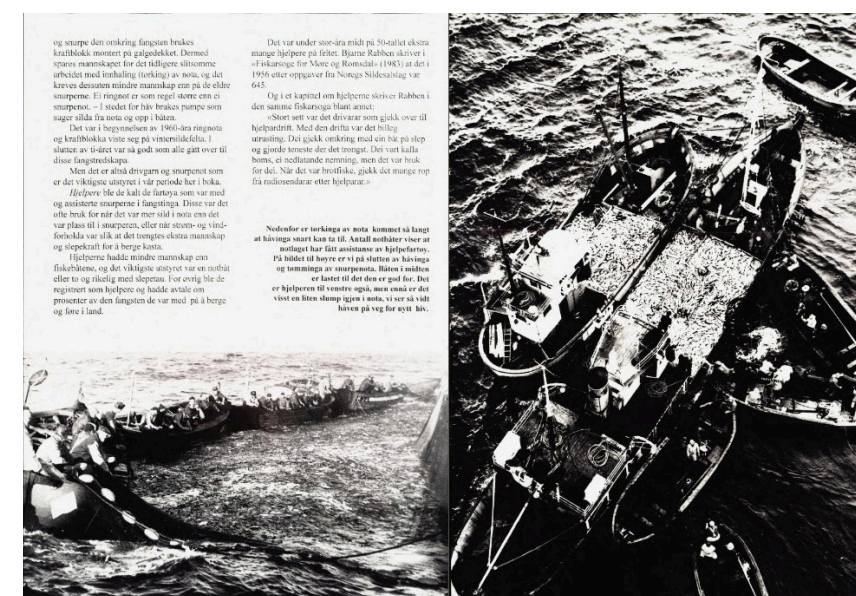
Ytre (outer) Sunnmøre has been characterized by fisheries (especially ocean-going vessels) and the shipyard/workshop industry, among other things related to fishing activities. The rise of Ålesund and Fosnavåg as trading centers and cities was particularly based on the rich coastal and fjord fishing. The fisheries gave rise to processing industries (such as cod and herring oil factories) and the production of fishing equipment.

For hundreds of years, herring have been an essential part of the Norwegian diet: the remains of this fish have been found all over Norway in archeological sites dating back as far as 600 BC. As early as the 13th century, the country was already enforcing laws regulating herring fisheries, describing the tools used and establishing punishment for offenders.

In the 19th century, herring were salted in wooden barrels in salting houses, which numbered nearly 1,000 along coastal Norway. At the beginning of the 1900, the Norwegian marked for cured and smoked herring was mainly destined for export.

The situation has changed dramatically since the golden age of herring fishing, which lasted from 1946 to 1968. In that period the region of Sunnmøre boasted 35 companies that produced smoked herring. The last significant stock of herring reached Norwegian waters in the 1950's, supplying the fishermen with plenty of fish for about twenty years.

However, in 1970 almost the whole stock of herring was gone from the Norwegian coast, and this year also marked the last year of free fishing. From 1971 to 1983 the herring fishery was strictly regulated. After a series of unfavorable fishing seasons, all the processing companies were compelled - one after the other - to shut down.



The buildings of the smoked herring factory

Two field trips have been made to the smoked herring factory as part of this diploma. First was in the end of July 2022, the second one in late February 2023.

Registrations from these trips were used to draw up the plans for the factory, as they did not exist prior, or I was at least not able to access them.



Buildings at the site



The smoked herring factory seen from the island across
June 2022



Buildings at the site



The smoked herring factory seen from the air
March 2023

References

Litterature

”Mushroom at the End of the World: On the Possibility of Life in the Capitalist Ruin” by Anna Tsing

”Eat Like a Fish, My Adventures Farming the Ocean to Fight Climate Change” by Bren Smith

Projects

Nest We Grow - Kengo Kuma

Bakehuset på Loseter - Flatbread Society,Futurefarmers

The Modern Seaweed House - Vandkunsten

Traditional seaweed houses in Lesø

Gjemmested - Gartnerfuglen Arkitekter and architect Mariana de Delás

Biosack pavilion - Rex Skov Arkitekter

Halewijnkouter House - Raamwerk

Surface Tension: Blueprints for Observing Contamination in the Sydney Harbour Estuary - master project by Victoria King

CV

Eductaion

BERGEN SCHOOL OF ARCHITECTURE

Master of Arts in Architecture

Studios: Ocean Space III, Experimental House, Complex

Context, Diploma

8/2021-current

Bergen, Norway

AARHUS SCHOOL OF ARCHITECTURE

Bachelor of Arts in Architecture

Studio 3: Emerging Sustainable Architecture

09/2016 - 06/2019

Aarhus, Danmark

BEZALEL ACADEMY OF ARTS AND DESIGN

Exchange Programme

Black City Studio

Courses in Architecture, Photography and Print

10/18-02/19

Jerusalem, Israel

KRABBESHOLM HØJSKOLE

Foundation year (Folk high school)

Courses in Architecture and Design

08/2015 - 06/2016

Skive, Danmark

Scholarships and experiences

Fondation Idella

Exchange programme scholarship

2018

Dreyers Fond

Exchange programme scholarship

2018

Lisbon Triennale 2022

Coastal Interference exhibithion

*This project won the 2022 Lisbon Triennale Millennium
bcp Universities Award in the Master category.*

Portfolio

The next pages shows the main projects I have worked on during my masters, that have all in some way or another informed my diploma.

