## Mobile Heritage: Preserving Architecture on the Move

**BINDER 2** 

By Tora Lie Brunborg, 2022



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### NT - THE BUILDING ON THE MOVE AGAIN

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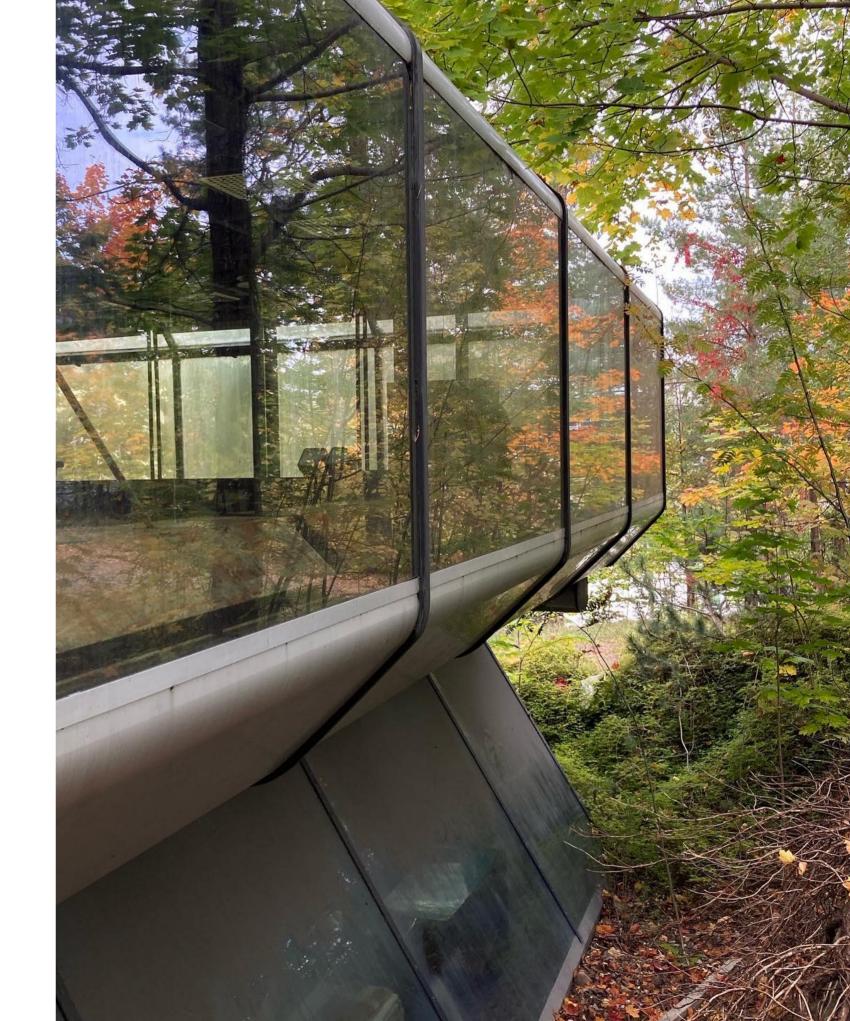
#### AR PRESERVATION APPROACH

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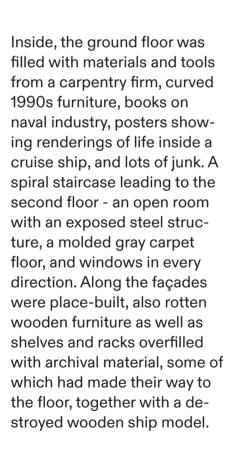
### First meeting

In August 2022, I received a copy of the keys to this building, a pavilion located right next to the three-lane highway E18 at Lysaker. After having seen the building from the highway a few months earlier and becoming curious about it, I went to take a closer look. The first thing that met my eye was the building's outer skin, a facetted but strict aluminum structure with four large, highly reflective windows on each side of the main volume, resting on a cone-shaped glass floor. It was dusty, dilapidated, with punctured windows, and appeared as a futuristic ruin. I reached out to the owner, who was excited about my enthusiasm and made a great effort for me to study the building closer by giving me full access and a copy of the key.









result of.

Njål Reidar Eide was one of Norway's most renowned cruise ship architects and the designer of several of the housing modules on the offshore oil platforms. Still, his work has received almost no attention in the field of architecture (in contrast to the cruise ship- and petroleum business, where he's a superstar). Today, his archives, together with the office pavilion, are falling into disrepair. Through this diploma, I will argue that the pavilion is a key monument of the offshore chapter, an essential period in Norwegian history. My strategy for saving it includes moving it to the Folk Museum to emphasize its importance in a Norwegian architectural context. The diploma project is about movement in two dimensions. In concrete terms, the building is a movable object, and in a figurative sense, it represents a technological movement, which can tell us a story about Norway today.

The office pavilion was designed by the Norwegian architect Njål R. Eide (1931-2016) in two stages: the top floor in 1978 and the lower floor, which was added after a moving operation in 1990. In 2012 the building was abandoned, and today the property is under development, meaning the pavilion will be demolished unless someone takes the initiative to move it again. In my thesis, I have investigated numerous aspects of the building, everything from its iconic shape, its quality of space, and the experimental implementation of both construction details and materials. My research has discovered surprising evidence of inspiration connected to the history of the Norwegian petroleum and cruise industry, which the building is a direct



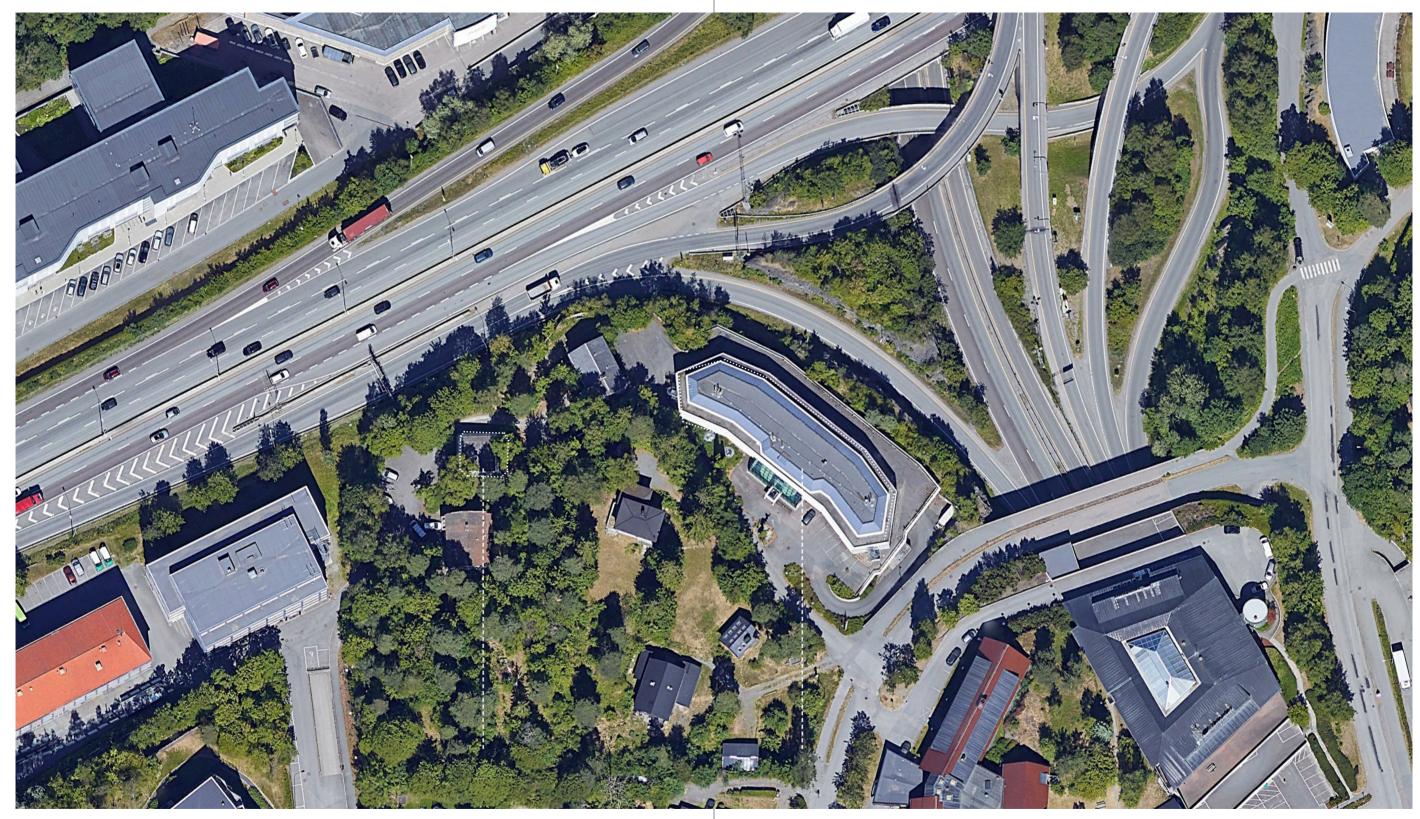


### Mobile Heritage: Preserving Architecture on the Move



OFFICE PAVILION

### Mobile Heritage: Preserving Architecture on the Move



OFFICE PAVILION

OFFICE BUILDING DESIGNED BY NJÅL R. EIDE, 1990

### Mobile Heritage: Preserving Architecture on the Move

### PART I research

#### RECEPTION

"Many have probably wondered about a slightly unusual house that a few months ago suddenly 'appeared' in between the trees in Lysaker," reads the opening of a newspaper article in Asker og Bærums budstikke, from February 1980. The office pavilion evoked strong reactions and wonder from the passer-by.

When it was built in 1978, many claimed it resembled an alien object that had dropped from the sky. With descriptions like "flying saucer," "technical machine," "spaceship," and "UFO," the building was, from the get-go, seen and referred to as an extraterrestrial object - as something foreign. But the building did not "suddenly appear" or drop from the sky as a complete artifact. Neither did it fall into an architect's head as a perfect idea. It was the result of different factors and a complex history of experimentation and transportation. It consists of materials, parts, and components that have been screwed, bolted, and welded - moved, changed, altered, and abandoned.

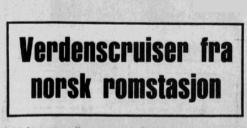
In the following pages, I will present my research on the architect Njål Reidar Eide, how he impacted cruise ship design and petroleum platforms, and how these led to the design of the office pavilion at Lysaker. The two industries can be considered as "contested heritage," and the structures connected to them are often perceived as "tacky and unsustainable." Still, the office pavilion contains a tale of an era when traditional on-site craftsmanship was replaced by factory-made and mass-produced components. It can be considered a monument of Norwegian petroleum history - the foundation of the Norwegian Welfare State. I will demonstrate how this building is more than a foreign object or a unique case. In fact, from an environmental point of view, it is a matter of great urgency to find new purposes for neglected buildings of all kinds, including those we find problematic for cultural, political or architectural reasons.

Nationen, 1982.06.10 1

2. Asker og Bærums budstikke, 1989.09.18

## Flyvende tallerken» flyr fra Lysaker til Strand





I et hus som ligner mer på en romstasjon enn en bygning på Lysaker utenfor Oslo sitter den norske arkitekten Njål R. Eide og tegner det som kommer til bli verdens største, dyreste og mest moderne cruiseskip. Eide fikk oppdraget konkurranse med 40 andre ledende arkitekter verden over. Nationen har besøkt denne uvanlige mannen i det høyst uvanlige huset.

VSAKER: Som en flyvende tallerken vil hele hvonin ette og fly fra Lysaker til Strand, hvis arkitekt Niål R. Eide får det som han vil. I et eneste kiempeløft flytter han

Du har sikkert lagt merke til det vadratiske glasshuset som ligger om en romstasjon fra en fjern lanet ved E-18 når du kjører ennom Lysaker mot Oslo. Tung-afikken dundrer forbi i plaskregn enfor, men inne er det helt stille g trivelig. Glassveggene innehol-ler en gass som bidrar til dempe tøyen. Å sitte i arkitekt Njål R. ides kontor er som å sitte i friluft et skogholt på den ene siden, og ærmest midt i trafikken på den andre. Glassveggene lar verden utenfor bli en del av bygningen. Slik har det vært i ni år, men nå nå Eides «romstasjon» vekk på grunn av Lysaker-utbyggingen

eredt på flytting. Derfor bygget oret sitt slik at det kan

flyttes som en hel pakke, eller i deler. I løpet av noen timer kan hele huset fly som en flygende tallerken og lande en kilometer lenger vest, ved avkjøringen til Strand. Lignende bygninger står ved E-18, som restaurantene «By The Way» utenfor Tønsberg, og ved Sarps-

#### Optimist

- Jeg er optimist, men også «nøkternist». Det betyr at jeg rolig venter på en avgjørelse fra reguleringsvesenet i Bærum. Om jeg får flytte til Strand avgjøres nok om 14 dager. De foreløpige signaler nunen er positive, sier fra kon Njål R. Eide og lener seg ettertenk somt tilbake. Hans hvithårete hode har lenge fraktet ideer i skyt teltrafikk mellom Europa og Lys-aker. Verdensbyer på kontinentet gir praktiske vyer for alt fra hvor støvskjermene langs E-18 i

hele kontoret nå ti tonn og 125 kvadratme ter eller kranbil dersom kommunen godk

Bærum hurde være av glass i ste- hvor det er fys det for avskylige og høye sement-og tremurer, til Eides tegninger av for eksempel et cruiseskip med plass til 5000 mennesker. En flyt-ende by, designet på Lysaker.

på Strand Tenk deg en pyramide som egypterne laget. På vei inn i år to tusen vil Eide ha sin egen pyramide av glass. Den skal stå rett etter avkjøringen på Strand. Nesten midt i trafikkmaskinen. Der en vei går mot Stabekk, en ned mot sjøen og en mot Høvik, ligger et stort falle ferdig hus. Dette har Eide kjøpt. og vil rive, så hans pyramide kan strekke seg opp mot himmelen, med kontoret på toppen. - Du får bilstøy på alle kanter. Er ikke det

- Tvert om. Alt er slik jeg vil ha ten før han spa

som spandere på flytting av og bygging av det siste som k gen er relativt h - For ikke le

Side 11

en hel villa på hele huset over Jeg tror derfo problemer à le jong. Det kan ved at man lar på E-18 og tar pter gjør joh

- Jeg har i egen bak. For den første sor bygges lokk o utbyggingen ( må vi derfor f Research

1

1.1

# Njål R. Eide and Norwegian oil (*oljeeventyret*)

Having financed the expanding welfare state for almost sixty years, the petroleum business is by far Norway's most important industry. And although we mostly associate the large constructions in the North Sea with high-level engineering, they are equally important for architecture. This chapter explores Eide's contribution to improving the living conditions onboard the oil platforms, how he ended up in the business, and how the large-scale industry affected the office pavilion at Lysaker.



### 1.1.1 FINDING OIL

In May 1963, the Gerhardsen government proclaimed Norway's sovereignty over the Norwegian continental shelf after Philips Petroleum had asked for permission to explore the North Sea the previous year. The new law established that only the King (the government) could grant permits for exploration and extraction.

In 1969 the first substantial oil discovery was made. *Ekofisk* would become one of the largest oil fields ever found offshore, and with this find, the Norwegian "Oil-fairytale" officially began.<sup>1</sup> In the following years, major discoveries were made, and production from the Norwegian continental shelf was dominated by large fields such as Ekofisk, Statfjord, Oseberg, Gullfaks, and Troll. These fields have been, and still are, crucial for the development of the petroleum business in Norway.

In the initial phase, foreign companies dominated the exploration activities and were responsible for developing the first oil and gas fields. Gradually, Norwegian involvement increased as Norsk Hydro entered the scene. So did Saga Petroleum, a private Norwegian company established in 1972. Statoil was founded the same year with the state as the sole owner, and the principle of 50 percent state participation in every extraction permit was established. The swift intervention of the state reinsured that a particular Norwegian "social democratic approach" governed the development of the petroleum business – the oil would benefit the community.

Energidepartementet, "Norsk oljehistorie på 5 minutter." Slik har Kvaerner Engineering's arkitekt Njål R. Eide skissert inn boligkvarteret på 6<sup>1</sup>/<sub>2</sub> etasjer som skal bygges inn i toppen av Condeep plattformen til Statfjord A feltet. Svære dimensjoner!

Ekofisk 2/4 Hotel

Kontakt med Kværnerkonser-

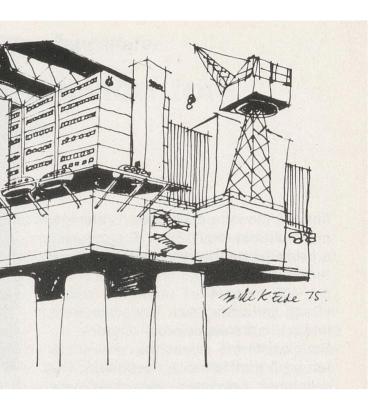
nets bedrifter, 1975 Nr. 2

3. 4 00

### 1.1.2 NJÅL R. EIDE AND THE PLATFORMS

In 1974, after having worked 17 years for the influential architectural office of F. S. Platou, mainly with larger naval projects, Eide decided to leave to start his own company in Maries vei in Høvik. One year later, he moved premises and rented a space at Kværner Engineering in Lysaker. The same year, Kvaerner Engineering was assigned the residential quarter design task on MOBIL's Condeep platform for the Statfjord A field in the North Sea. Because of his naval design experience from F. S. Platou, Kvaerner Engineering engaged Njål R. Eide as the architect for professional handling, leading to a collaboration that would last for ten years.

Improved living conditions quickly became important on the platforms, and Eide was commissioned to respond to the challenges. Kåre Storvik, a close friend and one of Eide's colleagues at Kværner Engineering, wrote in an obituary in memory of Njål Eide in *Aftenposten* in 2016 that Njål was instrumental in the first efforts to create good living conditions on board the platforms. Storvik had, on a rig visit to the Gulf of Mexico in 1972,



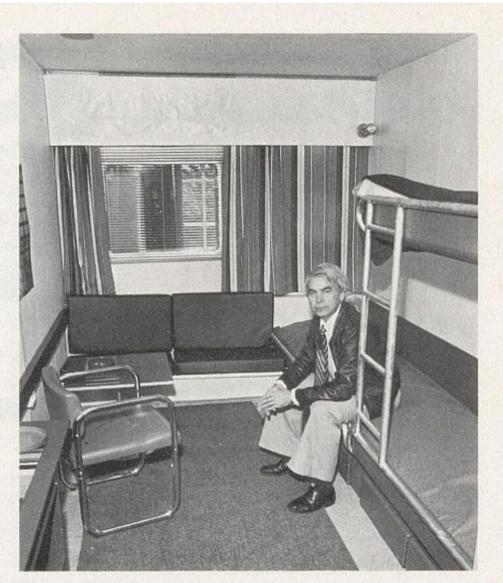
learned that they had cabins for up to 16 men and showers and toilets in the hallway. They even practiced "hot sheeting," meaning people on different shifts shared a bed between them. This was not considered good enough for the Norwegian sea, and in 1975, Eide, together with Kværner Engineering, was commissioned to develop a new general housing system for offshore oil platforms together with the company Vigor from Orkanger. The intention was to design simple yet comfortable living quarters. It consisted of modular sections that could be added together according to the need for space on each platform. Particular emphasis was placed on satisfying the requirements for comfort and fire safety. The sections could be connected in length, width, and height.<sup>2</sup> The housing modules were used the same year on the MOBIL Condeep platform in the Statfjord A field in a flotel (floating hotel) named Polymariner. It was constructed as 14 standard modules and included 79 four-person rooms, with the possibility to house 600 people.

The flotel was built in record time – in just three and a half months. The modules were prefabricated and assembled on a platform at Framnæs Mekaniske Verksted in Sandefjord before they were towed out to the Statfjord field.<sup>3</sup> In the magazine *Kontakt med Kværnerkonsernets bedrifter* from 1975, we can see Eide's solution of a fully furnished crew room as it would appear on board the Condeep platform. The prototype was made 1:1 and with the exact interior that the cabins would have. A full-scale, seven-ton room module was even brought all the way to the oil fair in Houston with great success.<sup>4</sup> When interviewed about the modules in the same magazine, Eide stated as follows: "It is in the matter's nature that the cabins are not luxuriously equipped, but practical and pleasant – even if the floor area is somewhat limited."

2. Adresseavisen 1976.11.20, 11.

 Kværner industrier, Kontakt med Kværnerkonsernets bedrifter.
 1975 Nr. 2, 21.

4. Aftenposten 2016.12.13, 32.



Slik blir mannskapsrommene i Condeep'en på Statfjord A feltet. Enkelt, men praktisk. Bildet er fra Kvaerner Engineering's prototype-lugar. Sittende på køyen arkitekt Njål R. Eide.

 Kværner industrier, Kontakt med Kværnerkonsernets bedrifter.
 1975 Nr. 2, 21.

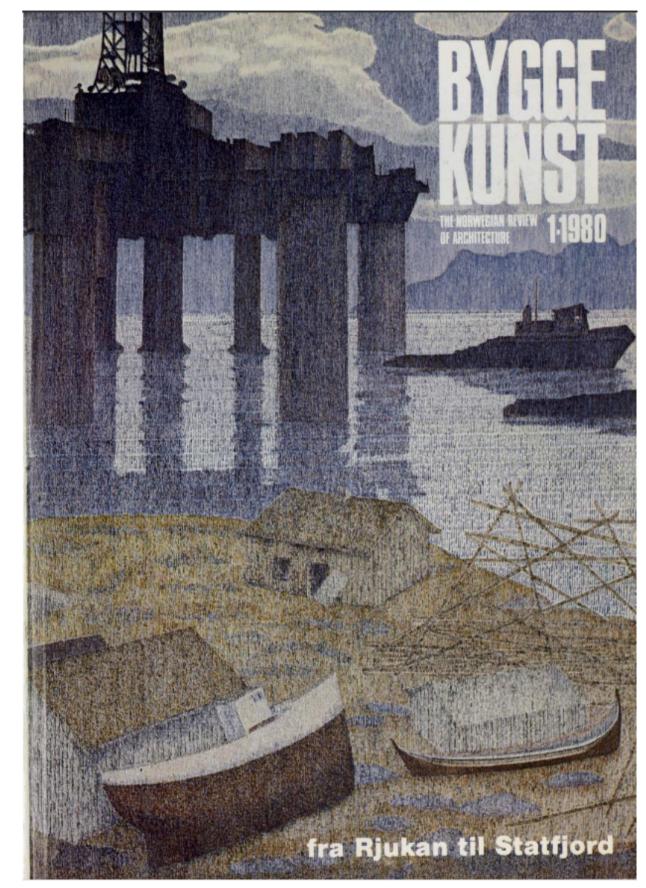
### 1.1.3 PLATFORM VILLAGE

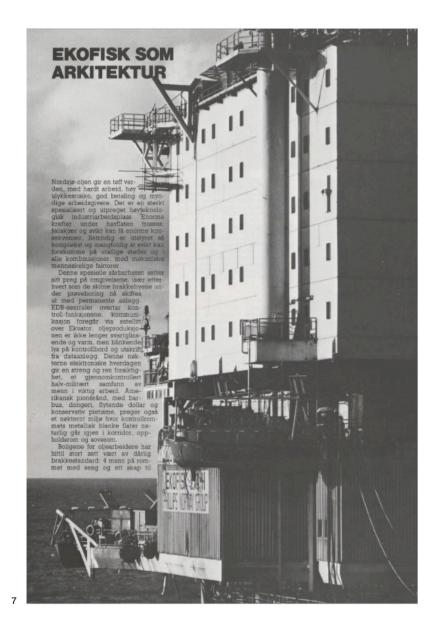
Even if the Norwegian platforms already were among the most comfortable in the world, it was not sufficient. In January 1980, only two months before the fatal Alexander Kielland-accident, *Byggekunst*, the Norwegian review of architecture, dedicated a whole issue to the oil industry. The introduction read as follows: "The North Sea is Norway's largest workplace. Only Ekofisk has as many residents as a medium-sized Norwegian town. But the environment and the architecture have been given little care and consideration. This must become a more important field of work in the next ten years, also for architects. *Byggekunst* has looked at the situation."<sup>5</sup> (fig 8)

In *Byggekunst*, Peter Butenschøn argues that the housing for the oil workers this far has been chiefly of poor barracks standard: 4 men in a room with a bed and one cupboard for each, a bathroom for each corridor, and insufficient space for wet and dirty work clothes. Many rooms are windowless, facing the installation and exposed to noise from pumps, machines, and helicopters.

He argues that in American business philosophy such conditions are easy to treat: Environmental disadvantages are financially compensated. But under Norwegian legislation, such a solution is not as straightforward, and the tax rules reduce the benefits.<sup>6</sup> Butenschøn is very critical, but he singles out one housing example as exemplary: the Ekofisk-hotel 2/4 H. The hotel was installed at Ekofisk in 1977 and served as accommodation for senior officials and workers with long seniority. All rooms had windows facing the sea with triple glazing and wall-to-wall carpeting. The platform and modules were built by Byggekunst =, 1980, 7.
 Byggekunst =, 13.

- Front cover. Byggekunst = The Norwegian review of architecture. 1980 Vol. 62 Nr. 1
- Facsimile. Byggekunst = The Norwegian review of architecture. 1980 Vol. 62 Nr. 1
- Facsimile. Byggekunst = The Norwegian review of architecture. 1980 Vol. 62 Nr. 1







# Norges første offshore-arkitekt NJÅL R. EIDE: Arkitekten skal ivareta det rent menneskelige Går det mot enmannsrom i Nordsjøen?

Av Hellick O. Haugen

- Etter vår mening bør arkitektene komme inn i første fase av prosjekteringen av holigkvarterene på offshore-installasionene. Arkitekter er

Arkitekter vil ha mer

total oversikt over et

inn i fremtiden, understreker Njål Første norske

sjonene. Arkitekter er trenet i å lage gode disposisjonsplaner for anlegg, mens ingeni-ører ikke nødvendig-vis er trenet i dette. Arkitekter vil ha mer

offshore-arkitekt

være forskjellige, sier Eide De mange Nordsiø-oppdrag

Njál R. Eide var den første norske arkitekt som kom inn i off-shorevirksomheten. Det skjedde allerede i 1973. Årsaken var hans arbeide med Den norske Ameri-kalinjes daværende cruiseskip

Eide har vært både delkonsu lent og helansvarlig for en rekke v Nordsjøens boligkvarterer si-en starten i de tidlige syttiår. Det første oppdraget gjaldt Ekofisk som alt dreiet seg om den-gang. Den aller førte oppgaven gjaldt Cod-feltet. Siden fulgte opp-drag på «Statfjord A», Ekofisk «Statfjord B» og «Statfjord so Odin og Heim-

ger til grunn for begge typer prosjekter. Standard og produktom-råder skulle imidlertid vise seg å

Forts, side 4



Arkitekt MNAL/MNIL Njål R. Eide foran inngangen til den særp de kontorbygningen av stål, glass sog aluminium på Lysaker hvor han firma delvis holder til. Med seg har han to modeller som på hver si måte karakteriserer hans virksomhet: Skipsmodellen er en tidlig mo dell av verdens største spesialbygde cruiseskip på 40 000 tonn som byg ges for det britiske storrederi Peninsular & Oriental ved Wärtsila-verf ges for det britiske storrederi Peninsular & Oriental ved Wärtsila-verf. tet i Helsinki, og som skal settes inn i cruise på den amerikanske vest-kyst i oktober 1984. Hele skipets ytre profil og innredning utformes av Eide. Det skal ta 1200 passasjerer, får en meget høy standard med alle 600 lugarer på utsiden og 150 med egne terasser. Plattformmodellen er en Tripod Quarters plattform som Eide utvik-let for Kværner Engineering som et alternativ til den konstruksjon som ble valgt for Ekofisk-hotellet. Eides design legger spesiell sterk vekt på rekreasjonsområdet – triangelformet – med svømmebasseng og and-re forlikter.

Aker Verdal, with Kvaerner Engineering as the constructor. One of the architects behind the floating hotel was Njål Reidar Eide. His collaboration partners were Norconsult A.S, with architect MNAL Steinar Rosenvinge in charge, in close collaboration with architects Tor Jacobsen and F.S. Platou AS.<sup>7</sup>

In the early 1980s, after of the fatal Alexander Kielland-accident and probably also due to the critique published in Byggekunst in 1980, the condition of the platforms improved rapidly. In 1983, Byggekunst published a new article titled "The architect who will take care of the purely humane - is it heading towards single rooms in the North Sea? - Norway's first Offshore architect NJÅL R. EIDE."<sup>8</sup> Eide had the prior year been the architect behind the so-called "oil temple," Polycastle. Prefabricated, fully furnished one-room modules, like the ones used at the Polymariner-rig, were used as building blocks. The hotel was created for people to rest, sleep, and eat between shifts. The technical director of the Rasmussen Group stated that the safety requirements of the 1980s had to be strict, while Eide argued that there must also be room for human well-being in-between all the technology. This was reflected in contemporary soluByggenytt (Oslo 1962 trykt utg.) Norwegian building news. 1983 Vol. 28 Nr. 3

Byggekunst =, 14. 7. Byggenytt =, 4.

Fædrelandsvennen 1982.07.10, 9. 20. Fædrelandsvennen 1982.07.10

20. 11. Byggenytt =, 4.

10

tions: 7,000 square meters on three decks with two-person cabins in red, green, and yellow and with private bathrooms and wall-to-wall carpets in bright corridors. Sauna, fitness landscape, recreation salons, fairs, galleys, library, TV room, cinema hall, and strong, bright, and clean colors on floors, walls, and ceilings made it a friendly environment for the workers.9

In an interview about Polycastle in Fædrelandsvennen in 1982, Eide is asked if he has made it too nice for the workers and if bright colors is a smart choice in such an oily environment. Eide replied: - "Experience in the oil industry at sea, at least in the Norwegian sector, indicates that people keep their environment clean when all the surroundings invite them to do so. After all, everything is gray at sea, so the sea must have an addition of color... People should feel like dumping down wherever they feel like it." Eide refers to the rig as a "village at sea."<sup>10</sup> His philosophy was that as opposed to considering the workers as tools, they should be able to enjoy their time surrounded by a pleasant environment, and benefits should be distributed equally -this way, everyone would also do a better job. He would also bring this urbanistic mindset with him both to land and into the cruise ship business.

The living modules at Polycastle consisted of three main components: A basic structure made of steel, a secondary construction, primarily including parts such as facades, walls and roof cladding, insulation, internal partitions, doors, and prefabricated bathroom units, and the third layer including furniture and other furnishings.<sup>11</sup> A system recognizable in the office pavilion.

### **1.1.4 INITIATING THE OFFICE PAVILION**

As his company grew in line with assignments in the North Sea, the need for more space became apparent. In 1978, when Kværner Engineering started building their new office complex, the construction of the office pavilion was initiated as a place for him and his employees to work. Eide claims it was built as a mock-up to demonstrate building modules in steel, aluminum, glass, and other non-combustible materials, designed for use in particular building purposes and offshore contexts. In an interview with Asker og Bærums Budstikke in 1980, he argued that the building was based on steel construction, both because he was "concerned with imparting knowledge about steel as a building material" and because he wanted to "test whether his work with living guarters in the North Sea also could be adapted on land."12 It was an experiment on many levels: construction, materials, and shape.

The steel structure was produced by Kværner Brug A/S, which was part of Kværner Industrier together with Kværner Engineering.<sup>13</sup> The project, including prefabrication, planning, and mounting, was accomplished in just six months, using the same industrial production methods as the oil platforms. It was built on a rented property right next to the renowned Klaveness-building, in Gamle Drammensveien 312. The Klaveness-building was designed in 1933 by Magnus Poulsson for the shipping company A.F. Klaveness, being an early example of functionalism in Norway. The building towered prominently at Lysaker, a fact that possibly affected the status of the office pavilion.

The pavilion was placed in between the trees on the site, sitting on four poles, "floating" 60 cm above the ground. The main

Asker og Bærums budstikke 1980.02.26, 16. 13. Kværner Brug, was an industrial enterprise in Lodalen, southeast of Oslo, between Etterstad and Ekeberg. The company was founded in 1853 by merchant Oluf Onsum. The company's first products were castings, ovens, and stoves. Gradually, machines and building structures were added to the production program on an increasingly large scale. The original furnace foundry was separated in 1917 and became the basis for the later Jøtul AS. Kvaerner's business spread outwards. In 1999, the original Kvaerner in Lodalen was closed. Production then consisted of hydropower turbines, steam and gas turbines, turbine tubes, etc., ship equipment, tanks, and steel structures, mainly for offshore use. "Kværner Brug - Oslo Byleksikon."

12

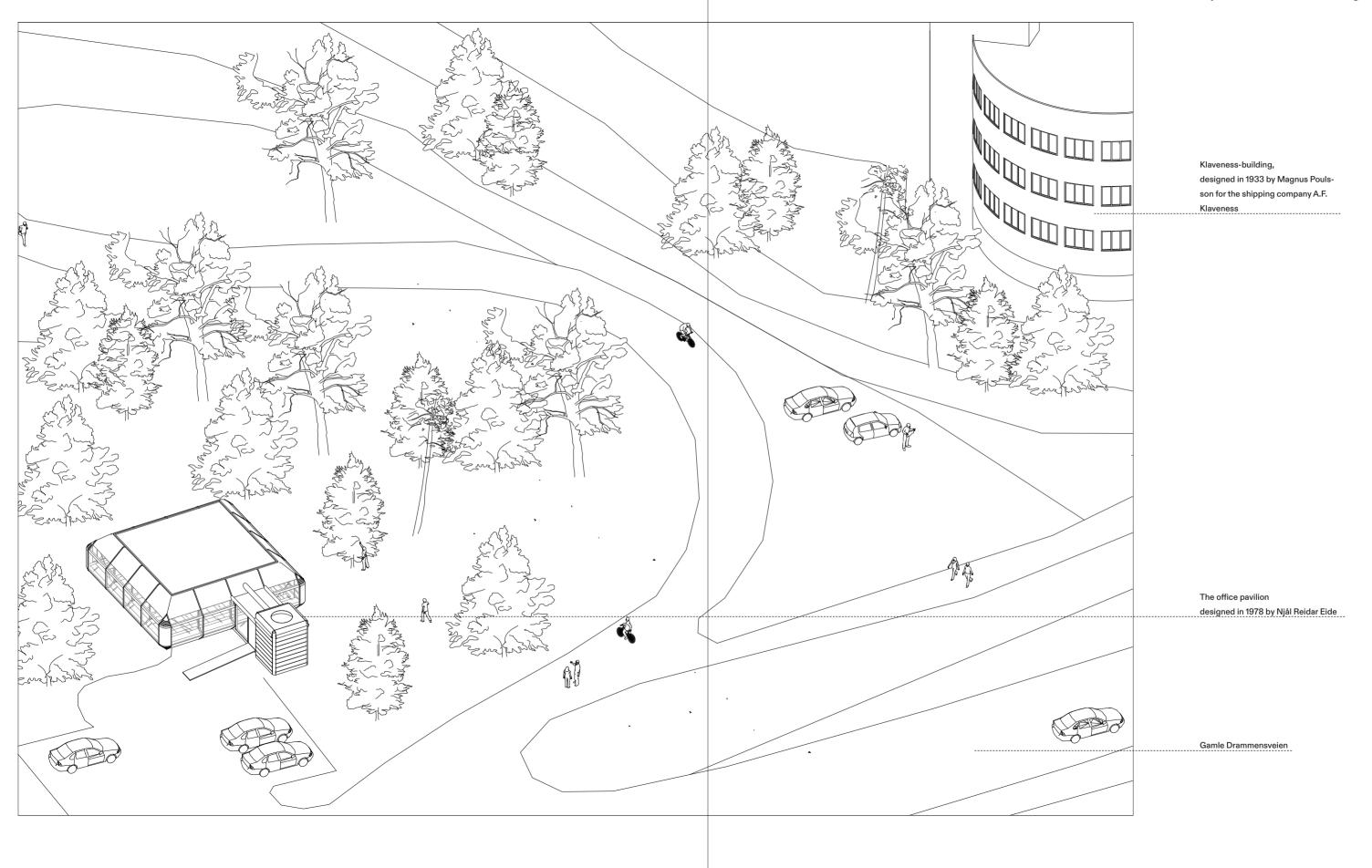


Office pavilion, 1978-1990 10.

volume consisted of a 107 square meter open room with a free ceiling span. The whole building was built of steel modules, with a service module connected to it, containing an entrance, WC, technical installations, and a small kitchen.

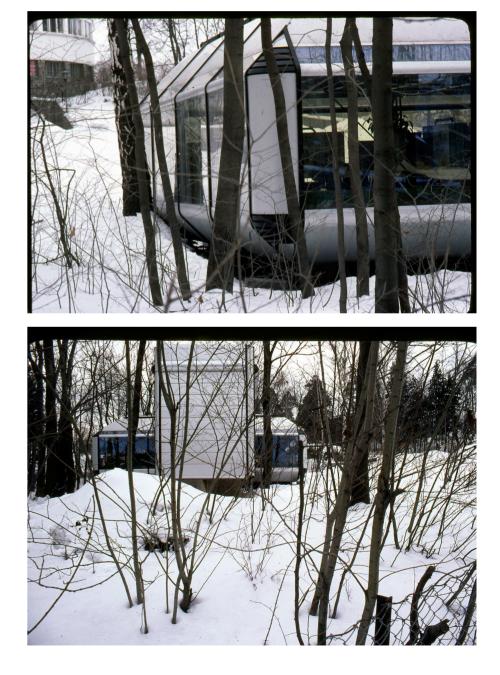
Equivalent to the offshore living modules, the office pavilion was designed to facilitate an expansion in square meters and staff, reflecting a dream of an ever-growing industry. And for many years, Eide was right, as his career at sea had just begun.

1



Njål. R. Eide and Norwegian oil











### 1.1.5 ENTERING THE CRUISE SHIP INDUSTRY

Parallel with his many assignments in the North Sea, Eide's career as a cruise ship designer was growing rapidly. In 1991, only one year after the spectacular moving operation, he had between 16 and 20 employees, all located in the "new" office pavilion at Lysaker. The cruise ship business was, and still is, a large part of Norwegian tourism and export, but it remains an almost unresearched topic in architectural history. With this subchapter, I aim to briefly introduce how the Norwegian cruise ship business arose, how Njål R. Eide contributed to it, and how the office pavilion was directly and indirectly influenced by the industry.