Sonic Reflections

A project in collaboration with Sofia Korte

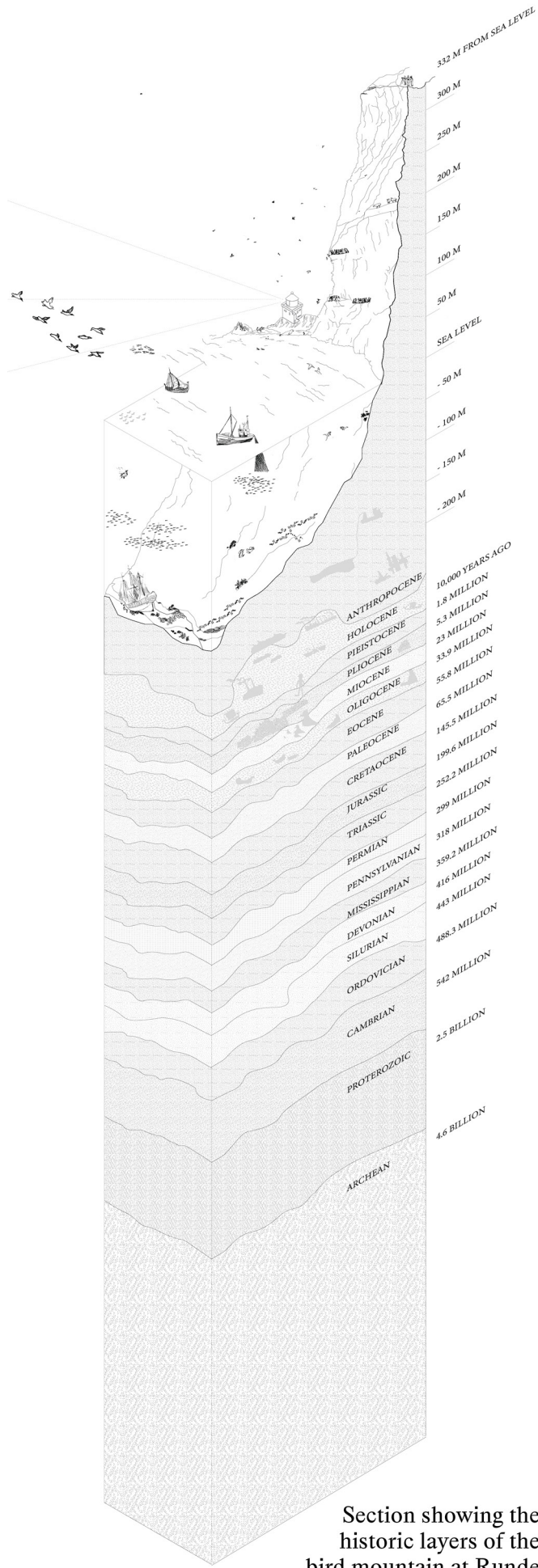
As the concern for the decreasing wildlife grows, the focus of this project derives from the awareness of the reduction in seabird populations around the Norwegian Sea. Through listening as a phenomenological approach, this project seeks to create a connection between humans and seabirds in their natural soundscape.

In an attempt to reflect upon and to work with nature and its soundscape(s) and the human awareness, this project investigates geophonies and biophonies. The proposal is an acoustic space that corresponds with the soundscape as a mediator that amplifies the state of the natural habitat. A place for nature to tell and humans to listen.

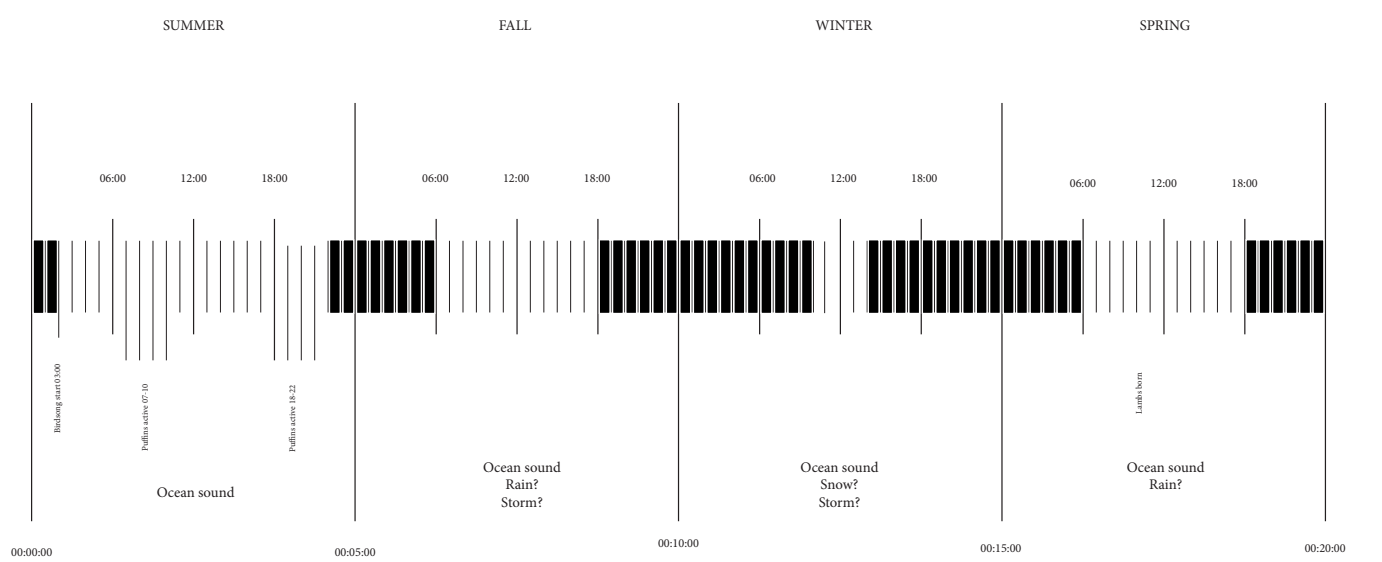
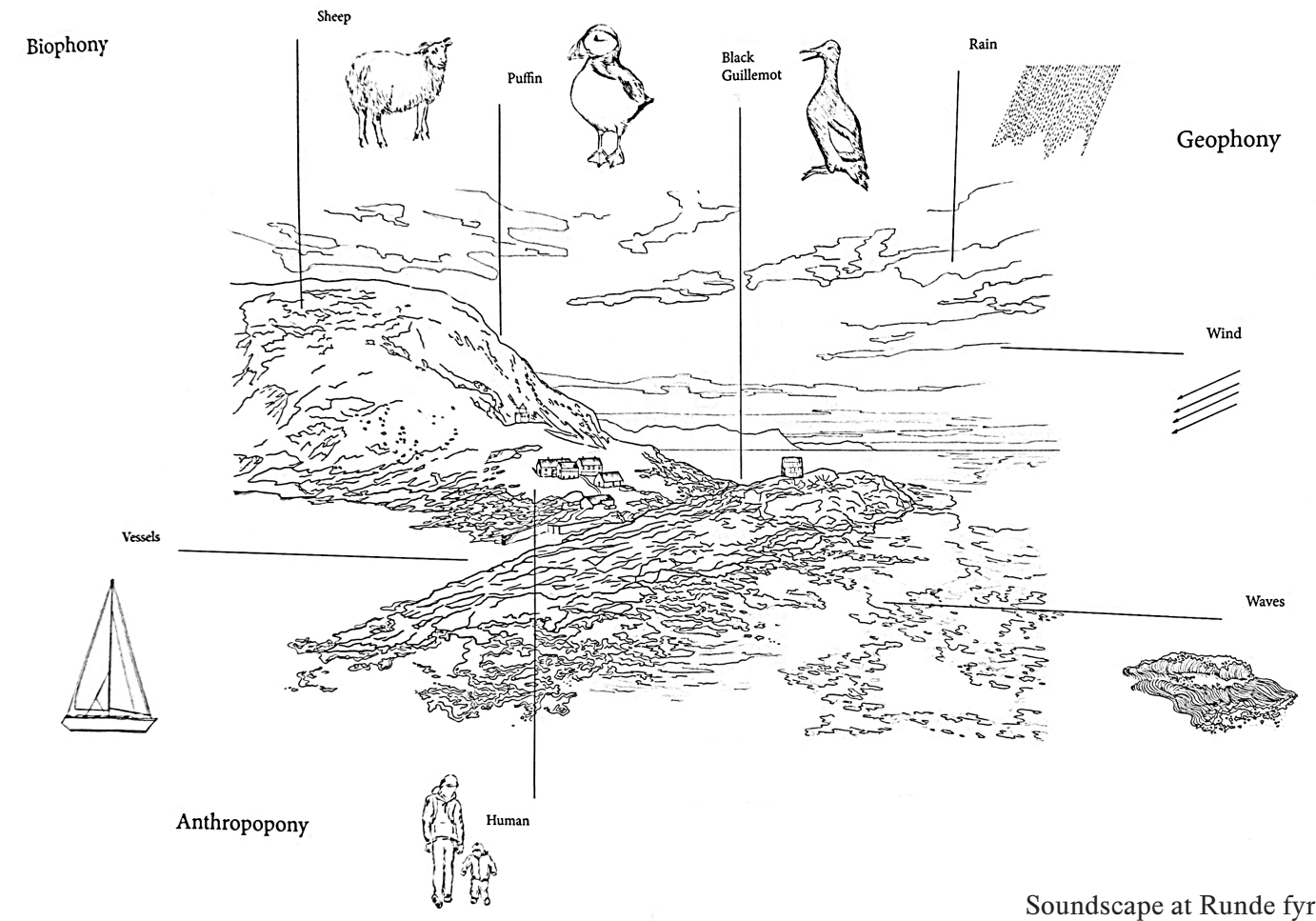
The location is on Runde, an island in the south of the Norwegian Sea, a changing land- and soundscape shaped by wind, water and seabirds throughout the seasons. It is characterized by its important cultural and biological history. The acoustic space is situated inside the remains of an old lighthouse, on the northern part of the island.

Explorations in Ocean Space III
A choreography for Norskehavet / the Norwegian Ocean

Teachers in charge:
Nancy Couling (APP) and Vibeke Jensen (DAV),
with marine biollog Marianna Anichini



Section showing the historic layers of the bird mountain at Runde island.



Mapping of the soundscape at Runde fyr.