There are today, apparently more Norwegian descendants in America than there are Norwegians in Norway.<sup>14</sup> Norwegians emigrated at a rate that was 3.5 times greater than the average for the whole of Europe, and the route to America was traveled by boat. Freedom of religion, an increase in the Norwegian population, war, political persecution, and the "American Dream" are all reasons why Norwegians emigrated to the United States in such large numbers. Of the estimated 1 million Norwegians who emigrated from the country, most people traveled between 1865 and 1930. When mass emigration began around 1865, many argued for establishing a national shipping company with a direct connection between Norway and the United States, and years later, on August 27, 1910, Den Norske Amerikalinje (NAL) was founded. The two first official NAL ships, Kristianiafjord and Bergensfjord, arrived between May and September 1913, delivered from the Mersey shipyard Cammell Laird.<sup>15</sup>

The financial results of NAL after the first year of operation proved better than anticipated, and the First World War gave the line a truly flying start. As a non-commercial link across the Atlantic, the line played an important part in the communication between Europe and America. However,

Mørkhagen, *Farvel Norge*, 9.
 Kolltveit and Norsk sjøfartsmuseum, *Amerikabåtene*, 110.



after eleven years of sailing back and forth, both USA and Canada imposed drastic reductions in their immigration quotas in 1924, leading to the "traditional" emigrant traffic becoming less important. In fact, from 1930 onwards, more people traveled eastwards than westwards with NAL. Plans for new passenger tonnage were shelved while Stavangerfjord and Bergensfjord commuted regularly back and forth, offering two sailings a month in each direction. And to exploit capacity during slack periods, NAL, like many other shipping lines, began pleasure cruising, which quickly became a success.

All in all, NAL sailed eight passenger ships, where the two latest, Sagafjord (1965–1983) and Vistafjord (1973-1984), represented a complete shift in the industry and play an important role in this story. When Sagafjord, the seventh passenger liner for NAL, arrived in 1965, it was obvious that the company had completely shifted its focus toward the worldwide luxury cruising market - also a way to compete against airline traffic. As the experience became more important than the destination, so did the design. Amerikalinjen's technical department, under the direction of Kaare Haug, was responsible for the hull form and exterior of Sagafjord, while the well-reputed Norwegian architect F. S. Platou was mainly responsible for the interior. Eide, who had worked for the firm for almost ten years, was given great responsibility. He brought with him experience into Sagafjord

from the work he had done for the company five years previously, especially with the design of Europafergen, an 88-meter-long ship, with a design and interior far ahead relating to the standard of the time.<sup>16</sup>

By the time Vistafjord, the eighth, last, and largest of all NAL passenger liners was delivered from Newcastle in May 1973, it was clear that the ships were now built solely for luxury cruising. Some would even argue it should hardly be listed as an "Amerikabåt" at all, and with this, a new era began.<sup>17</sup> The world was ready for luxury cruising, and Njål R. Eide had boarded what would become a huge career at sea. NAL's passenger ships were considered the undisputed "flagships" in the merchant fleet and gained a lot of attention. They were often seen in newspapers, the weekly press, and all over the country. There was undoubtedly optimism in the air, and many famous architects not only allowed themselves to be impressed: they wanted to be a part of it. In Bergen, Hugo Kaltenborg was commissioned by director Ths. Falch in the Bergen Steamship Company after he had first criticized the design of a new Hurtigbåt. In Oslo, Arnstein Arneberg worked for Amerikalinjen, as did F.S. Platou. Finn Nilsson, Geir Grung, Petter Yran, Bjørn Storbraaten, Arne Johansen, Finn Falkum-Hansen, and Per Høydahl were together with Eide among many architects landing big jobs in the cruise ship business.<sup>18</sup>

- 16. Aastad and Aastad, Ukens byggenytt, 13.
- 17. Kolltveit and Norsk sjøfartsmuseum, *Amerikabåtene*, 112.
- Kolltveit, Eventyret om norsk cruisefart, 577.

#### Poster, Den Norske Ameriakalinien.

- 19. Interior shot of Sagafjord.
- 20. The architects behind Sagafjord.





The designers and interior decorators of the ship from left: Han van Tienhoven (Dutch,) Finn Nilsson (Norwegian,) Kaare Haug, Technical Director of the Norwegian America Line, Kay Kørbing (Danish,) Frithjof Platou, who co-ordinated the interior designs with Njaal Eide. The two last named Norwegians.



19

Research

Ι

# 1.2 Monuments on the move



Pry

 Husflytt fra Forøya, 1965, by Jan Gunnar Engvig.
 Beryl A slepes ut for å ta fatt på oljeeventyert, by Knut S Vindfallet.

22



#### 1.2.1 LYSAKERLOKKET, 1990

In 1990 the process of building a 250-meter-long concrete lid over the pre-existing highway Drammensveien at Lysaker started. Two years later, the 150 million NOK traffic machine opened, and 3500 square meters of office space, with Nielsen-Nielsen in the lead, appeared on top of the lid.<sup>19</sup> Art historian Wenche Wolle referred to them in a comment in Aftenposten in 1998 as parrots, or banal translations, unsuccessfully imitating the circular shape of the renowned Klaveness-building, which was one of few buildings left after the extensive intervention. Lysakerlokket was an infrastructural project of large scale, and many buildings had to give way. At least twenty buildings were demolished, but the office pavilion had, as we know, mobile properties to avoid obliteration.

For twelve years, the office pavilion had been standing in Gamle Drammensveien 312, right next to Klaveness. But in 1990, it was decided to move it as the construction of Lysakerlokket was about to start. On Tuesday, July 10th, the three-lane highway, E18, connecting Oslo to the south of Norway, was blocked for five hours in the middle of the night while a spectacular moving operation took place. The 107 square meter steel pavilion was lifted off its fundament by a large crane, placed on a truck, and moved 700 meters down the highway. In its new location, Arnstein Arnebergsvei 31, it landed on a "glass pyramid," in Eide's own words. In September 1989, Asker & Bærum Budstikke published an article describing the new fundament, which at the time, moving towards the millennium turn, was seen as genuinely futuristic: "Imagine a pyramid like the Egyptians made. Heading into year 2000, Eide will soon have his own pyramid in glass."21

Aftenposten 1993.04.01, 27.
 Aftenposten 1998.04.15, 16.

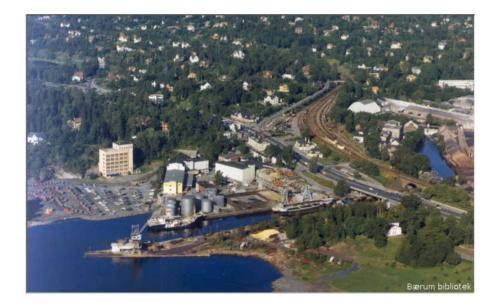
 Asker og Bærums budstikke 1989.09.18, 7.



I sakte fart beveget Njål R. Eides arkitektkontor seg i natt fra Drammensveien 312 på Lysaker til sin nye tomt i det gamle Lysaker-krysset. (Foto: Anita Østereng)

Det var noe science fiction-aktig over situasjonen på E 18 på Lysaker i natt. Det romskips-lignende huset til Njål R. Eides arkitektkontor, som i en del år har hatt tilhold i Drammensveien 312, ble i løpet av noen timer flyttet til det gamle Lysaker-krysset noen hundre meter lenger vestover. For å få til flyttingen var det

23. "House night-blocked E18" Facsimile, *Asker og Bærums budstikke*, 1990.06.10



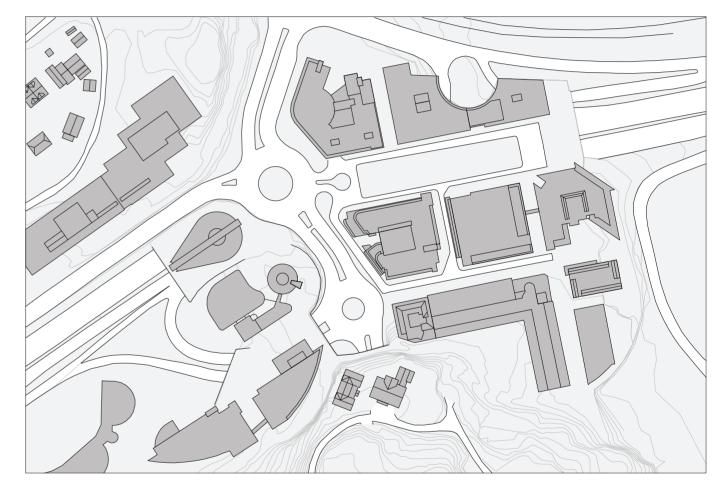
24. Photo of Lysaker centre, 1965



Map, Lysaker before the lid, no scale



Lysakerlokket,
 2011, by Karl
 Braanaas.



Map, Lysaker after the lid, no scale

Eide was driven by a passion for urbanism in all his projects on land and at sea. He wrote several "letters to the editor" (fig 35) suggesting pedestrian streets and removing traffic from busy areas in different cities.<sup>22</sup> And in an interview in *Aftenposten*, 1980, ten years before its execution, Eide argued that the heavy traffic almost killed Lysaker and that they should place a sizeable concrete lid over Drammensveien to introduce a friendly and "pollution-free" business environment.<sup>23</sup> Eide knew that this proposition would require his office to relocate, but as it rested only on four fundament pillars in its first location, it was ready to do so.

Despite the intriguing shape of the new fundament, when studying it closer, something seems strange. It's a paradox how the building, with its new "glass pyramid" lost parts of its mobile qualities and appeared more permanent. Especially when we consider that the building only received temporary approval when it moved to Arnstein Arnebergsvei 31 and once again rested in a plot with an unknown future ahead.<sup>24</sup>

Why would Njål R. Eide AS place the movable pavilion on such a permanent new ground floor? This is a topic further reflected in chapter 1.3.4.

- 22. *Aftenposten*, torsdag 10. januar 1980
- 23. Aftenposten 1980.03.19, 20.
- 24. Midlertidig godkjennelse og approbasjonsbetingelser for flytting av kontorbygg på Gnr.
  41 BNR. 218. Bærum Kommune, 1990.05.08



- 26. Photo showing the office pavillion before the move
- 27. Photo showing the office pavilion after the move
- 28. Facsimile, Asker og Bærums budstikke, 1990.06.10





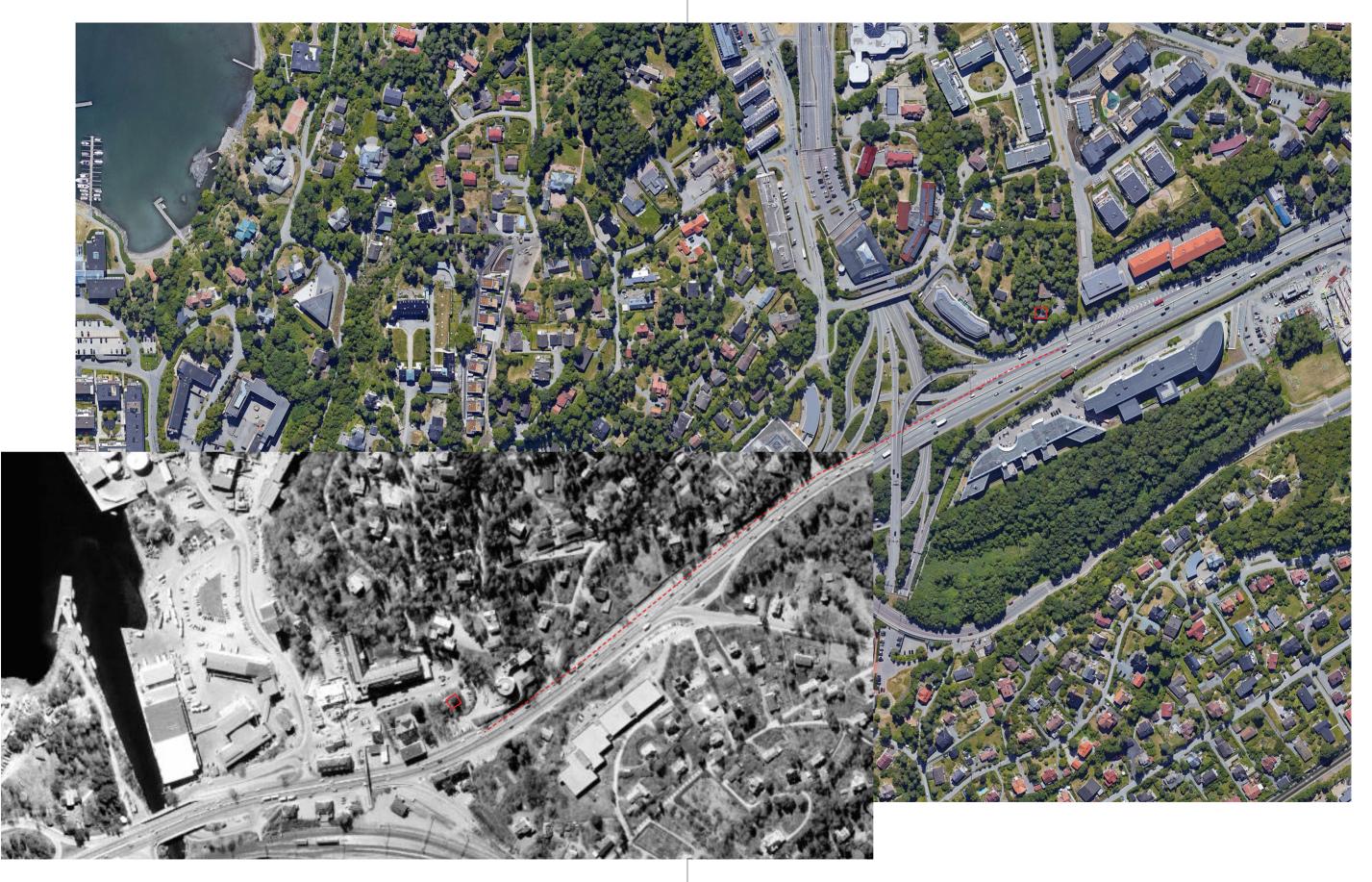


Office pavilion Gamle Drammensveien 312 \_\_\_\_1978-1990

Office pavilion Arnstein Arnebergs vei 31 1990-2023



I

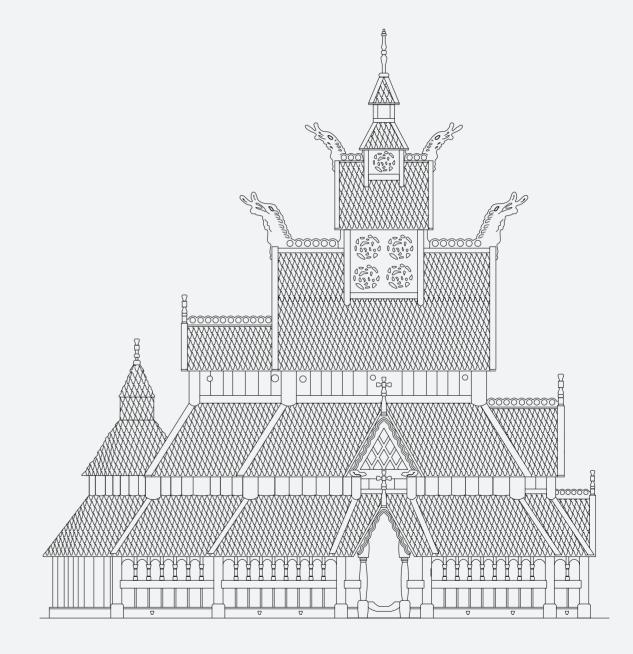


### 1.2.2 MOVEMENT OF HERITAGE OBJECTS: A KNOWN PRESERVATION STRATEGY

The tale of the movable office pavilion can be understood in light of the long history of heritage objects on the move, where preservation by relocation has been a strategy ever since the ambitious attempts to save national treasures like stave churches in the 19th century. A classic example of this is Gol Stavkirke, now to be found at Bygdøy. Towards the end of the 1870s, the congregation in Gol - a municipality in mid-Norway - desired a larger and more contemporary church than the old stave church, dating from around the year 1200. Fortidsminneforeningen encouraged the congregation to preserve the stave church on site, but they would rather demolish it to make money by selling the materials. In the end, Fortidsminneforeningen bought the church for NOK 200 and promised to move it. This coincided with the opening of the Kong Oscar II collection in Bygdøy in 1881, and they found an available plot for the church. Kong Oscar II's collection would later merge with Folkemuseet and is to this day considered the world's first open-air museum.

Open-air museums are often subject to criticism because buildings are considered best protected at their original plot – only there can a building fully retain its value as a reference object for future research. However, when a building is moved (especially to a museum), on-site conservation is rarely an appropriate option, and the houses are usually already approved for demolition.<sup>25</sup> In other words, if cultural monuments are moved, it is often an act of emergency protection. Lars Roede argues in the article "Flytting – forkastelig eller forsvarlig" from 1999 that moving as a rescue operation can quickly become a self-destructive position for the museums, where the museum can 25. Fortidsminneforeningen, Fortidsvern: (2005), 17.

Elevation, Gol Stave Church, Bygdøy



"become pure asylum reception centers that passively accept the wreckage after the cultural heritage has suffered defeat."<sup>26</sup> A notable example is how Maihaugen, an open-air museum in Lillehammer, was over-used in the 1970s as a justification for obtaining permission to demolish older buildings that were in the way of development. Because the residents of Lillehammer knew that the museum would rescue the cultural monuments, they would use it as an argument for getting a permit – a way for them to have it both ways.<sup>27</sup>

Small and large structures have been moved through history, and maybe the time has come to take this method more seriously as a natural alternative to permanent solutions, especially for structures in endangered environments or with mobility incorporated into their design. There is a need for alternative caretaking strategies if even more buildings are to be preserved. *Ex situ conservation*, a term employed in biology, refers to the protection of different endangered plant- or animal species outside of their natural habitat. Examples are zoological parks or wildlife safaris, while an example closer to home is the global seed bank in Svalbard. In this project, the Folk Museum is interpreted as the ex-situ place of preservation – an artificial environment imitating a natural one that is wholly curated and taken care of by specialists. 26. Roede, "Flytting - Forkastelig Eller Forsvarlig?"

27. Oral Source: Kjell Marius Mathisen, antiquarian at Maihaugen Open-Air Museum



A more recent example is from Northern Sweden. A mining city called Kiruna must relocate, building by building, because of geological instability caused by the mine. The city is currently on the move, approximately two miles to the east.

### Monuments on the move

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Research

# 1.3 Built to move: prefabrication, modules, and systems.

Today, prefabrication sometimes carries negative connotations like uniformity and monotony, despite the fact that prefabrication and building with modules have a long history, starting with the Nomads thousands of years ago. In Norway, log buildings (laftebygg) were the dominant building method throughout the Middle Ages and until the end of the 19th century. Reusing and relocating such buildings were an essential part of Norwegian building practice. It was typical for the traditional log house to be moved from one farm to another, for example, in connection with inheritance settlements. The buildings were mobile objects almost comparable to furniture and other fixtures. Log buildings are also by many considered the beginning of open-air museums, which first arose in Scandinavia at the end of the 19th century as a natural result of the tradition of moving and rebuilding laftebygg.

In the 1960s, 70s, and 80s, however, although it was not a new method, prefabrication became a symbol of the future, where elements of industry and technology were incorporated into the DNA of building design. The office pavilion is a part of this, where modular thinking and factory-made components replaced traditional on-site craftsmanship.