Coastal Interference

Lisbon Triennale 2022

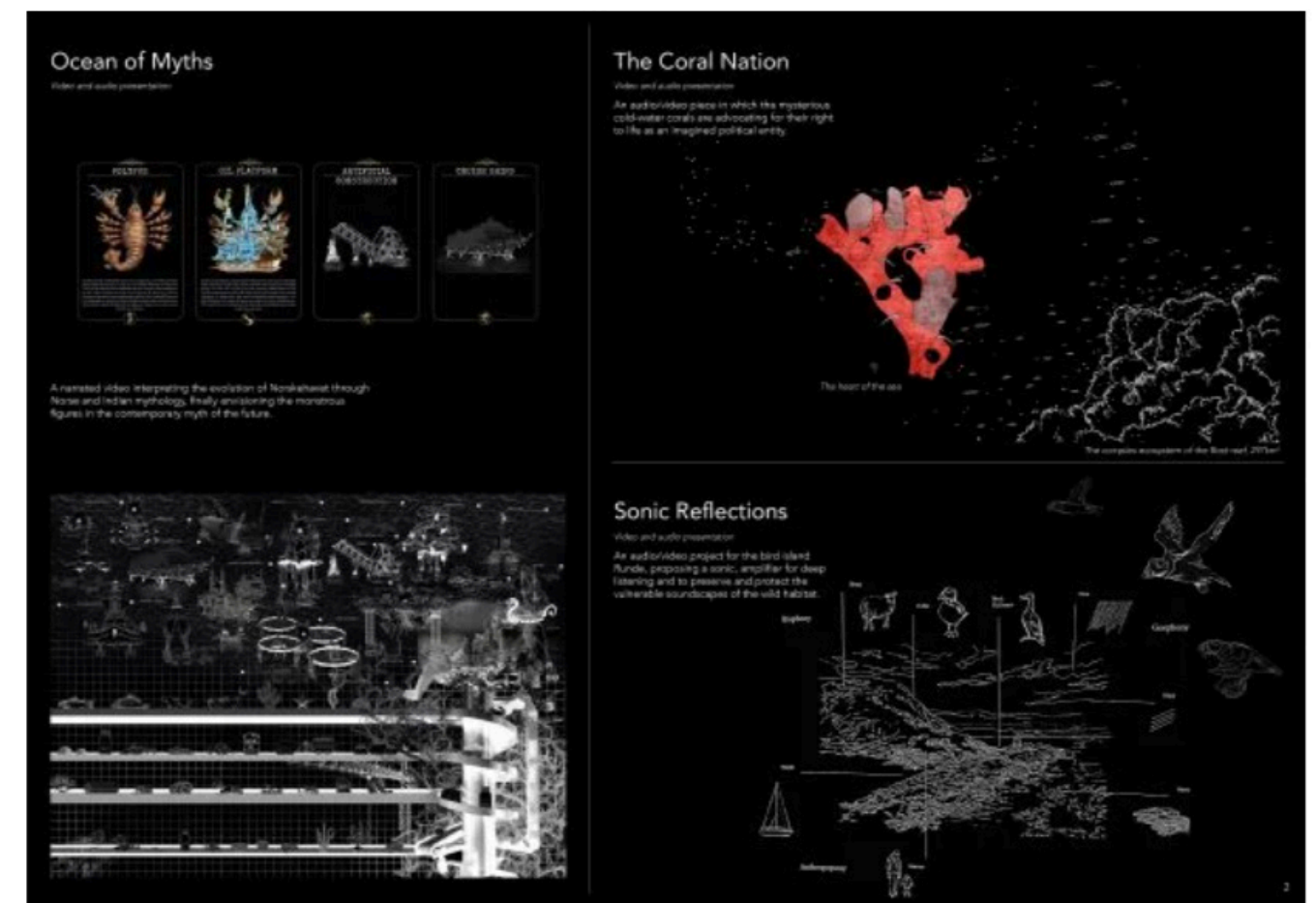
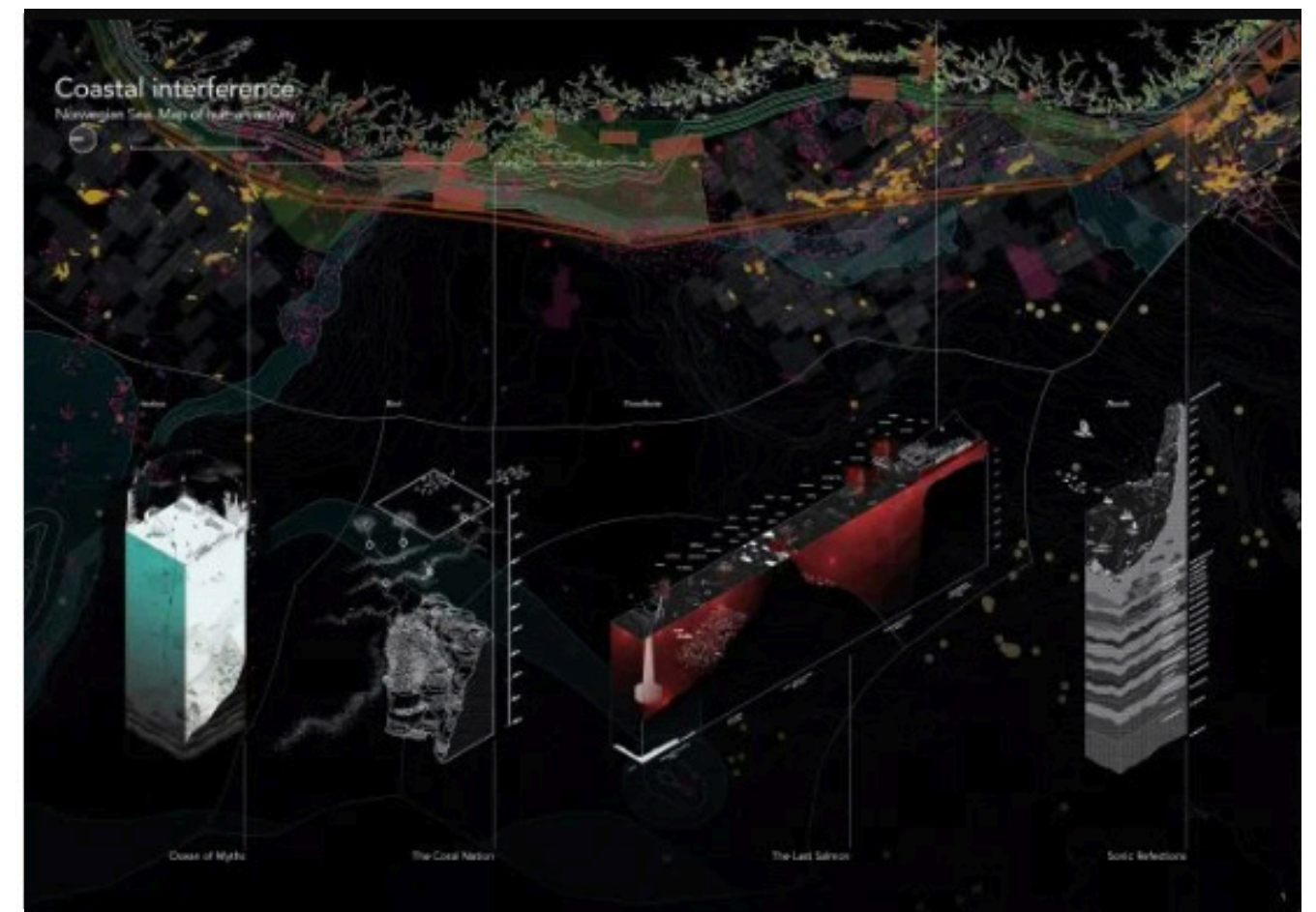
A project in collaboration with Atso Airola, Jonas Høiness, Kripa Jain, Sofia Korte, Changkun Ma, Sonya Markova, Luna Scéau, and Sashant Tiwari

This project won the 2022 Lisbon Triennale Millennium bcp Universities Award in the Master category.