> 30. Deconstructed laftebygg placed in storage at Folkemuseet



### 1.3.1 THE MOBILE CHARACTERISTICS OF EIDE'S OFFICE PAVILION

The office pavilion was "built according to a modular system, so that – on the day it needs to be moved – I can easily divide it into five sections and have it moved on regular trucks," Eide explained in an interview with *Asker og Bærums Budstikke* in 1980.<sup>28</sup> The building is based on a grid of 2,4 X 2,4 m, built of modules bolted together. In its form, materials, and system, the pavilion appeared as a fusion between architecture and transportation, making little impact on the ground. Initially, it was a building liberated from its context, built to be moved – resting temporarily on leased land.

With this, Eide followed futuristic modernists like Buckminster Fuller, Jean Prouvé, and Yona Friedman, who all engaged with modules and movable architecture. They had a fascination for automotive and aircraft production in common, and they saw the future of architecture in the mass production of industrially prefabricated buildings. The capsule-like experimental forms they developed had a connection to space travel, pop art, and the widespread idea in postwar architecture that "Mobility has become the characteristic of our period,"<sup>29</sup> as the English architects Alison and Peter Smithson put it.

As Even Smith Wergeland uncovers in his doctoral thesis, *From Utopia to Reality: The Motorway as a Work of Art*, Yona Friedman significantly impacted the Norwegian architectural debate. Friedman held a lecture at the Oslo Architects' Association in January 1964, and the same year his "l'Architecture mobile" was translated into Norwegian. The theories he introduces included visions where no fixed entities existed, as "all modules can be

- 28. Asker og Bærums budstikke 1980.02.26, 16.
- Smithson, Alison & Peter, "Mobility – Road systems", Architectural Design, vol. 126, October 1958, 385.
- Wergeland, From Utopia to Reality, 139.
- 31. Byggekunst =, 1984, 105.
- 32. Nationen 1982.07.10, 11

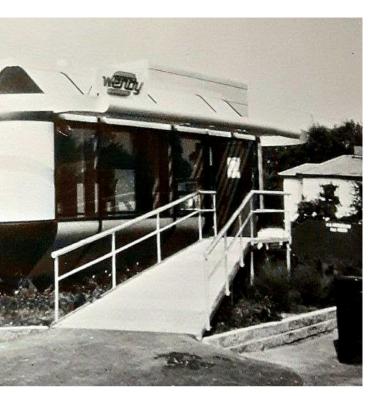
Wendy's restaurant in Hafslund. Found at facebook in a discussion of how much the inhabitants missed the place. moved, enlarged or minimized depending on changes that might occur as the city develops."<sup>30</sup> It's uncertain if any of the mentioned architects directly impacted Eide. Still, one decade after Friedman was in Oslo, Eide introduced his modular structure designed to facilitate expansion, where modules could be added infinitely.

### 1.3.2 OTHER EXAMPLES USING THE STRUCTURAL SYSTEM

Eide had big prospects for his building system and mentioned roadside inns, fast food restaurants, a petrol station, a cultural center for children, airport pavilions, schools, a bank, and office buildings being planned with specialized modules.<sup>31</sup> He also argued that the modules were a good solution for building homes. Nevertheless, in an interview with *Nationen* on July 10th, 1982, he stated that "as an architect, I don't want to see them scattered everywhere. A house like this must be deliberately placed in nature."<sup>32</sup>

Based on what my research has been able to uncover, only two of the many planned projects were realized: a Roadside Inn in Undrumsdal and a Wendy's restaurant in Hafslund. Of the two, only the Roadside inn still exists today.

Built to move: prefabrication, modules, and systems.



## «Romfart-restaurant» skal teste hurtigmat



(Av Rolf Kr. Nilsen) Det skal virkelig

(Av Rolf Kr. Nilsen) Det skal virkelig bli kamp om gatekjøkken-kundene på Hafslund i tiden som kommer! Veletablerte Rich Bar får nå to nabo-er som utvilsomt også kommer til å trekke folk: Tanken Grill, som får ser-veringssted på Shell-stasjonen, og Wen-dy A/S, som nå snart har ferdig sitt rom-fartøy-lignende hurtigmatkjøkken ved Esso-stasionen. Esso-stasionen.

- Jeg tror ikke det blir noe problem.

profilene forskjellige, sier prosjektleder Bjørn Mørki Wendy A/S. Bjørn Mørki Wendy A/S. Wendy A/S er spesielt uteressant. Det er Stabburet som står bak, og der

har man i mange är både produsert og telig drevet konsulentvirksomhet/kurs når det gjelder hurtigmat. Behovet for mer praktiske erfaringer har imidlertid teig spennende -bygningen-som vil gi plass for 25 kunder ved småbord. – Vi fant ut at vi gjerne ville kjenne markedet mer på pulsen, sier Bjørn Mørk. – Vi ville gjerne meldt seg, og nå får Østfold to Wendyhurtigmatkiøkkener. ser slår ut, skaffe oss skikkel

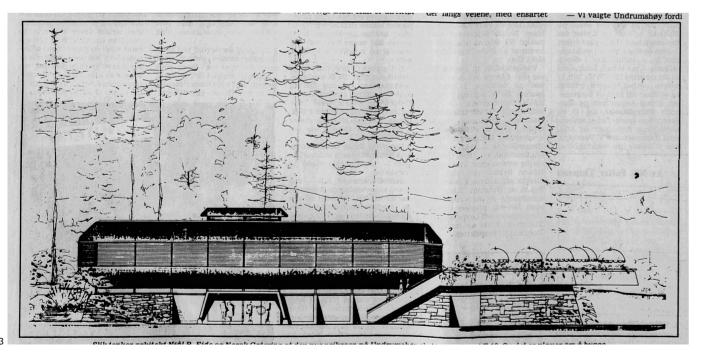
Det første Wendy-hurtigmat-kjøkkenet ble åpnet i Dronning-ensgate i Moss sentrum for en måneds tid siden, og det drives i startfasen av Bjørn Mørk,

At pr selv kjører i

Forts, nest siste side (1) 32

ass for 25 dieste

lan retter og tiltak og pri







k forestiller arkitektfirma Njål R. Eide A/S seg Lys er nye sentrum med gåga niljø. Butikkenes inngan

utstillings fra E18

- 32. Wendy's restaurant opening in Hafslund in 1984. Headline: "space travel`-restaurant will test fast food"
- 33. Roadside-in Undrumshøy, drawing
- 34. Roadside-in Undrumshøy, Google Streetview image
- 35. Eide's proposal for a new pedestrian area in Lysaker, 1980



Built to move: prefabrication, modules, and systems.

### Arkitektforslag efter oppdrag fra veisjefen: Gågatemiljø i Lysaker sentrum

En ny veibro over E18 forbit



# NR. 4 / 1991 KR. 65.-RANA BIELIOTEK HAV OG HAVN SKIPSARKITEKTUR STRANDEN, GRIEG GAARDEN, PUMPESTASJON, PLATOU 60 ÅR NORWEGIAN REVIEW OF ARCHITECTURE

Front cover of *Byggekunst* =The Norwegian review of architecture. 1991 Vol. 73 Nr. 4

#### **1.3.3 A FLOATING UTOPIA**

With a background in cruise ship design, Eide was no stranger to the "art of mobility."

It is common knowledge that cruise ships cause extreme C02 omissions, are vast and intrusive in the cityscape and generate massive "hit-and-run" tourism. As argued by Salvatore Settis in the book If Venice Dies, the ships are turning landmarks into shopping malls and theme parks.<sup>33</sup> However, between the 1960s and 90s, the mood was guite different. In 1991, Byggekunst issued an edition titled "Hav og Havn: Skipsarkitektur: Stranden, Grieg Gaarden, Pumpestasjon, Platou 60 år." In this issue, almost exclusively dedicated to the sea industry, the following six renowned Norwegian ship architects are praised in their articles: The architectural firm H. G. Finne & Co AS, Yran & Storbraaten, Njål R. Eide, Per Høyerdahl, Platou Architects AS, and Arnstein Arneberg AS, who came into the industry already in the 30s and later, like Eide, would get large assignments in connection with the oil industry.<sup>34</sup>

Eide explains how his cruise ship designs are planned based on avoiding "an impending urban planning nightmare at sea."35 Seen in light of his role in the urban planning debate, one can assume that he didn't want to repeat the same mistakes at sea as had been happening on land, namely traffic density and pollution. Njål Reidar Eide wished to design floating urbanistic masterpieces filled with optimism toward the future. In 1988, he introduced an atrium on the ship Sovereign of the Seas - the first one in the world. Cruise ship architects before him had argued that this architectonic intervention would steal too many valuable square meters. Eide argued that it would give so much

33. Settis. If Venice Dies. 34. Byggekunst =, 1991.

35. Byggekunst =, 190.

Built to move: prefabrication, modules, and systems.



back to the whole experience, increasing the total value. The ship should feel like a "real" city with different sightlines and varied experiences. Today one can find similar atriums on ships all around the world.

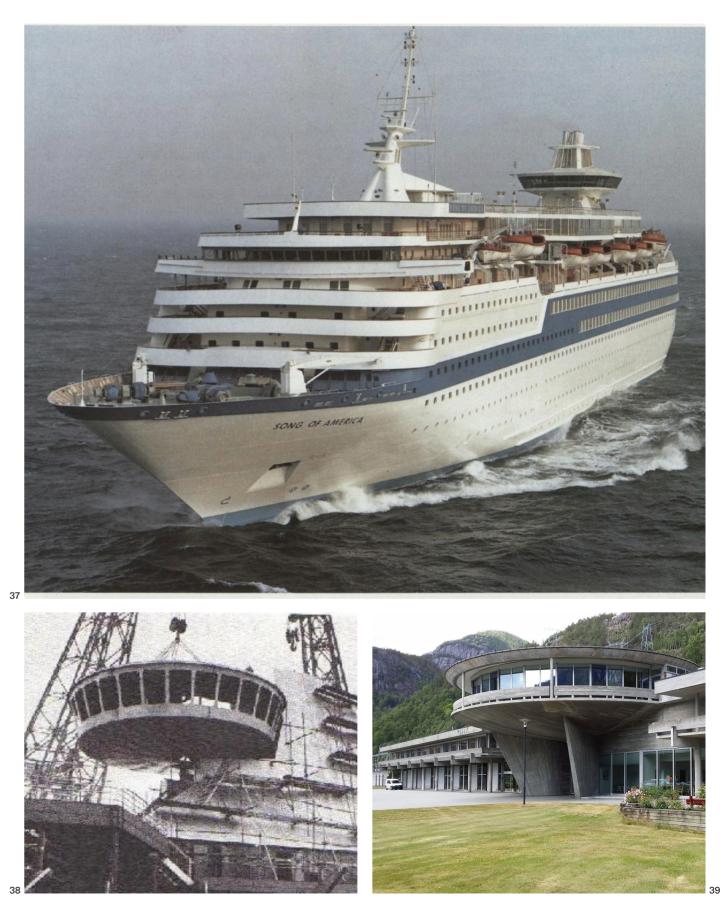
Throughout his career, Eide's firm was involved in designing approximately 40 cruise vessels, half of which were for Royal Caribbean Cruise Line, including the series Sovereign, Vision, and Voyager.<sup>36</sup> Of great importance was the cruise ship *Song of America*, launched in 1982, only four years after the office pavilion was built. Weighing 37,584 tons, the ship was the largest cruise ship built in 20 years. Several prominent Nordic architects were involved in the design, including Mogens Hammer, Finn Nilsson, and Geir Grung. The latter was responsible for the exterior design, including the chimney with the Viking Crown Salon.<sup>37</sup> One can recognize Grung's language in the vertical lines on the façade, and the Viking Crown Salon also reminds us of the Røldal-Suldal power station, designed in collaboration with Georg Jens Greve in 1967 for Norsk Hydro.

The "Viking Lounge" became the trademark room of the Royal Caribbean fleet. As we can see in the evolution of the ships (fig 40), there is a big jump between Song of Norway and Song of America, which was both Eide and Grung's first significant collaboration with the Royal Caribbean.  Kolltveit, Eventyret om norsk cruisefart, 466.
 Kolltveit, Skaugen 70 år i ship-

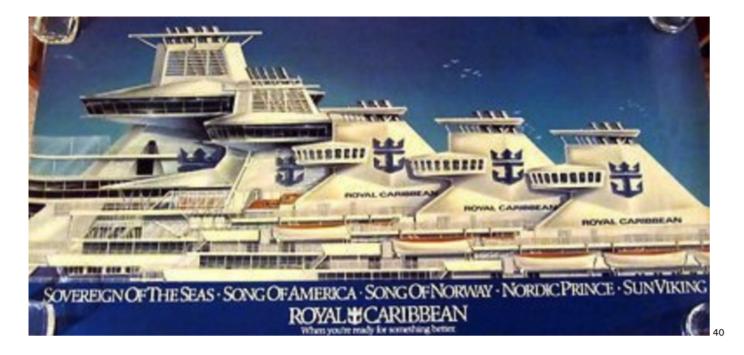
ping, 154.

37. Song of America (1986)

- Installation of the "Viking Lounge" in Song of Norway (1968)
- Røldal-Suldal power station, designed by Geir Grung and Georg Jens Greve in 1967 for Norsk Hydro



Built to move: prefabrication, modules, and systems.



#### 1.3.4 LOSING MOBILITY - HOW EIDE'S CRUISE SHIP EXPERIENCE INFLUENCED THE PAVILION

Several critical aspects of a building's history can be revealed through its different components. This curved beam (fig 41/42) marks the transition between the two floors and the transition between the construction before and after the move. When the building received a new fundament in 1990, the existing H-beam it rested on was clad with curved aluminum sheets, hiding the constructive elements. The beam was no longer only productive and rational; it became a part of the envelope and the esthetic profile.

In my analysis of the office pavilion, I will show how components, materials, ceilings, and façade elements are directly linked to his experience from the sea. In combination with his fast-growing career in cruise ship design, the shape of the viewing tower also can tell us something about the shape of the added fundament from 1990, previously referred to as the "glass pyramid." In shape, detailing, and overall aesthetics, the pavilion resembles something belonging to a cruise ship. The office pavilion went from being a mobile object to a grounded building. Based on my research and analysis, it is reasonable to assume that Njål Eide's architectural style and intention changed in line with his career. Evolution of the "Viking Lounge" in the Royal Caribbean cruise ships.



The first floor from 1978 depicts, to a greater extent, the petroleum business with a high level of technical performance, honest esthetic, and strong materials, while the ground floor from 1990, to a greater extent, depicts the cruise business, with a focus on decor and softer lines. When Njål R. Eide AS moved the building, they took a modular and high-tech steel pavilion and placed it on a new glass foundation, making it into something like a viewing tower on a cruise ship. As it challenged the mobility of the building, maybe the aesthetics had become more important than the original intention.

Built to move: prefabrication, modules, and systems.



I





Research

1.4

## A broader cultural context

The building balances rarity and representativeness. It has a distinctive shape, but as shown, it is not an unusual building of its time. Aluminum, steel, and glass products were becoming more advanced and available in various forms in the 1970s and 80s, alongside the rapid offshore development. In terms of appearance, the building is unusual and alludes to the avant-garde of the 60s. Still, if you look beneath the surface, a more conventional building system appears, based on standard prefabricated elements, laying the foundation of how we build today, making this building far more than just a unique individual case.



#### 1.4.1 HIGH-TECH ARCHITECTURE AND NORMAN FOSTER

In 1987, nine years after the office pavilion was built, a similar structure appeared as a contribution to the housing exhibition *"Bygg for fremtiden."* The exhibition was organized by *Foreningen Norske Boligutstillinger*<sup>38</sup> in collaboration with Bærum municipality and Løvenskiold-Vækerø. The residential area consisted of approximately 70 homes and three municipal buildings and structures, built based on four different project competitions among Norwegian architects, contractors, and model house manufacturers.<sup>39</sup> One building stood out: Jones and Stenstadvold Arkitekter had designed a high-tech home, better known as the "UFO at Bærums Verk." There is little written on the building, but an article from *Botrend* reads, "The house was to be future-oriented, and the result was a one-of-a-kind detached house. The house is built on the same principle as the oil platforms, i.e., a steel structure on four columns."<sup>40</sup>

The profiles, the oil platform reference, the ferry aesthetic in the interior(fig 45), and the construction all indicated that Eide's office pavilion had been a role model for the high-tech house. But after a conversation with Christen Stenstadvold, one of the architects behind the design, it emerged that they had <u>not</u> been inspired by Eide's design; rather, they had similar references.

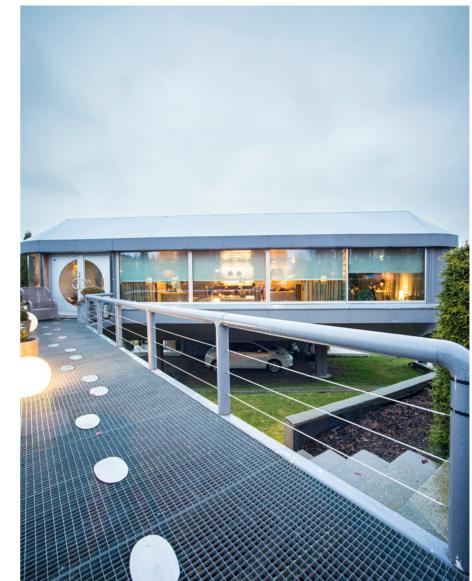
In 1976, the architectural firm Norman Foster designed an office building for Thomas Fredrik Olsen, a Norwegian shipowner. It was planned in a forest in Vestby and based on a steel structure with the intention not to leave an imprint on the ground. When comparing the drawings, the constructive systems look almost identical to both Eide's office pavilion and Jones and Stenstadvold's high-tech house. 38. Foreningen Norske Boligutstillinger was established in 1984 with the initiative to arrange housing exhibitions in collaboration with both private and public actors, following the model from Finland. The housing exhibitions were built as residential areas acting as an exhibition when they were built, whereas each building was to be sold and put into normal use as residential areas afterward. The goal was to promote good building practices, and rational housing constructions, as well as test new materials and construction methods.

> The following exhibitions were held in Norway: Bygg for Fremtiden, Hånes i Kristiansand, 1984 Bygg for Fremtiden, Sleiverud i Bærum, 1987 Bygg for Fremtiden, Godeset i Stavanger, 1989 Bo i Nord, Olsgård i Tromsø, 1990 "Bygg for fremtiden – lokalhisto-

 https://botrend.no/et-bygg-fremtiden/:

riewiki no."

39.



The High tech house in Bærum, photo by Magnus Ross, 2022

#### A broader cultural context

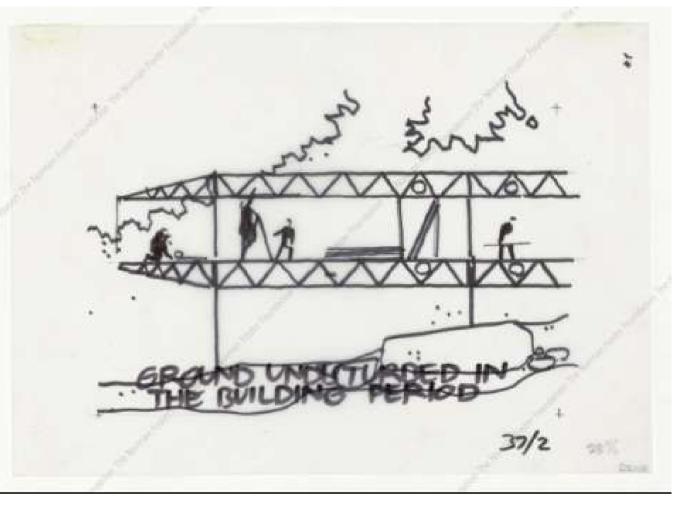
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Christen Stenstadvold and his college John Jones had worked for Norman Foster from the mid-60s to the late 70s, where at least Stenstavold was involved in the project for Fred Olsen, and he might have brought with him the idea of the high-tech house from that experience.<sup>41</sup> As far as I know, Eide had nothing to do with Foster, but according to Stenstadvold, a colleague of theirs from Foster named John Calvert started working for Eide around the time he designed the office pavilion.<sup>42</sup> We will never know who put pen to paper, but the story adds up.