Coastal Interference: Aquaculture, shipping lanes, oil fields, military installations, birds, spawning fish, trawlers, kelp, cold-water corals, dreams, myths and multiple marine species, all inhabit the Norskehavet coastal zone, here defined by depth from shore to the continental shelf. This highly productive area, propelled by the warm Gulf Stream, is fully urbanised and characterised by instable conditions. The project articulates human interference throughout the zone from the perspectives of a salmon, cold-water corals, seabirds and both lost and resurgent mythologies. The interdisciplinary work aims to illuminate tensions, potentials and promote future action. Case-studies highlight four selected sites; Runde, Rost, Andoya and Trondheim.

Explorations in Ocean Space III
A choreography for Norskehavet / the Norwegian Ocean

Teachers in charge:
Nancy Couling (APP) and Vibeke Jensen (DAV),
with marine biologist Marianna Anichini

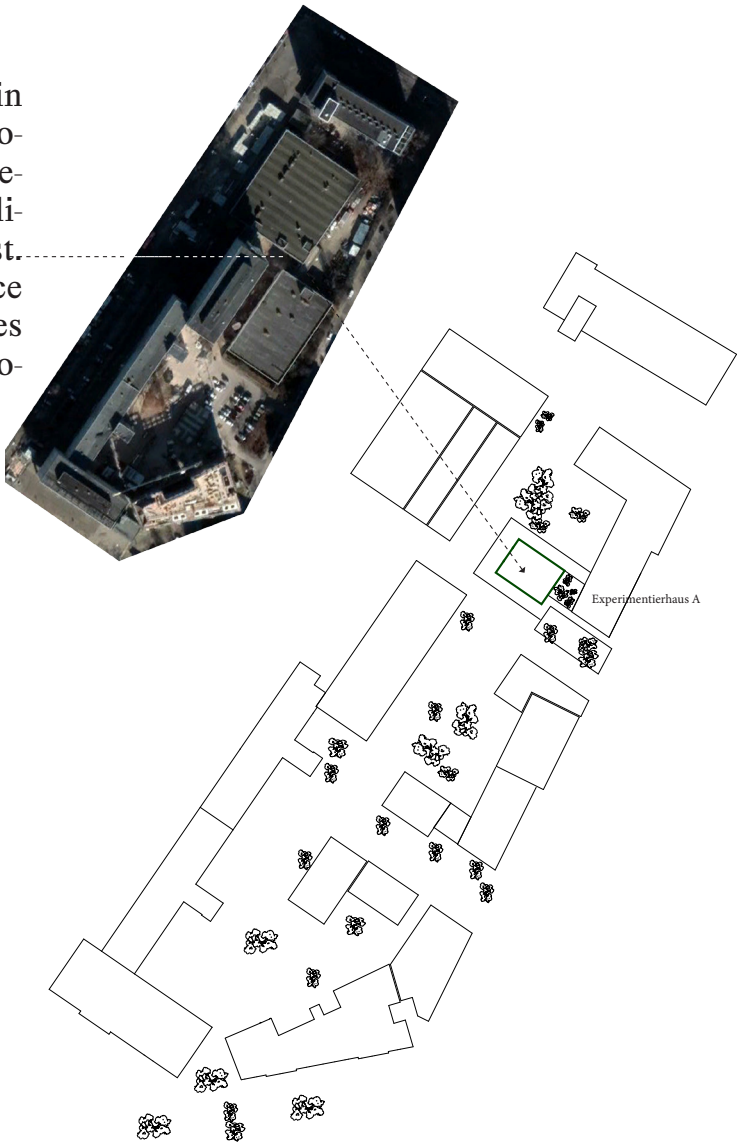


House for Food, by Food

A project in collaboration with Olivia Nilsson

Urbanization and the vast global import threatens the knowledge growing, preserv- ing and composting food in cities (Berlin). As a result of climatic changes and the ever changing geopolitical conditions, food scarcity is becoming more threatening to populations across the globe. As people are moving away from the countryside and the long traditions of farming and into big cities, a lot of knowledge around food culture and cultivation is lost in the transition.

As cities need to become more self-sufficient in the near future, A House for Food, by Food proposes a urban food forest infrastructure that deals with composting, collecting rainwater, utilization of surplus heat and gas from the compost. Most importantly, the house becomes a place for passing on knowledge of where food comes from, through urban farming and collective cooking and dining. A house of food, for food.