Norman Foster was a leading figure in the movement of High-Tech architecture, a style that emerged in the 1970s. The High-Tech movement utilized materials like glass, aluminum, and steel which were becoming more available in connection with a growing industry. New advances in building technology allowed for adaptable buildings with programmatic design. Characteristics found in Eide's office pavilion, like cantilevering





- Unbuilt project by Norman Foster, 1976. Office building for Fred Olsen.
- 47. The High tech house in Bærum, photo by Magnus Ross, 2022
- Office pavilion, Njål R. Eide
   Norman Foster, 1976. Office building for Fred Olsen.

floors, transparency in the construction, and a lack of internal load-bearing walls, were all prominent traits of the movement. The use of bright colors was also frequent. As we know, Eide introduced many colors at the oil platforms, including bright furniture, painted walls, and blue, green, red, and yellow wallto-wall carpets – design elements he also brought with him into the office pavilion. Unfortunately, no traces of these original colors and interiors are found in the pavilion today.

- 41. Verbal source: a phone call with Christen Stenstadvold
- 42. Njål R. Eide's son could also confirm that he remembered this name from when he was a child. His name also appears as the photographer of the office pavilion in an article in Byggekunst: The Norwegian review of architecture. 1986 Vol. 68 Nr. 4/5.

### 1.4.2 MAINTENANCE ARCHITECTURE: WE MUST VALUE EXISTING BUILDINGS WITH ENDURABLE QUALITIES

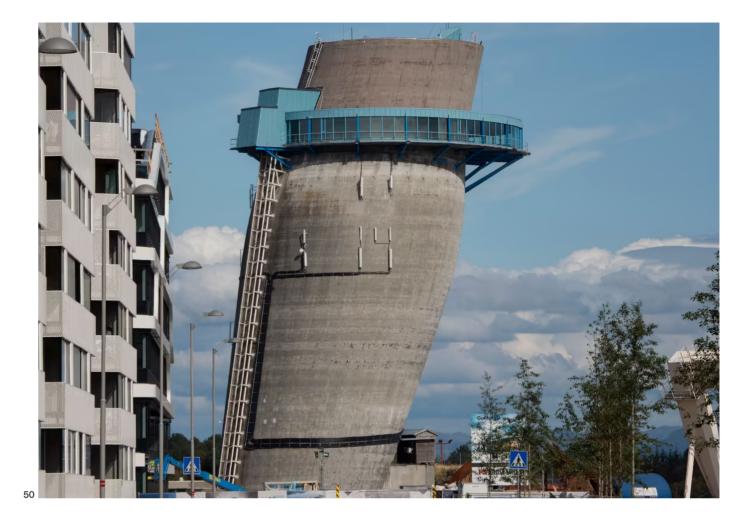
Hillary Sample's Maintenance architecture problematizes contemporary architecture's lack of interest in and understanding of maintenance and points out how society often neglects maintenance, resulting in buildings falling into decay.<sup>43</sup> The problem, she claims, is that maintenance has too often been associated with problems and passivity in architecture. It has not been treated as a disciplinary concern, since it is generally associated with dull, dry, and uninteresting matters outside the traditional realm of architecture. Maintenance, in short, is for janitors, electricians, plumbers, conservators and cleaners, and therefore thought upon as labor instead of creation. Sample points out that maintenance and any repair strategy are absolutely essential to keep facilities in use. It should therefore be mandatory, she argues, for architects to learn this during education and in practice. She looks explicitly to heritage management as an alternative to this mode of thinking and proposes a shift in focus toward durability, sustainability, and preservation in the future of architecture.

### 1.4.3 "DIFFICULT HERITAGE": WHAT IS THE VALUE OF OIL-RELATED HERITAGE OBJECTS TODAY?

Sharon Macdonald defined architecture related to troublesome history as *difficult heritage* in 2010.<sup>44</sup> She argues that preserving problematic cultural monuments is essential if done in a responsible and well-thought-out manner.

We cannot compare the petroleum and cruise ship business with war and racism. However, we are heading towards a time

- 43. Sample, Maintenance Architecture.
- 44. Sharon Macdonald, Difficult Heritage.
- 45. Kommunedelplan for kulturminner 2010-2025



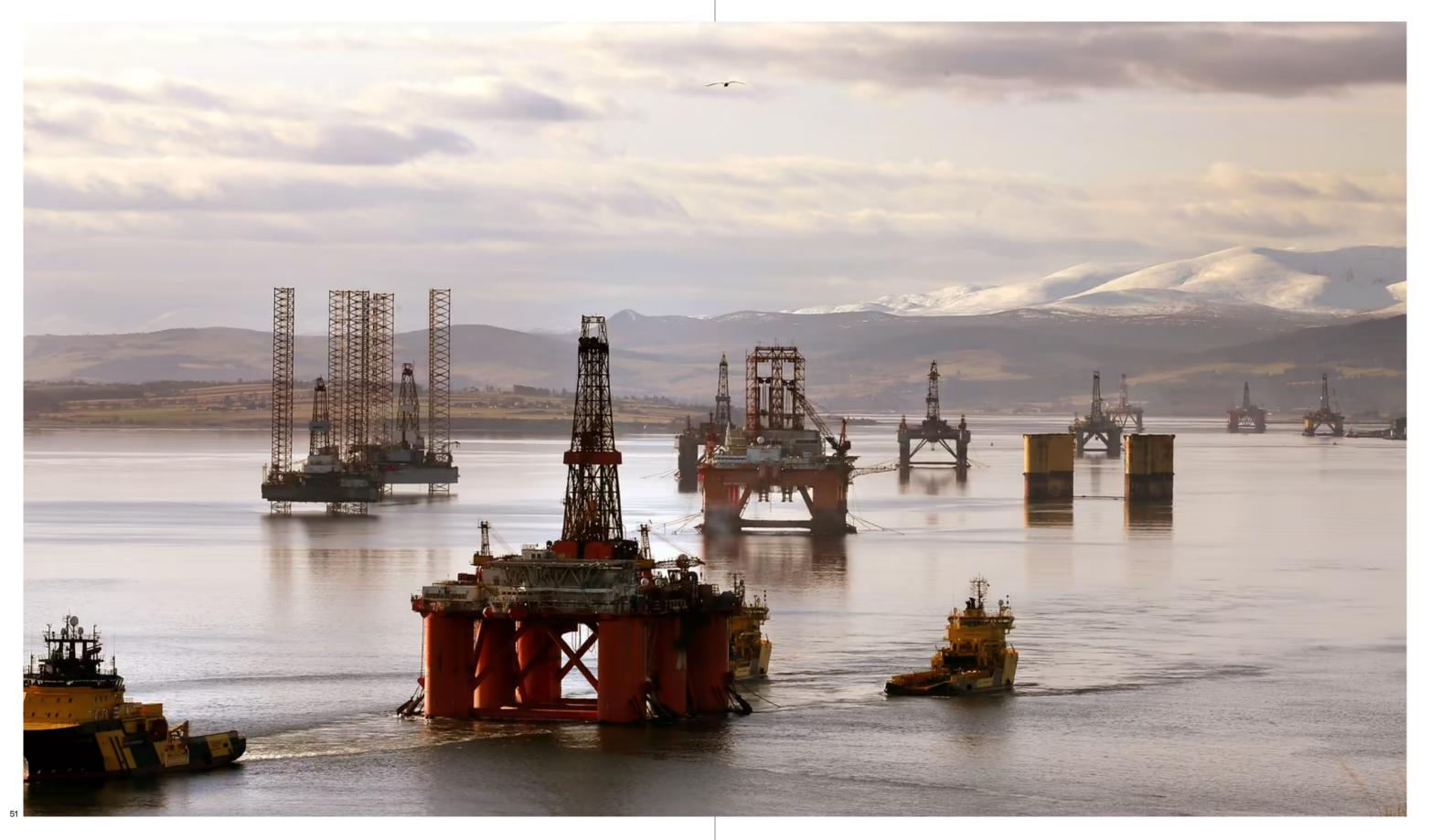
- 50. Det skjeve tårnet i Jåttåvågen by Marie von Krogh.
   51. The oil cemeteries, by Andrew
- 51. The oil cemeteries, by Andre Milligan Pa Photos

when both industries are becoming shameful chapters in our history as huge contributors to climate change, also being intrusive elements causing damage to nature and cities. The office pavilion is, as shown, connected to these two troublesome histories.

The oil industry is coming to an end. In recent years, Stavanger, known as the petroleum capital of Norway, has had to accept that oil-related growth cannot continue into eternity. The cultural heritage plan [Kulturminneplan] for Stavanger points to the fact that the city already has gotten an oil-age museum which is a "sure sign that an era is on the wane."<sup>45</sup> In other words, we are soon faced with a vast building mass left behind. Large offshore platforms and the buildings and infrastructure connected will need a new purpose and use. One example comparable to the office pavilion is the so-called Tilting Tower of Jåttåvågen [Det skjeve tårnet i Jåttåvågen]. The company Norwegian Contactors built the tower in 1984 to prove that it was possible to make a

concrete undercarriage that sloped 16 degrees, which also had varying diameters and varying thicknesses in the concrete. The technology was later used at a depth of 300 meters during the development of the Troll field. As stated in the cultural heritage plan, "the tower is a special piece of architecture which stands as a strong symbol of the oil industry and the associated technology that has been developed in Stavanger over the past 30-40 years."<sup>46</sup>

Perhaps can the protection and re-purposing of the office pavilion and the Tilting Tower of Jåttåvågen serve as model projects for the buildings and structures which will be left empty in the coming years that represent the same difficult cultural heritage. 46. Kommunedelplan for kulturminner 2010-2025



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#### **FIGURE LIST**

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- 18. Photo before move
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- 20. Facsimile, Asker og Bærums budstikke, 1990.06.10
- 21. Facsimile, Asker og Bærums budstikke, 1990.06.10
- 22. Kiruna, Forbes
- 23. Deconstructed laftebygg placed in storage at Folkemuseet
- 24. Wendy's restaurant in Hafslund, found at facebook in a discussion of how much the inhabitants missed this place.
- 25. Facsimile. Sarpsborg Arbeiderblad, 1984.04.28 "space travel"-restaurant. Wendy's restaurant in Hafslund.
- 26. Facsimile. Tønsbergs blad, 1982.07.27. Roadside-in Undrumshøy
- 27. Screen shot Google Maps, Roadside-in Undrumshøy
- 28. Facsimile. Aftenposten, 1980.01.10. Eide's proposal for a new pedestrian area in Lysaker.
- 29. Facsimile. Front cover. Byggekunst = The Norwegian review of architecture. 1991 Vol. 73 Nr. 4
- 30. Song of America (1986)- Kolltveit, Skaugen 70 år i shipping.

- Hydro
- 34. Photo of office pavilion 35. Photo of office pavilion
- sokkel/f/5-55-1314883
- 38. -II-
- sokkel/f/5-55-1314883 41. Office pavilion

31. Installation of the "Viking Lounge" in Song of Norway 32. Røldal-Suldal power station, designed by Geir Grung and Georg Jens Greve in 1967 for Norsk

33. Evolution of the "Viking Lounge" in the Royal Caribbean cruise ships.

36. Song of America (1986)- Kolltveit, Skaugen 70 år i shipping.

37. Magnus Ross. *High tech bolig*. Photograph. Budstikka.no. December 12, 2022. https:// www.budstikka.no/bevegelige-vegger-og-140-kvadratmeter-stue-her-star-boligdrommen-pa-

39. Unbuilt project by Norman Foster, 1976. Office building for Fred Olsen. 40. Magnus Ross, *High tech bolig*, Photograph, Budstikka.no, December 12, 2022, https:// www.budstikka.no/bevegelige-vegger-og-140-kvadratmeter-stue-her-star-boligdrommen-pa-

42. Unbuilt project by Norman Foster, 1976. Office building for Fred Olsen.

43. Marie von Krogh. Det skjeve tårnet i Jåttåvågen. Photograph. Stavanger aftenblad. https://www. aftenbladet.no/lokalt/i/7r3d3/se-stavangers-eiffeltaarn

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## PART II Components

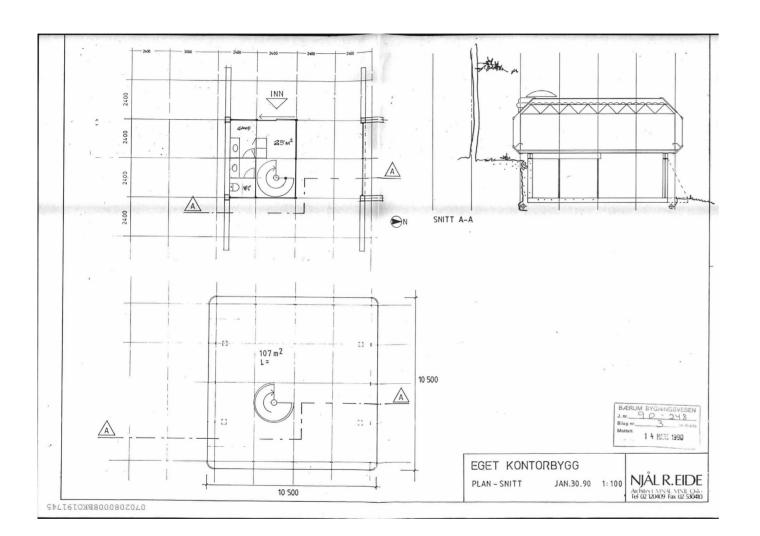
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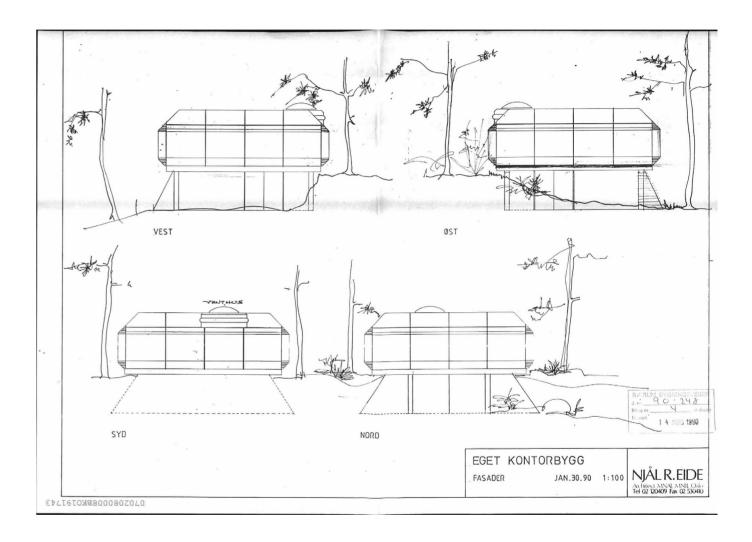
In a search to rediscover the office pavilion's value, I have studied its materials and components as the building stands in Lysaker today. Understanding the building's composition makes it evident how the elements are directly connected to the two naval industries. The only drawings I have been able to find of the buildings (fig 1,2) are not accurate and show a lack of detail. Many hours have therefore been spent in the building, measuring, surveying, drawing, photographing, and remeasuring the components. Some of the details are still a mystery. These will only be visible when a possible demounting of the building is to happen.

The office pavilion has a ground floor measuring 87 square meters and a first floor measuring 107.



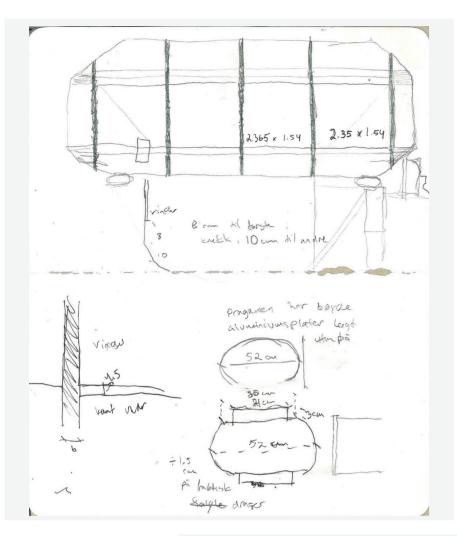
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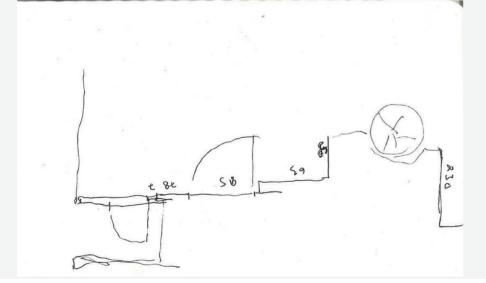


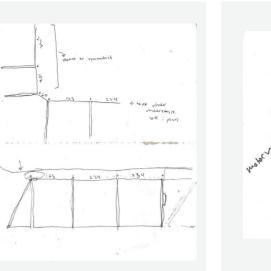
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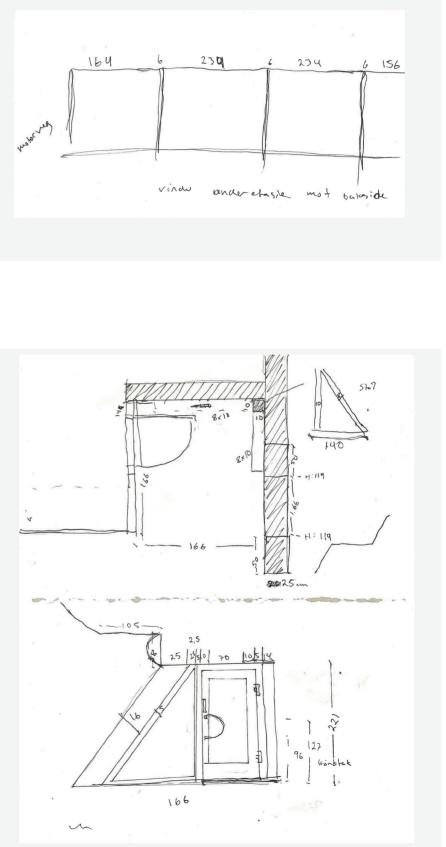
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Survey drawings

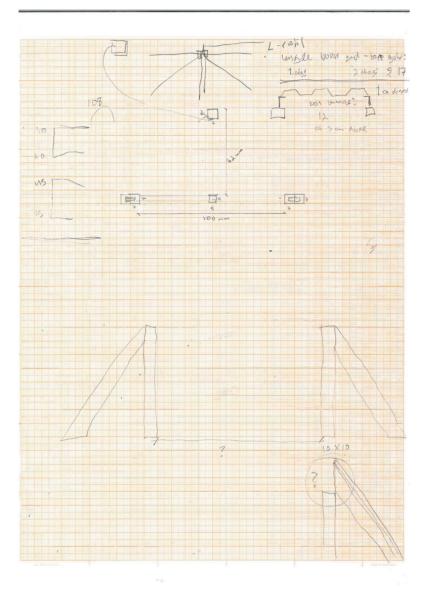


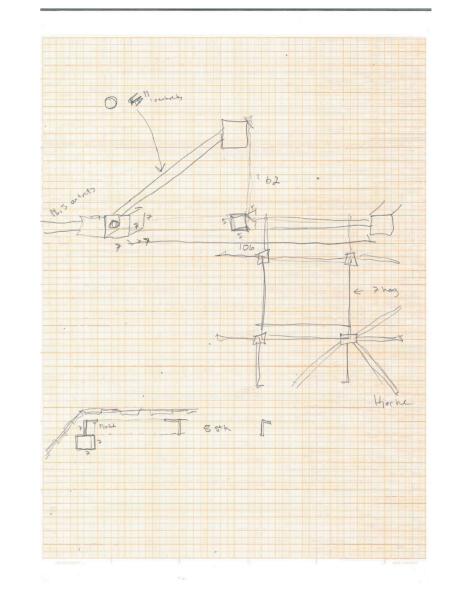




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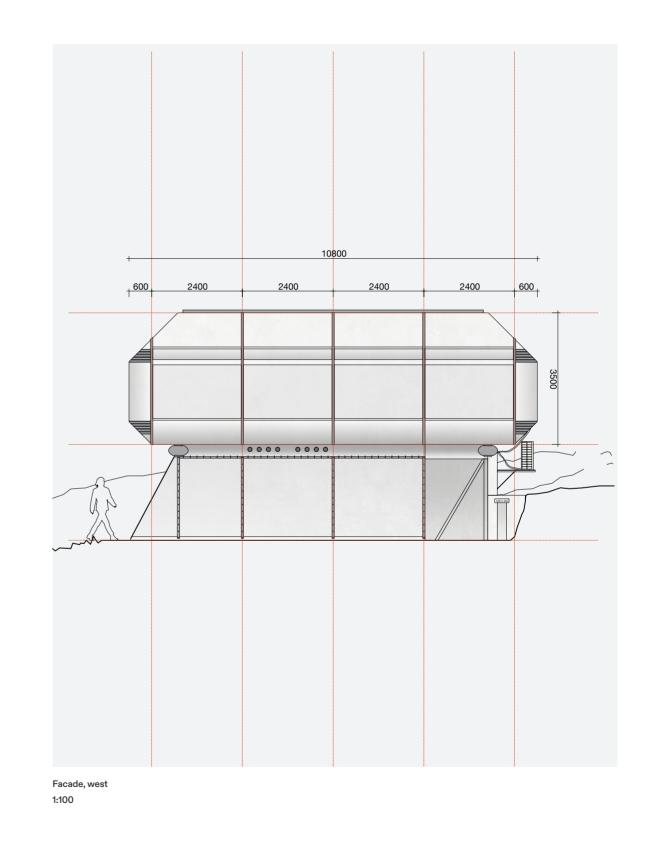
Components

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2.1

# Description of the first floor's components

The first floor was built in 1978 based on a grid of 2,4 X 2,4 m. The volume is 3,5 meters tall and 10,8m wide in both directions, with a 107 square meter usable floor area. It is built with rational logic, and everything down to the floor elements follows a modular system.



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### 2.1.1 STEEL STRUCTURE

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Material: Stainless steel

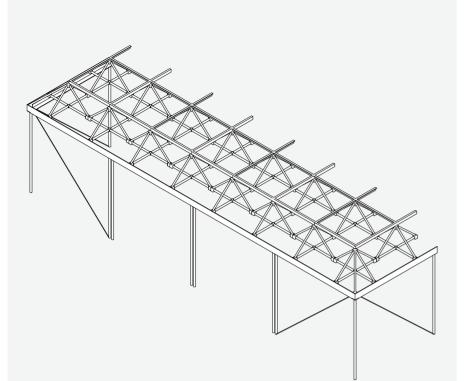
Produced by: Kværner Brug A/S

<u>Condition</u>: The steel supporting structure is in good condition. There is no visible corrosion damage. There may be some minor damage in the covered parts of the structure, but this will not be possible to detect before a dismantling.



Isometric showing full steel structure first floor

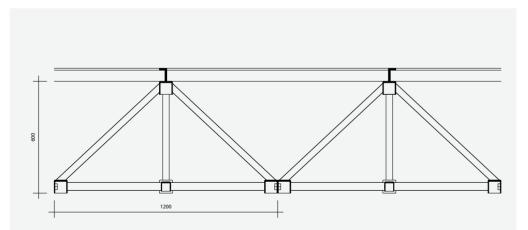
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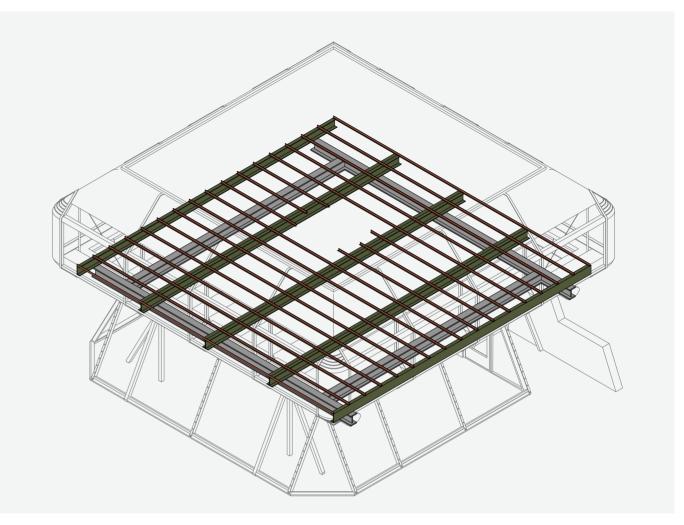


Modules: The building's first floor consists of four self-supporting main modules measuring  $2.4 \times 9.6$  m (plus 60 cm lose window modules as end pieces). The four primary modules are based on a specially constructed space truss in the ceiling.

Columns: Each module has four columns, and the four columns in the corner of the room are supported with inclined braces.

Space truss: The space truss is built of 64 modules, each measuring 120 cm meters in both directions, with a height of 60 cm. The modules are bolted together and create openings in the ceiling leaving room for lamps and ventilation. The modular units are held up



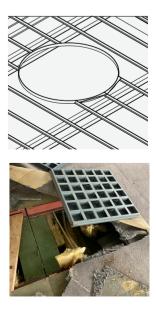


by round steel columns, one in each corner.

Floor construction: The steel construction between the two floors is most likely part of the original building. It consists of two main girders connected by secondary girders in the other direction. Across the main girders lies steel beams supporting floor modules.

Today, parts of the steel structure have been cut to fit in the stairs and reinforced with wooden boards.

Floor modules: The flooring consists of a standard steel framework with 60X60 cm steel cassettes, each of which consists of insulation, vapor barrier, floorboards, and carpet squares, all fully replaceable. A couple of squares are missing, and several must be expected to be replaced. All insulation must be changed.



#### 2.1.2 ENVELOPE

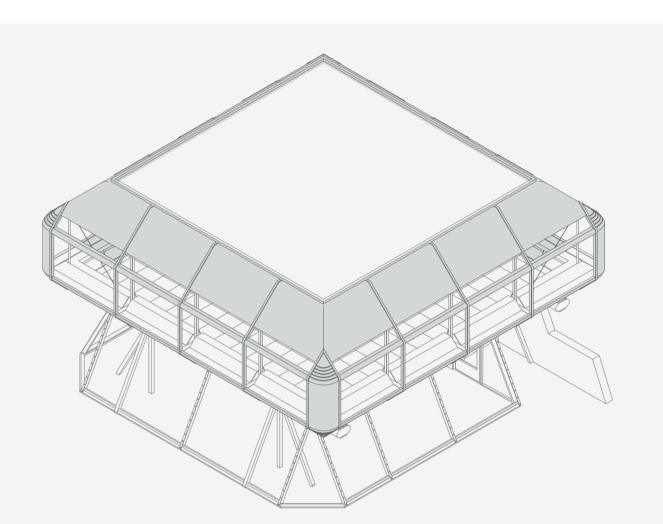
Material: Aluminum frames, anodized aluminum cladding.

Produced: Unknown.1

<u>Description</u>: The building's envelope differs from the construction by being less generic, with curved lines motivated by aesthetics and material. The facade profiles consist of an unusual solution, somewhat reminiscent of details more often seen on ships.

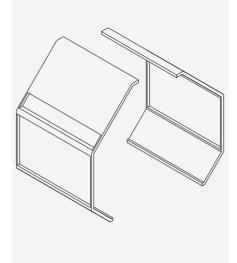
<u>Condition</u>: The panels are dirty but can be cleaned without much trouble. No physical damage to the panels has been observed on the exterior. In the interior, there is moisture damage to the profiles. The sealing profiles have assumingly started to leak and probably need to be replaced. Because the glass panels must be replaced, the facade system must be dismantled. It is also unknown if spare parts exist for the system after so many years, meaning one may have to replace the entire facade system and keep only the curved aluminum panels. I have yet to track down who produced the aluminum profiles. They could have been produced by Norsk Hydro or possibly by A/S Nordisk Aluminiumindustri's factories in Holmestrand, which Kvaerner Industrier used in several of their projects. It could also have been Raufoss Aluminium, which, i.a., delivered an aluminum facade to Storebrand in 1963, designed by the office F. S. Platou, an office Eide worked for many years.

1.



Isometric showing envelope first floor

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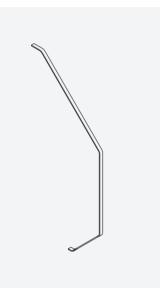


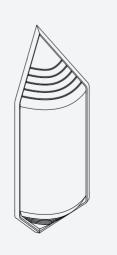
#### Facade profile:

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The façade consists of tinted insulating glass installed in 16 anodized aluminum frames. The panels are prefabricated modules that, in theory, can easily be added or removed from the structure. They are made of a support profile on the inside, to which the (glass) panels are attached with screws to an invisible clamping profile in the joint. The clamping profile is connected to an external cover profile, which is continuous from top to bottom of the facade and follows all curves. The clamping profile is probably clipped onto the clamping profile, and it is uncertain if it can be dismantled and reassembled without damage.

<u>Cover profile</u>: The frames are covered by an extruded rubber profile that forms a joint strip for the overlying and underlying anodized aluminum sandwich panels.







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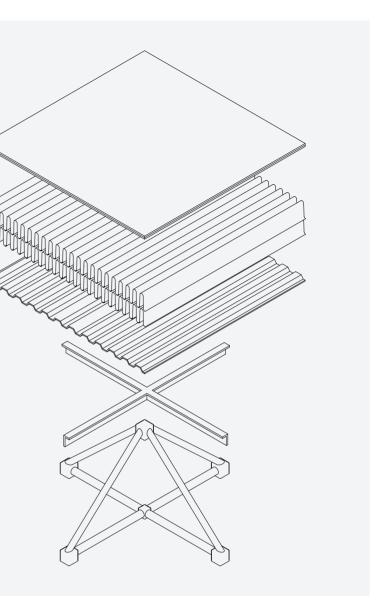
#### Window:

The glass consists of three layers, and the middle one is a sun-shielding special glass with gas filling. They are made of tinted insulating glass, causing the building to go from introverted to extroverted throughout the day. The glass has a shielding effect on the sunlight without breaking the warming rays from the sun. According to Eide, mirroring the vegetation with large glass areas would reduce the effect of "hard" surfaces, and he frequently used such glass facades in his projects. He was also eager to draw nature into the building - it should feel almost as if you were sitting outside all year round. The windows are punctured, leading to leakages in the frame, wood rot, and condensation.

#### Ceiling and roof:

The ceiling on the first floor consists of box profile roofing plates laid directly as inner cladding on the truss. Self-supporting Rockwool boards and roofing felt are again laid directly on the roof boards – everything fully exposed. The visible parts from the support system are in good condition but could need some cosmetic repairs.

All insulation, vapor barrier, and roofing felt have to be changed.

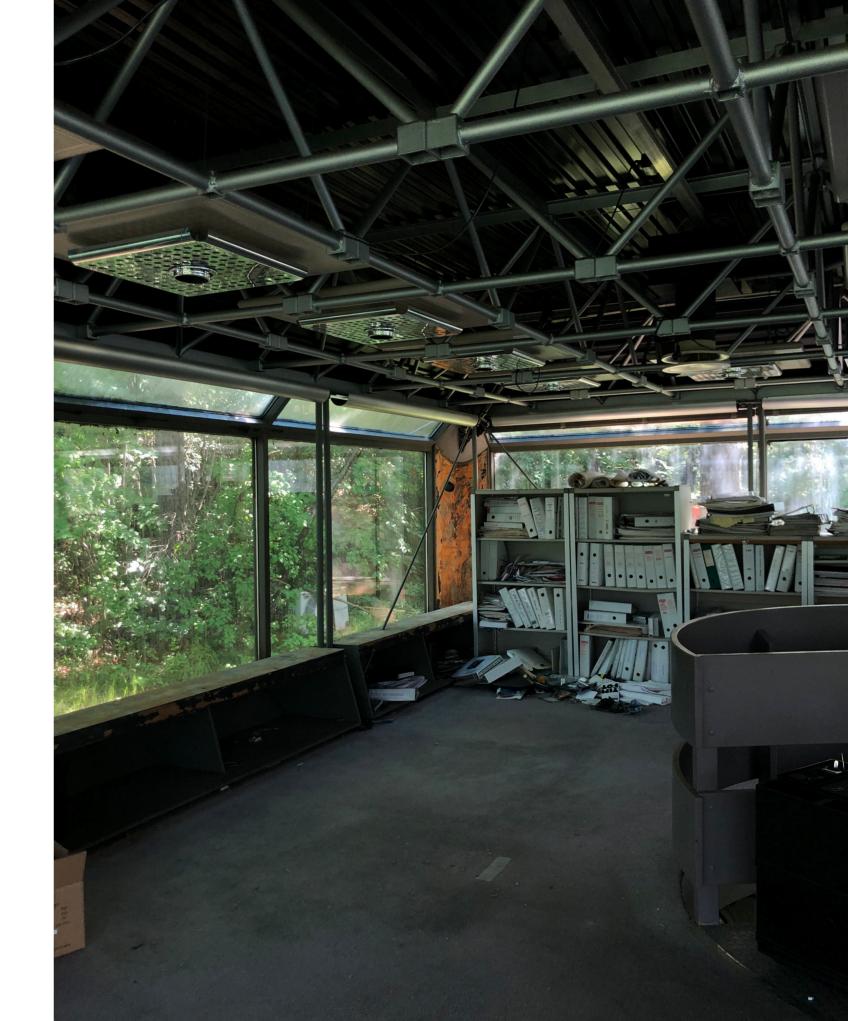


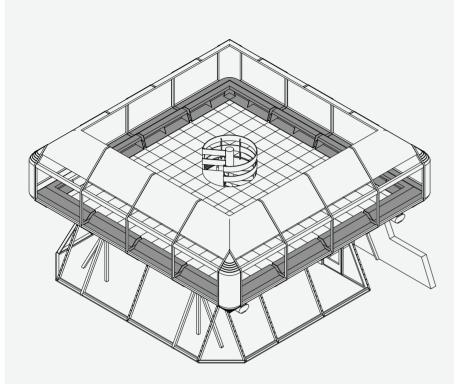
#### 2.1.3 INTERIOR

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Produced: Unknown

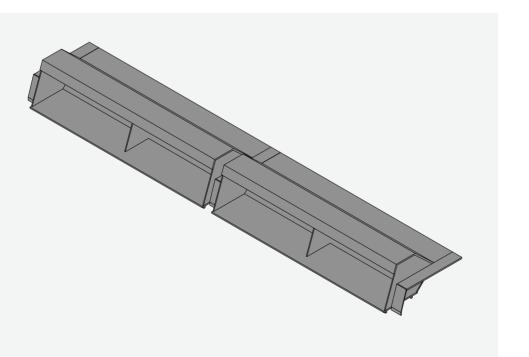
Description: There isn't a lot of fixed furniture on this floor. A wooden shelf/bench runs all the way around along the outer shell, and aluminum "shelves" over the window, holding wires and cables. The loose interior features lamps, ventilation systems, and freestanding shelves containing blueprints and the rest of his archive.





#### Bench:

A shelf/bench in plywood runs all the way around along the outer shell. It is made up of modules within the same grid as the rest of the construction. The bench is used for storing and conducting electricity. It is painted dark gray. Today it is full of mold from the condensation from the windows and needs to be reproduced.

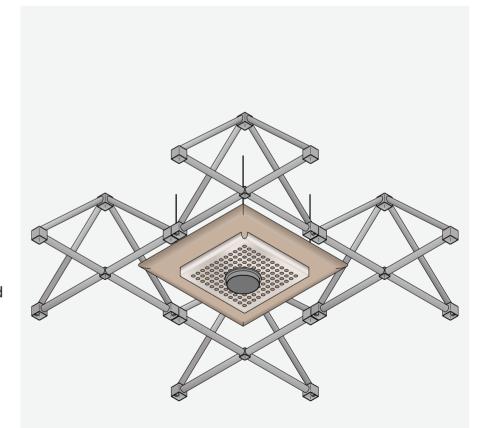






#### Lamps:

The lamps are similar on the first and second floors. From an article about the building in *Byggekunst: The Norwegian review of architecture* from 1986, Vol. 68 No. 4, one can see other types of lamps, which suggests that the current lamps were added after the move in 1990. This also agrees with the fact that the lamps have a characteristic appearance that corresponds to what can be found on board a cruise ship.

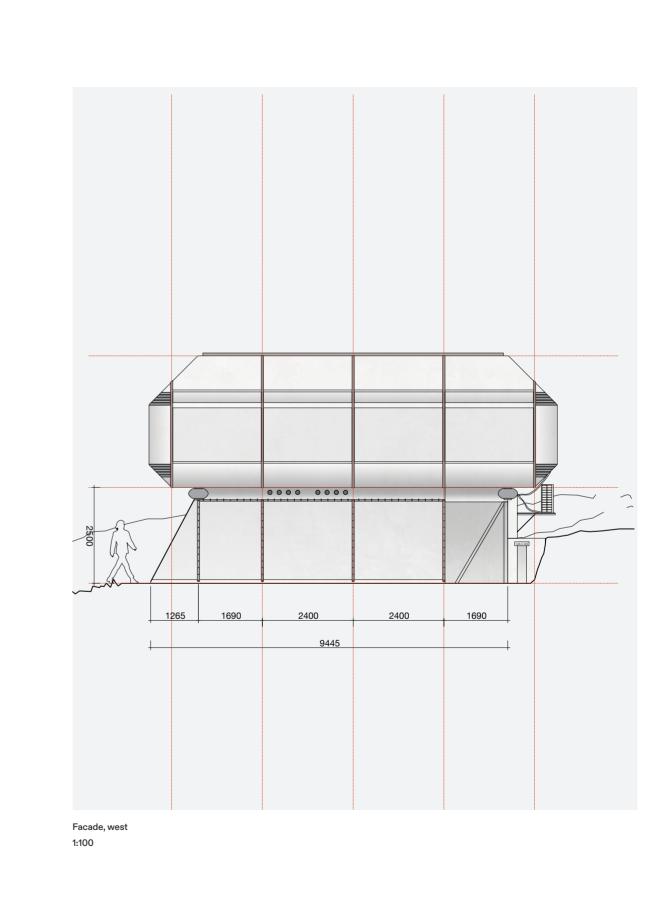


Components

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# 2.2 Description of the ground floor's components

The ground floor was built in 1990 as a new base for the top floor. Its exterior follows the original grid of 2,4 X 2,4 m to some extent. The volume is 2,5 meters tall with an 87 square meter floor area. It does not follow a modular system, but it does, to some extent, mimic the aesthetics of the top floor.