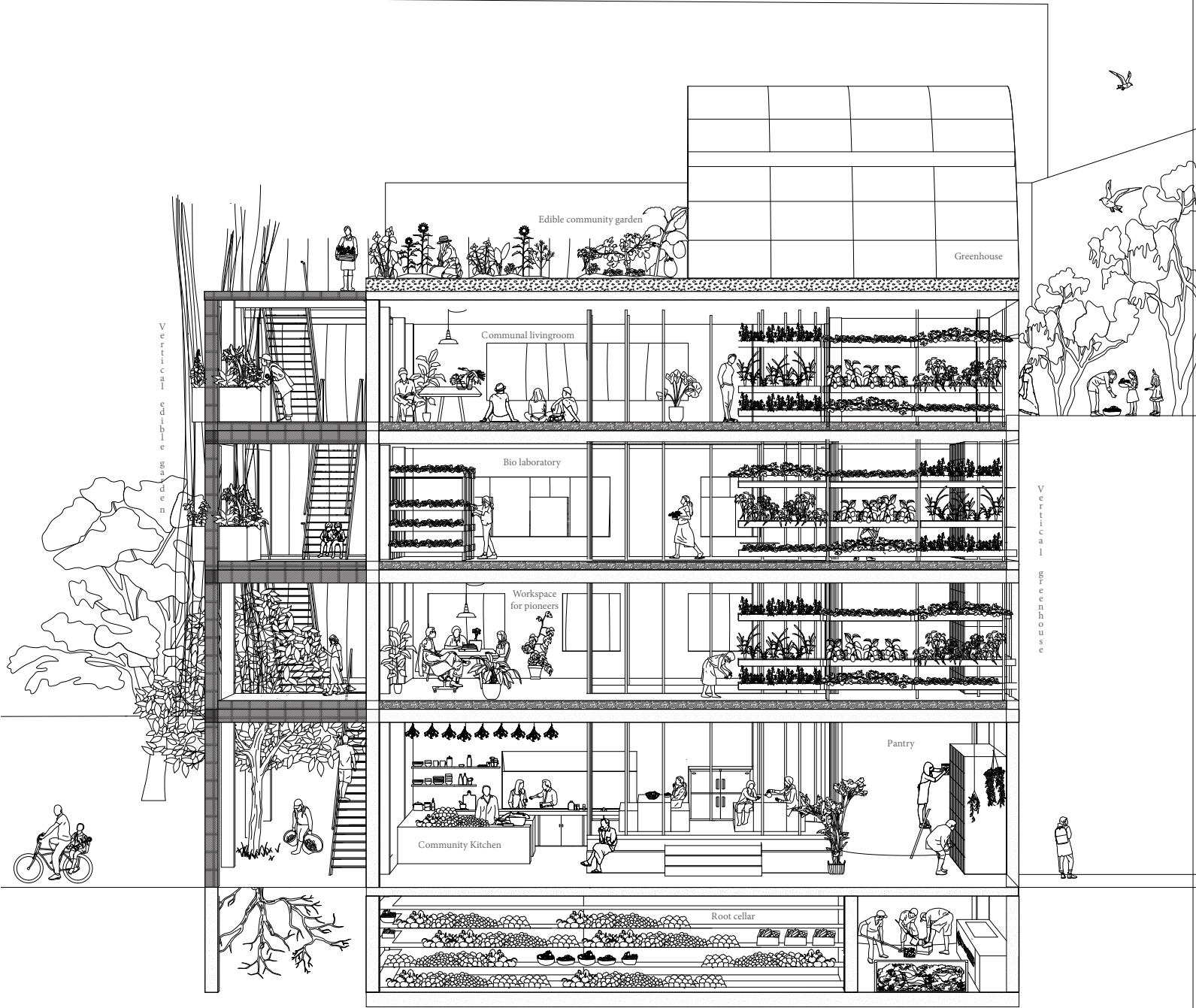
Experimental House
Haus der Statistik

Teachers in charge:
Jan Liesegang (APP), Cecilie Anderson (APP)
and Hector Pinas (APP), with Alberto Altés (KFT)

Situation plan Haus der Statistik

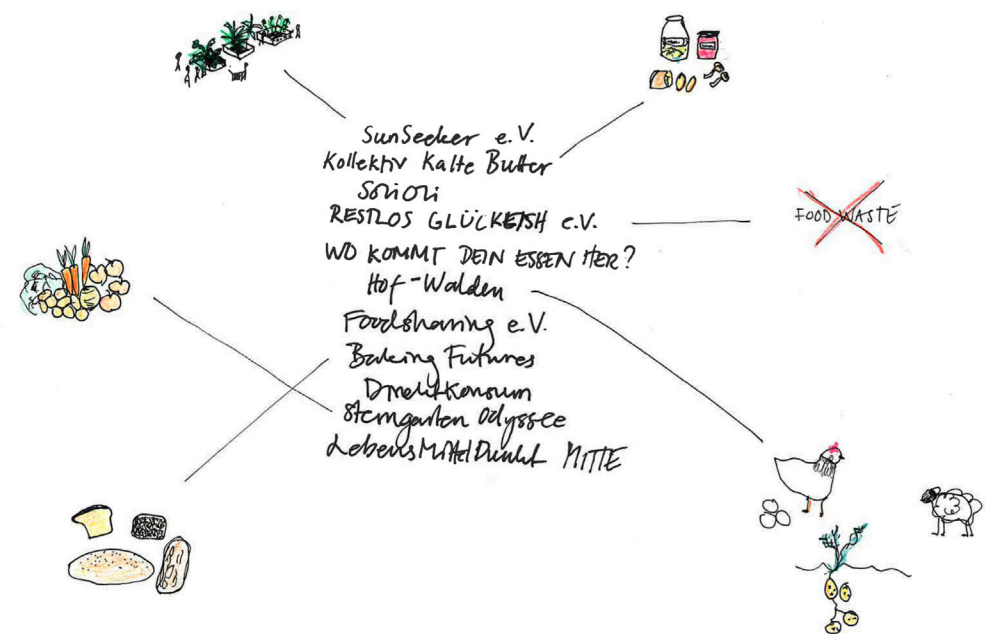
Spring 2022

Berlin, Germany



Section scale 1:33

PIONEERS OF FOOD



COMPOST HAPPENS

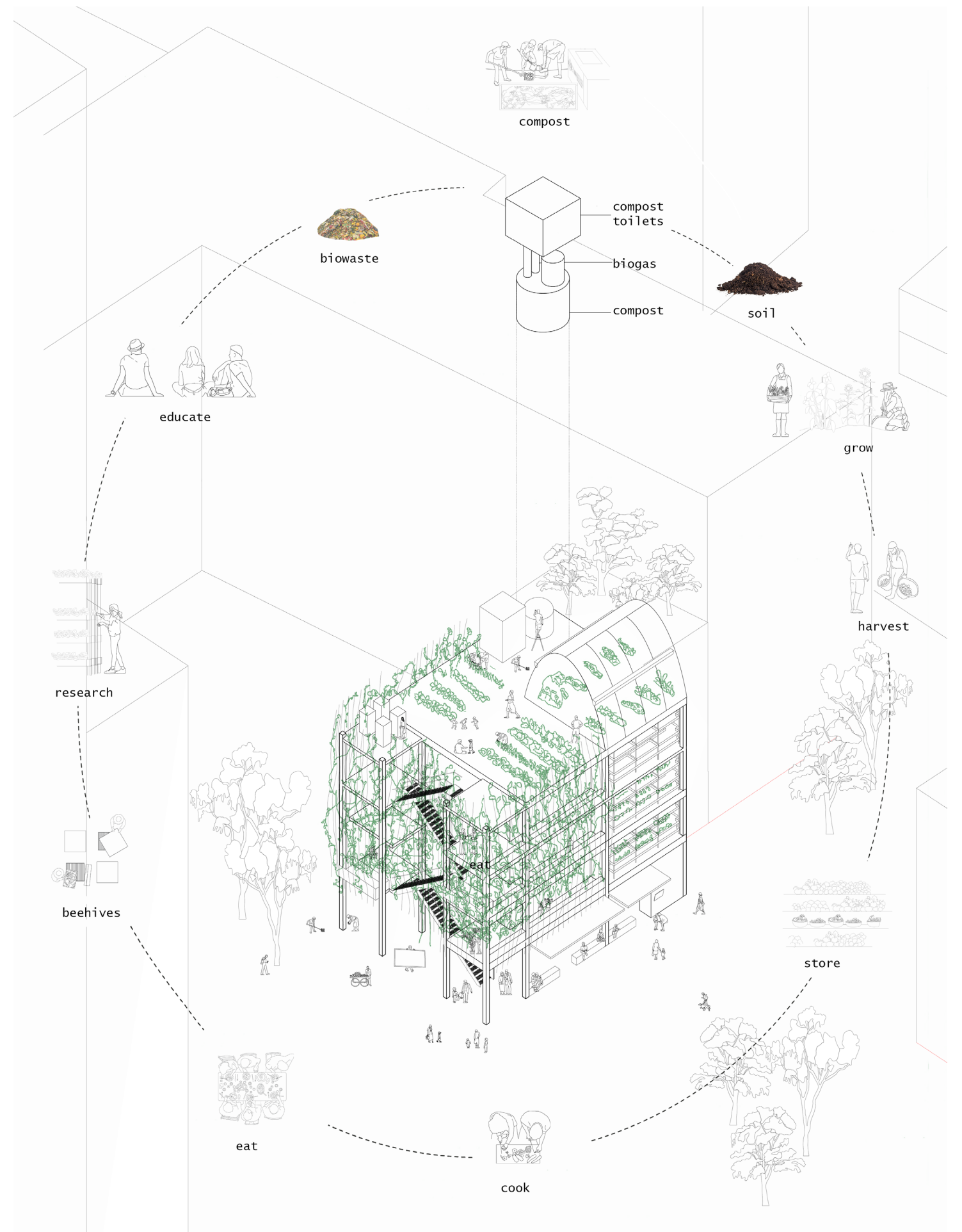
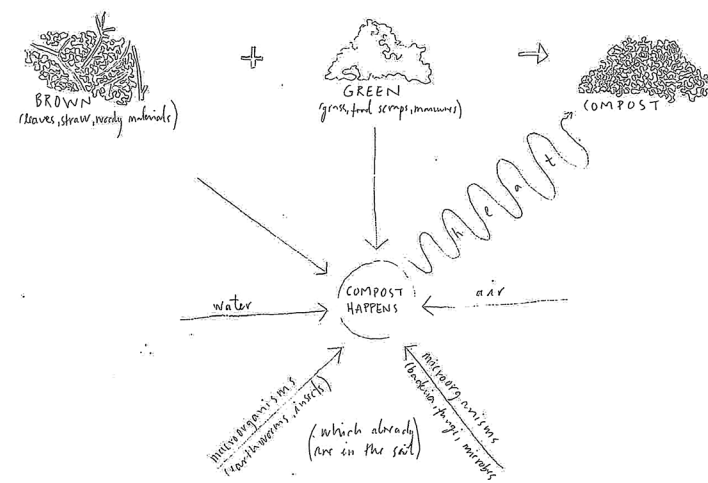


Diagram of programs

Eldstaden

urban space as social production

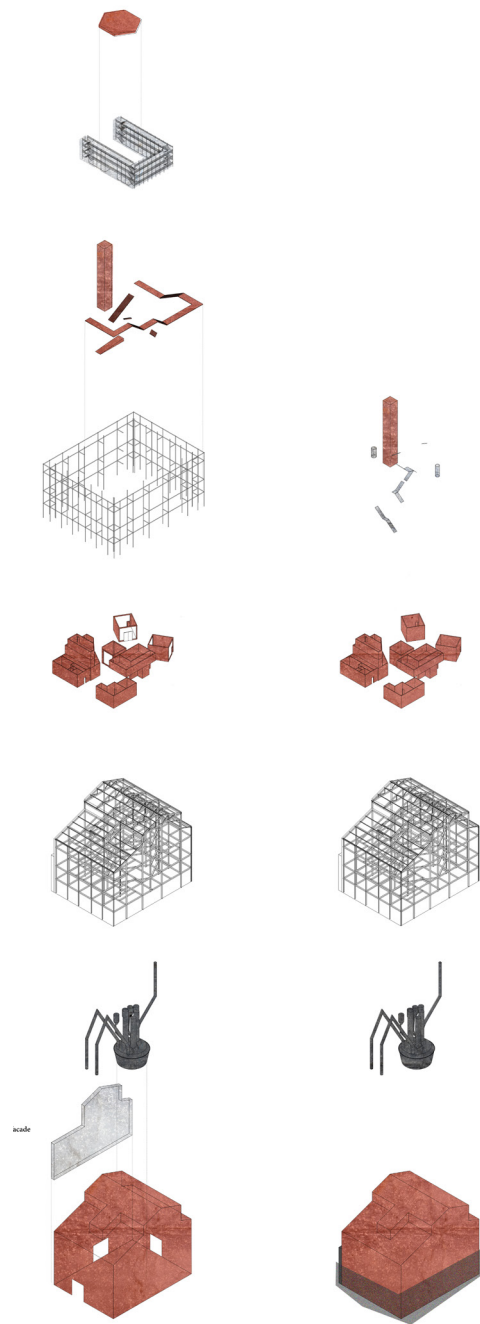
A project in collaboration with Olivia Nilsson

Eldstaden is a project about re-starting the fire in Odda, and giving Smelteverket back to the people. We are proposing a living heritage approach, that would showcase the importance Smelteverket had as a social gathering place in the town, as well as the important role in the second industrial revolution in Norway.