#### 2.2.1 STEEL STRUCTURE

Material: Steel

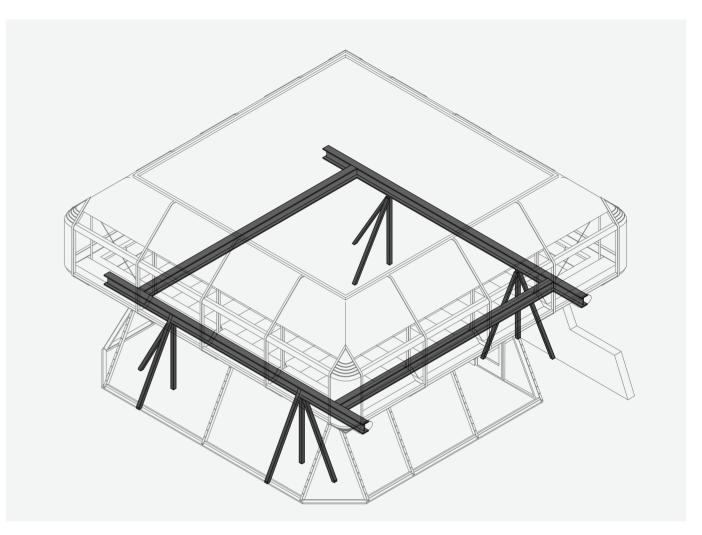
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Produced: Unknown<sup>2</sup>.

<u>Description</u>: The ground floor's steel structure consists of four columns measuring  $10 \times 10$  cm, each supported with two inclined braces. They are connected by steel girders hidden in the ceiling. They are all part of the 1990 addition.

<u>Condition</u>: The visible parts of the steel supporting structure are in good condition - there is no visible corrosion damage. But much of it is hidden behind white-painted aluminum sheets.

 It could be Vigor Engineering A/S, who Eide had close collaboration with. They specialize in Semi-Conductor, Oil and Gas, Automotive, OEM / ODM and more. It could also be Ing. Bjørn Rotheim A/S in Kongsvinger who delivered the steel for the Nielsen-Nielsen building in Magnus Poulson vei 7, drawn by Njål R. Eide A/S the same year as the extension of the office building, but this is purely speculation.



Isometric steel structure ground floor

#### Description of the ground floor's components

#### 2.2.2 ENVELOPE

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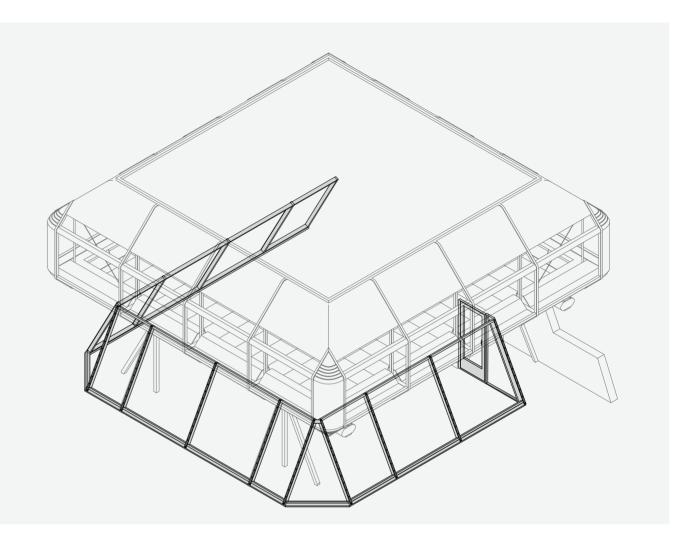
Material: Aluminum frames, anodized aluminum cladding

Produced: Unknown<sup>3</sup>

<u>Description</u>: In surface and materiality, the ground floor mimics the first floor, also using anodized aluminum panels and tinted glass. The facade on the ground floor seems more of a fixed situation, not demountable modules like the top floor.

<u>Condition</u>: The panels are dirty but can probably be cleaned without much trouble. No physical damage to the panels has been observed on the exterior.

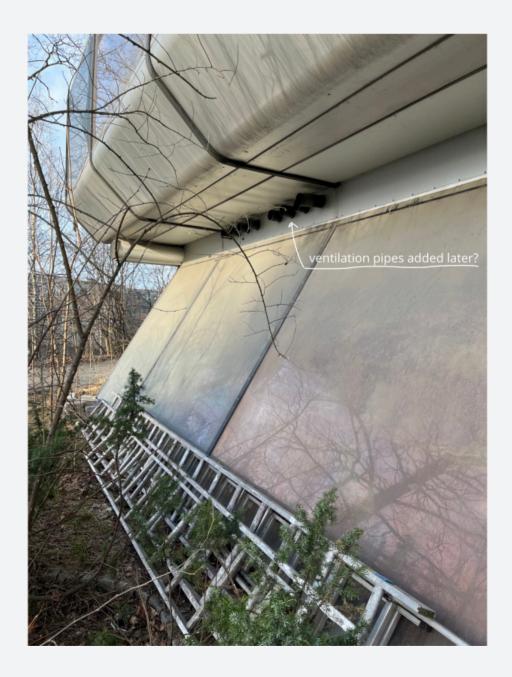
 It could Profilteam A/S from Hamar. They delivered curved aluminum façade profiles for the Nielsen-Nielsen building in Magnus Poulson vei 7, drawn by Njål R. Eide A/S the same year as the extension of the office building, but this is purely speculation.



#### Description of the ground floor's components

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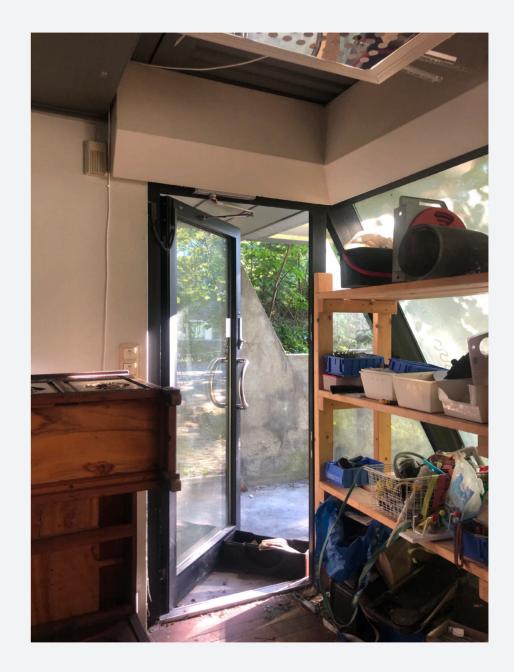


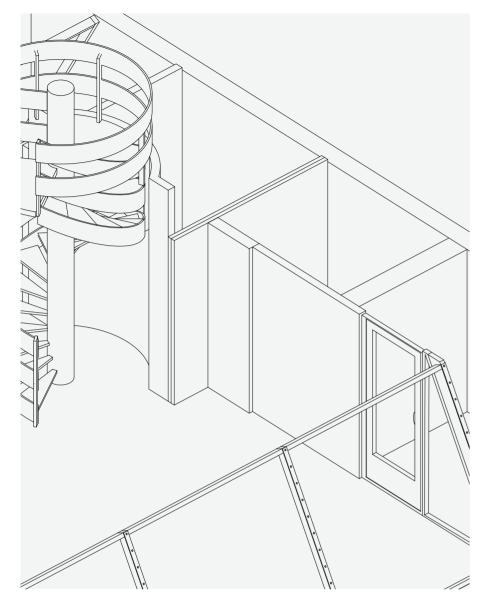
### 2.2.3 INTERIOR

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<u>Description</u>: The lower floor contains far more "unnecessary" surfaces. Unlike the first floor, parts of the construction are hidden.

<u>Condition</u>: The surfaces on the lower floor are of a poorer standard than the upper floor.





#### Walls:

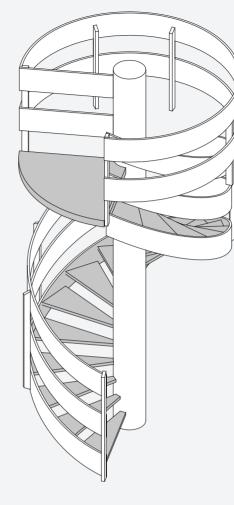
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The ground floor has a concrete supportive wall towards the south. Curved plaster walls follow the staircase shape between the main room and the service areas. None of the walls are modular.

#### Ceiling and roof:

Photos from an inspection Eide had on one of the cruise ships he had designed showed ceilings similar to the ones in the bathroom and kitchen in the office pavilion.





#### Staircase:

A white-painted spiral staircase built in wood, with steps covered in linoleum, connects the two floors. It is part of the 1990 addition, as it connects the old building to the new one, and the original system would not allow anything to pierce through the flooring modules and the construction like that. The spiral shape also reminds us of Eide's cruise ship designs.

#### Description of the ground floor's components







3.1

Strategy

## Lysaker under development – the building on the move *again*

History repeats itself: because of a large development about to happen in Lysaker, the building has to be moved to avoid demolition. As emphasized previously, in 1990, Bærum Municipality gave temporary approval for moving the building from Drammensvenen 312 to Arnstein Arnebergs vei 31. In a statement on the matter dated 14.02.90, the municipality argued against a permanent location for the office pavilion and justified as follows:

- 1. The location will be an obstacle to the implementation of the current development plan, which requires a coherent office development along the E18.
- 2. The location is possibly in conflict with the assumed noise protection measures for residential buildings to the south of the property.

Thirty-two years have passed since the office pavilion landed on its temporary ground. Today the site is regulated to include office buildings of 5-6 floors, designed to achieve the best possible noise barrier effect between E18 and the residential areas behind. Eide's office pavilion is impossible to incorporate into this plan and must therefore give way.

In 2010, after several years of trying to sell/give away the office pavilion, Link Architects applied for demolition on behalf of the client. Due to a constant postponement of the building plans, the office pavilion still stands today, although highly dilapidated, marked by the lack of maintenance over a long period of time.

Following the emergency-rescue tradition, I propose moving the office pavilion to Folkemuseet.

 Midlertidig godkjennelse og approbasjonsbetingelser for flytting av kontorbygg på Gnr.
 41 BNR. 218. Bærum Kommune, 1990.05.08 EIDE, NJÅL R. A/S DRAMMENSVEIEN 312 1324 LYSAKER

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-EU006E

Jnr. 90- 248 SHa/bb BILAG 1-9

MIDLERTIDIG GODKJENNELSE OG APPROBASJONSBETINGELSER FOR FLYTTING AV KONTORBYGG PÅ GNR. 41 BNR. 218 TOMT/HUS NR. BYGGEPLASSADRESSE: ARNSTEIN ARNEBERGSVEI 29 BYGGHERRE: EIDE, NJÅL R. A/S

Vi viser til Deres søknad mottatt 14.3.90 om byggetillatelse for ovennevnte byggearbeid.

Søknaden innvilges <u>midlertidig</u>. Bygningen må fjernes når hovedutvalget for plan- og utbygging måtte forlange det, jfr. plan- og bygningslovens § 85.

Bygningssjefen innvilger søknaden og approberer denne på følgende betingelser:

De betingelser som er anfort i vedlagte skjema "Alminnelige approbasjonsbetingelser for byggearbeider i Bærum, del 1-3.

Beliggenheten godkjennes som vist på situasjonsplanen, stemplet bilag 2.

Skriftlig rekvisisjon for påvisning av bygningens beliggenhet må sendes bygningsvesenet.

Den ubebygde del av eiendommen må få parkmessig opparbeidelse.

Arbeidet må utføres i samsvar med godkjente tegninger bilag 3,4.

Regularingsvesenets betingelser av 2/4-90 jfr. bilag 7 som vedlegges.

Opparbeidelse av avkjørsel, snuplass og biloppstillingsplasser må være ferdig opparbeidet og godkjent av bygningskontrollen før bebyggelsen tas i bruk.

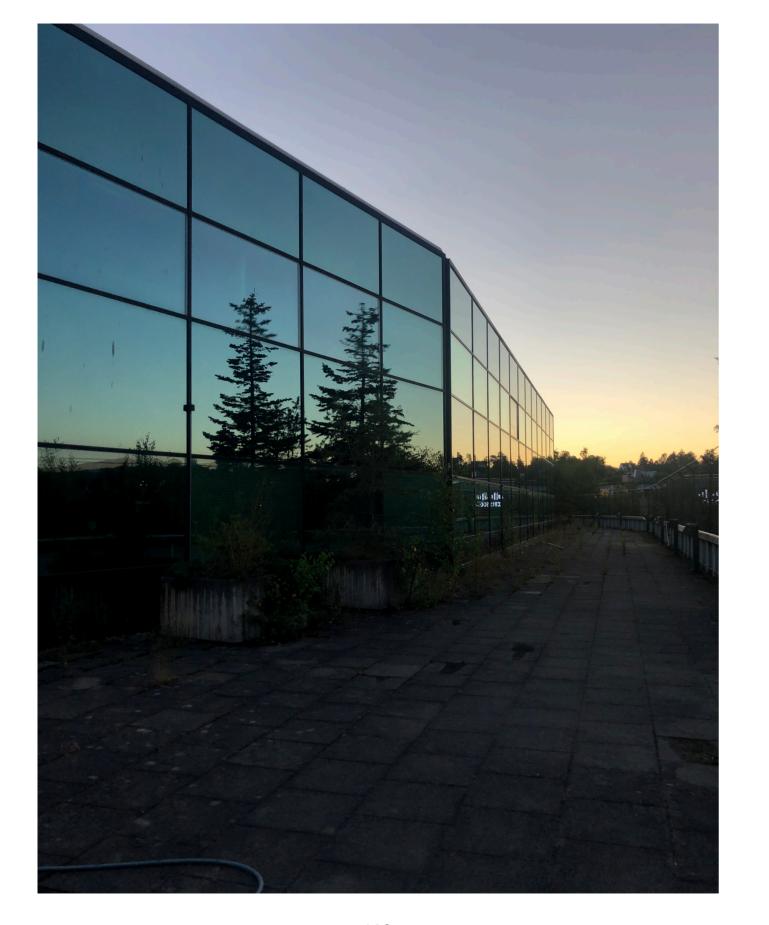
Vann- og kloakkvesenets betingelser av 29/3-90 jfr. bilag 6 som vedlegges. Det gjøres spesielt oppmerksom på at vann- og kloakkledninger må enten flyttes eller legges i varerør. Nota for bygningsgebyr på kr. 4730.00 følger vedlagt. Beløpet

Nota for bygningsgebyr på kr. må være innbetalt innen 3 uker.

#### Dato 8/5-1990

forts.

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Lysaker under development - the building on the move again

3.2

## Introduction to Folkemuseet (FM)

Folkemuseet is the second-largest open-air museum in Norway, located in Oslo, Bygdøy. It holds a collection of historically significant building structures, including over 160 buildings from both cities and the countryside dating from the Middle Ages until the post-war period. Hans Aal founded the museum in 1894 and was the director until the autumn of 1946. From the start, the museum aimed to represent daily life in Norway and to show the interaction between society, culture, and nature. A central task was to shed light on what it means to be Norwegian and what this constitutes in line with a society in change; "The Norwegian Folk Museum was to become one of the important actors in the establishment of a Norwegian identity."<sup>12</sup>

In the far north of the area, one can find Kong Oscar II's Collection, considered the first open-air museum in the world. It was founded in 1881 by king Oscar II of Norway and Sweden and opened to the public in 1882. In 1907, the collection was incorporated into the Norwegian Folk Museum, and the five original buildings are still present today.

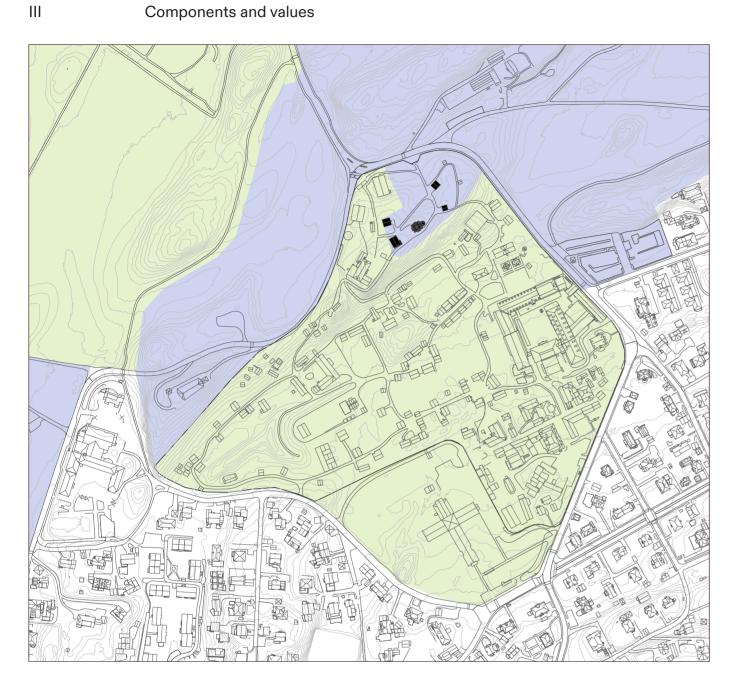
In 2012 large parts of Bygdøy, including Folkemuseet and Vikingskipmuseet, was listed by the Oslo Municipality, with the purpose to "ensure a unique cultural environ-

- . "Om Norsk Folkemuseum -Norsk Folkemuseum."
- 2. "1894-1946 Norsk Folkemuseum."
- "Forskrift Om Fredning Av Bygdøy Kulturmiljø, Oslo Kommune." Quote translated by me.

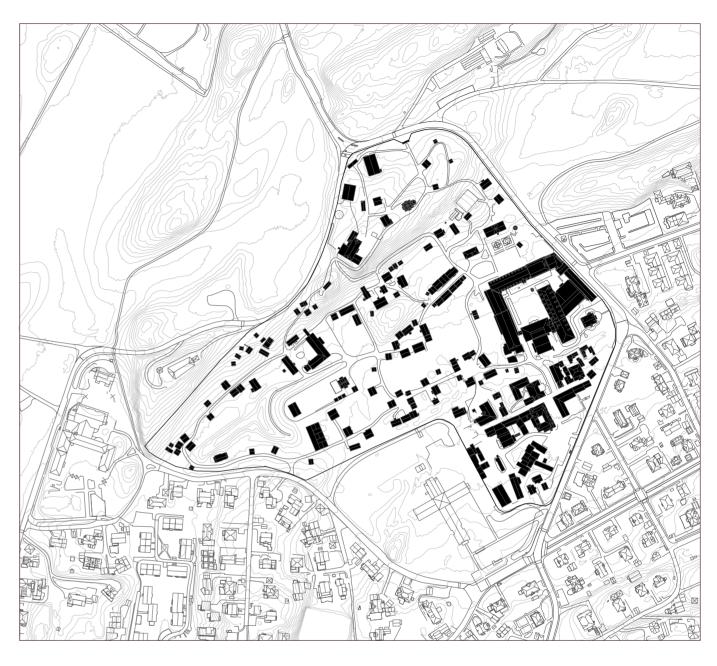
Photo of collection showing buildings from Hardanger in Folkemuseet. December, 2022







Map of Folkemuseet, no scale Sone B in green Sone A in purple Only Kong Oscar II's collection marked in black



Map of Folkemuseet, no scale All buildings in the museum marked in black.

cludes a small area north in the museum, which holds Kong Oscar II's Collection. Zone B consists of the rest of the museum areas, i.e., the area of the Vikingskiphuset and the part of Folkemuseet, which does not fall under zone A. Inside zone A, one is not allowed to make any changes (except safety measures, etc.), while inside zone B, there are tailored rules.