Our idea is starting out in a thought of how to work with existing industrial buildings. Odda Smelteverk is a central part of Odda's history but as well the future for this place. How can a place like Odda Smelteverk become a living heritage? Preserving and creating a new direction? Starting in the strong presence of the labour movement in Odda, we want to investigate how the community can get new types of social arenas in the village. Since the building scale is large, too large for a town like Odda to fill with programmes, we will instead treat the large buildings as urban space instead of enclosed buildings with a fixed programme. Investigating how we through a kind of architectural acupuncture can generate change through small, but precise, interventions. Addressing the buildings' different elements relating to the history of the buildings, is our strategy to develop new activities in Odda. Urban space as social production.

Complex Context
Haus der Statistik

Teachers in charge:
André Fontes (APP), Tom Chamberlain (DAV),
Hedvig Skjerdingsstad (APP/DAV),
with anthropologist Frode Fadnes



Exploded axonometric of Ovn III



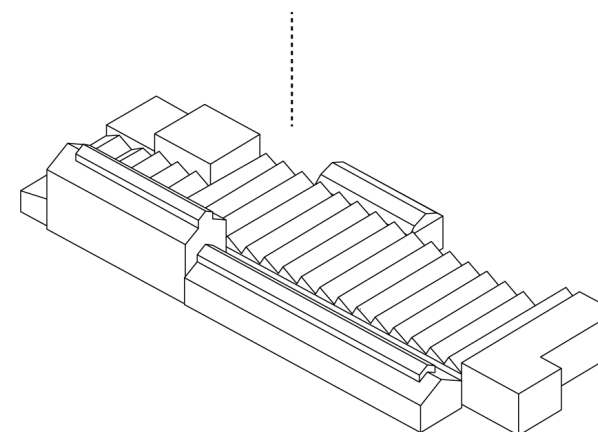
Model of structure and interior
1:100



Landscape model of Odda Smelteverk and surroundings
Scale 1 : 500

Cyanamiden

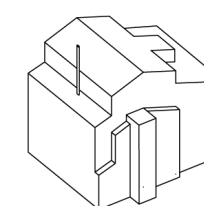
(earth)



Axonometric of possible sites, Cyanamiden,
Ovn III and Skalltaket

Ovn III

(fire)



Skalltaket

(water)

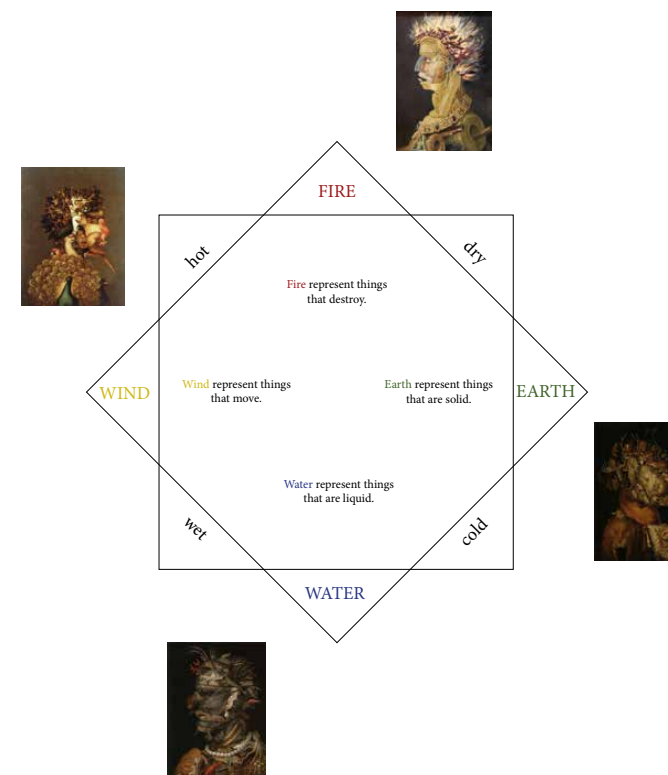
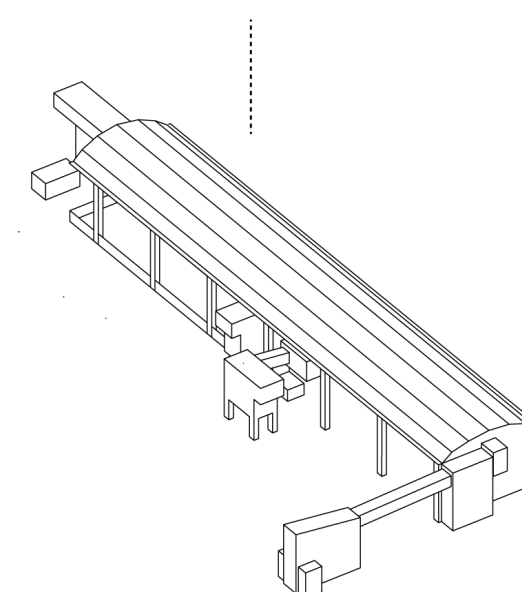
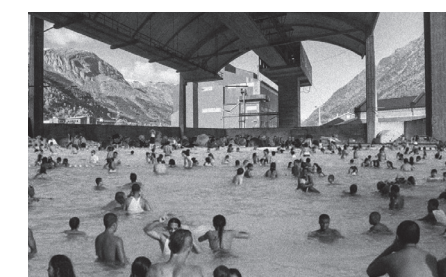


Diagram of different approaches; Earth, Fire or Water



Diploma 2023

Helene Isabelle Millan Eide