Part two, paragraph 9 of the protection states: "Within the Norwegian Folk Museum's area (zone B), a dispensation is not required for new buildings, relocations, rebuilding or dismantling museum buildings or to change the landscape if this is in line with the purpose of the conservation and as part of the development of the area as a museum".<sup>4</sup> It also states that it does not prevent new buildings and other necessary measures for the museum operation if they are considered and approved by Riksantikvaren.

- 4. "Forskrift Om Fredning Av Bygdøy Kulturmiljø, Oslo Kommune." Quote translated by me.
- Oral Source: conversations with Stian Myhren and Terje Planke among others at Norsk Folkemuseum



Eldhus from Østerdalen/Glomdal, placed in storage at FM, currently being renovated by students before it begins its journey home

#### 3.3.1 BUT THE MUSEUM IS FULL

According to the museum's staff, FM has officially reached total capacity, and approximately twenty-one buildings are stored at the back, waiting for their time in the spotlight.<sup>5</sup> This means that if something is to be incorporated into the museum, something else must give way.

When a building is placed in a museum, one can assume that it is meant to "last forever" as a historical document, and conservation is the conventional way to protect cultural heritage. A museum can be considered a place for eternity, but does time really stop inside Folkemuseet?

#### 3.3.2 CIRCULATION AND DEACCESSIONING

On November 5, 1954, an eighty-one-year-old log house named Kindredhuset was dismantled in a small village in Norman, North Dakota, placed onboard the ship M/S Oris and shipped across the Atlantic. <sup>5</sup> It was built in 1873 as a residence for the priest Hellestvedt who had emigrated from Norway a few years earlier. On 22 June 1955, it was re-erected at Folkemuseet in Bygdøy. The house was exhibited in Bygdøy for 17 years until 1972 when it was moved again to Domkirkeodden, where it formed the basis for the new open-air museum Norwegian Emigrant Museum (Norsk Utvandrermuseum). In addition to this, the building also had to move internally on Domkirkeodden due to flooding.<sup>6</sup>

To my knowledge, only three buildings have been deaccessioned from the exhibition of Folkemuseet. In addition to Kindredhuset, these included a Løe from Valdres and a Bur from Trøndelag. There are also two examples that I know of, of buildings being bought by FM, placed in storage, and deaccessioned after many years without ever being exhibited: a Kjellerbu from Østerdalen/Glomdal and Per-Amundsagården. The latter was one of the first farms in Røros to be protected in 1923, but nonetheless, it was demolished in 1925 in favor of a petrol station. The components were moved to Folkemuseet's storage, where it spent forty-four years before it, in 1969, returned to Røros and was re-built in its original place. Other examples of buildings in the process of being deaccessioned from FM are an Eldhus (cook house) from Østerdalen/Glomdal, currently being renovated by students before returning home, and a Drengestue (workers' house) from Østerdalen/Glomdal, still placed in storage.

"Kindredhuset - Norsk utvandrermuseum."

 Oral Source – Stian Myhren, Norsk Folkemuseum, Bygdøy

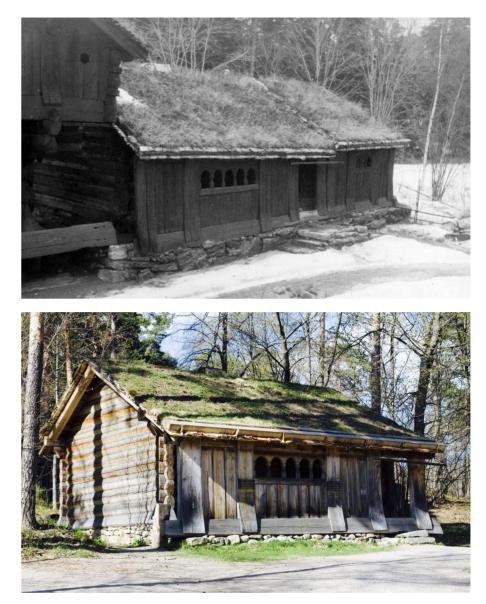


Kindredhuset. Photo by Erik Mostue

But buildings not only move in and out of the museum. They move around inside the museum; they are dismantled and placed in storage; they are altered, recreated, and copied. They move through mediation, time, and place.

Kjellebergstua, a Stue from Valle, built around 1650-1700, was one of the original buildings which made up Kong Oscar II's Collection. In 1913, however, it was moved to Setesdalstunet, approximately a hundred meters away, and in its place, sitting on the same foundation, came another building from Valle: Setebu from Støylsemne.

Eighty-one years later, in 1994, Kjellebergstua would "move" again as the museum built a copy of it. The new building, Sagastua, was "processual authentic," created to give an impression of what a new house might have looked like 300 years ago. The building work was carried out according to older methods, using materials and tools that were common when Kjellebergstua was built were used.<sup>7</sup> 7. "Sagastua - Norsk Folkemuseum."



- Kjellebergstua from Valle in Setesdal. "Gammelstog" to the left and "Nyestog" to the right Photo by Norsk folkemuseum, 1942.
- "Sagastua", copy of Kjellbergstua. Photo by Anne-Lise Reinsfelt / Norwegian Folk Museum, 2010

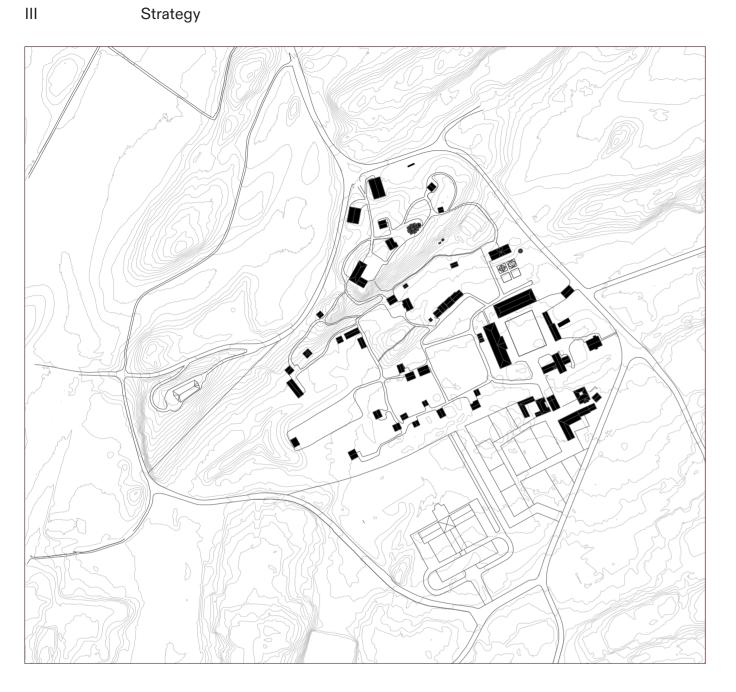
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Map of Folkemuseet, 1900 no scale |||



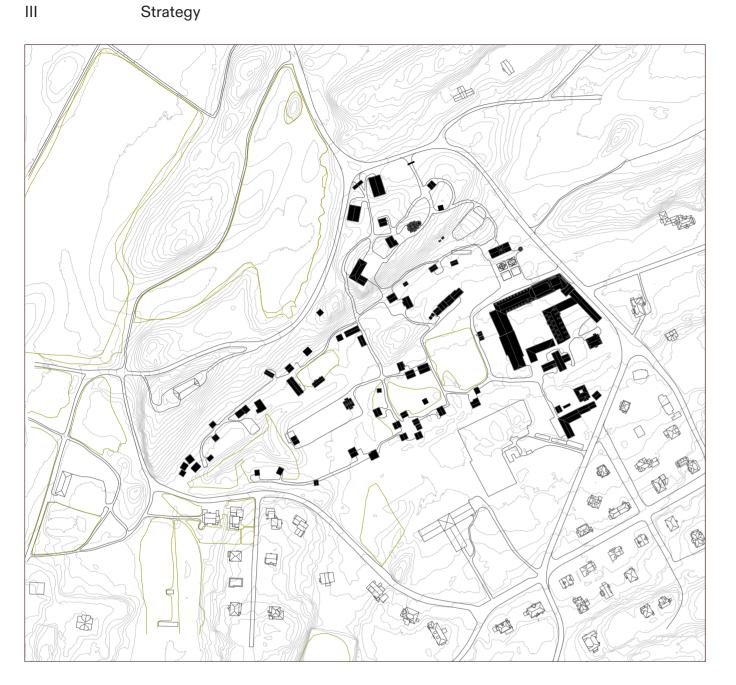
Map of Folkemuseet, 1919 no scale



Map of Folkemuseet, 1925 no scale







Map of Folkemuseet, 1937 no scale



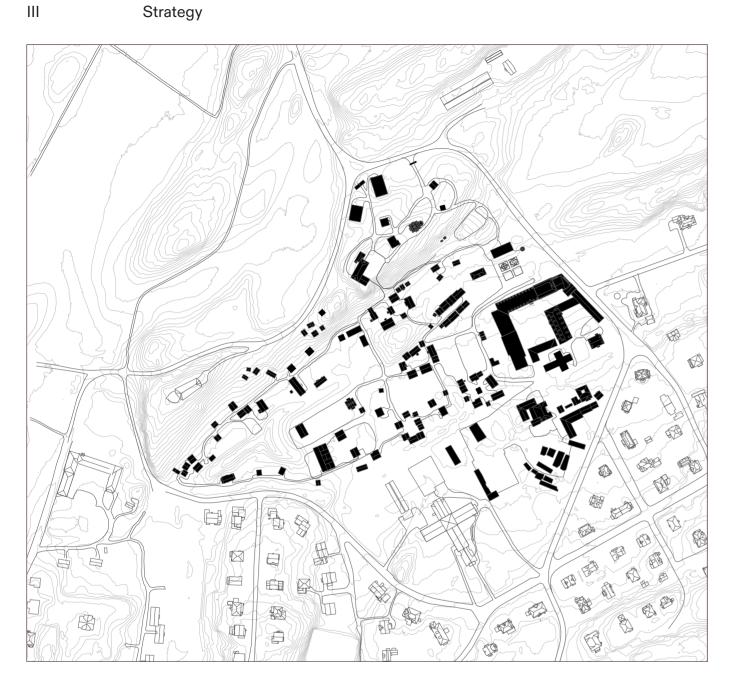




Map of Folkemuseet, 1947 no scale



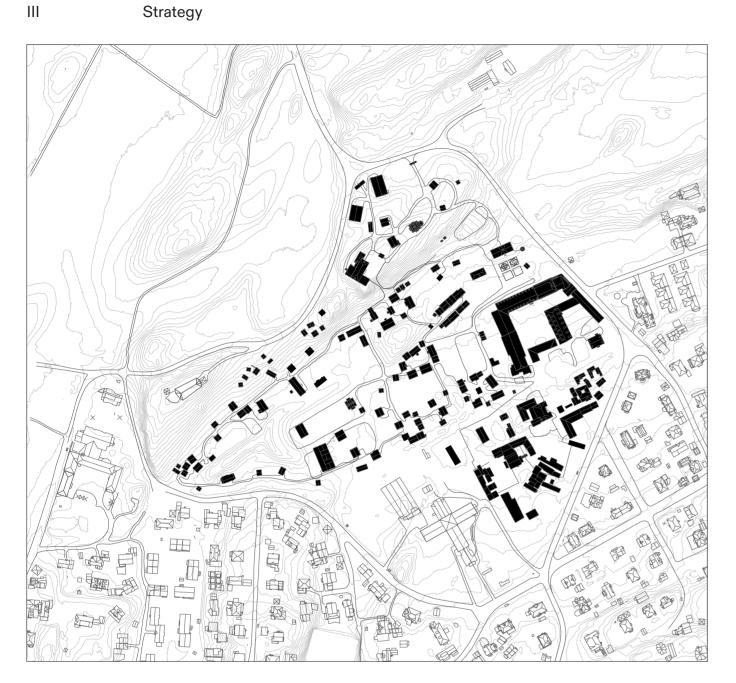




Map of Folkemuseet, 1956 no scale

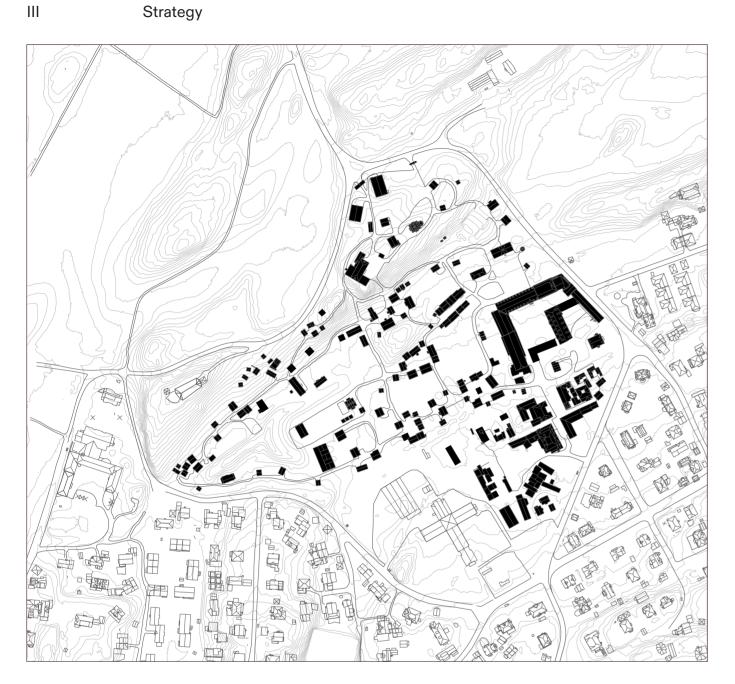






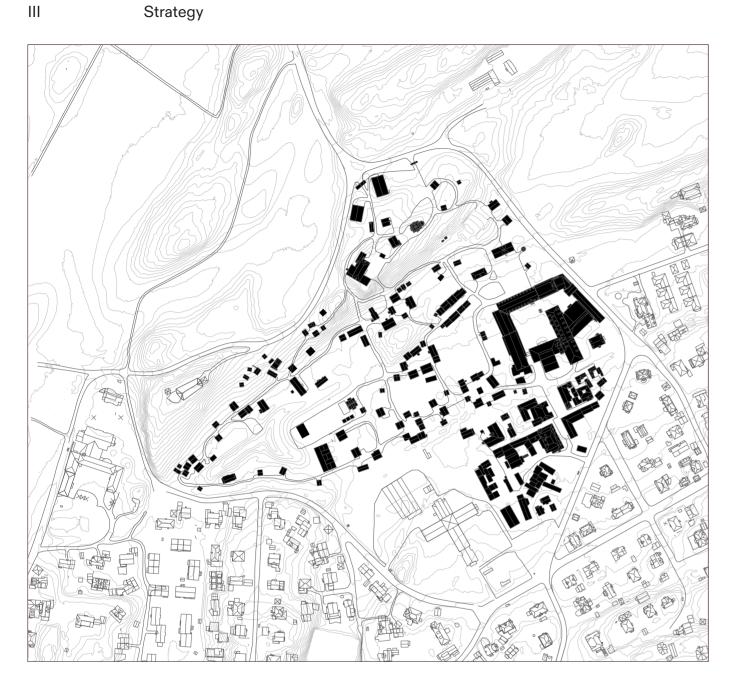
Map of Folkemuseet, 1971 no scale





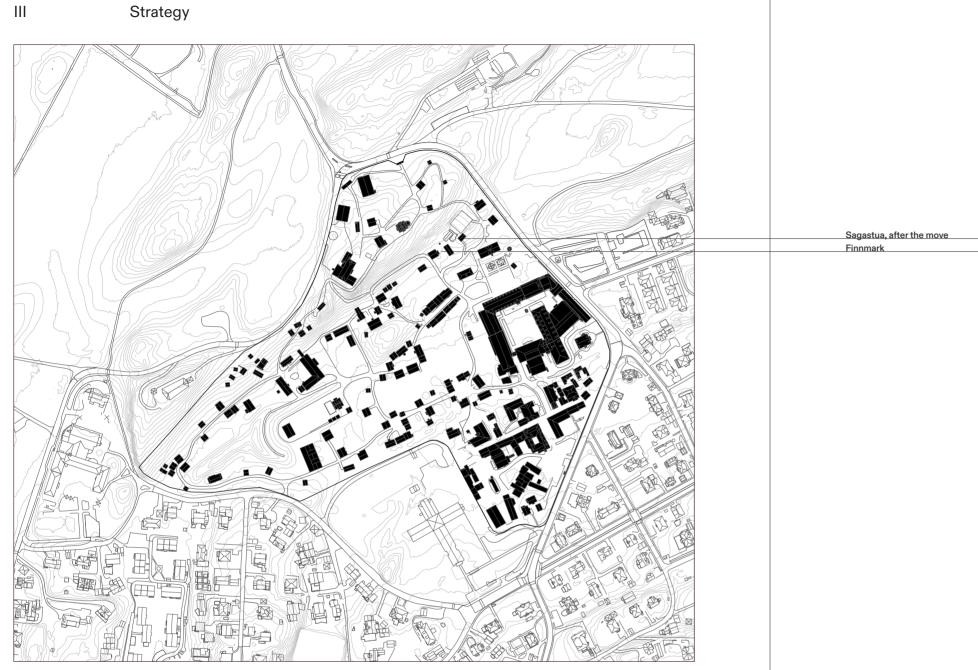
Map of Folkemuseet, 1984 no scale





Map of Folkemuseet, 1997 no scale





Map of Folkemuseet, 2019 no scale



Sagastua gave a new dimension to the museum: a place where everyone is allowed to touch and use all the objects and materials. Today, the building is frequently used for storytelling, hence the name: Sagastua. Saga origins, as we know, from Norrøn, or Old Norse, meaning "epic tale" or "story," but the name was only a lucky coincidence. The building actually got its name from Saga Petroleum, the company that financed the project. As stated by an employee at the museum: "it was lucky that it wasn't Esso who financed it because Essostua wouldn't have had the same resonance."

In 2016, when northern Norway was to be represented in the museum for the first time, Sagastua, just like its prototype, also had to move. TThree post-war buildings from Finnmark were handed over free of charge on the proviso that the museum would cover the costs of dismantling and moving. They are today used as arenas for sharing stories about the Second World War and, more particularly, how the war affected the northernmost part of the country.<sup>7</sup> When the buildings arrived in 2019, several alternative locations were considered, but the museum decided on a site alongside the pathway towards the stave church - the museum's most visited building. As the museum had already reached total capacity, FM had to do some rearrangements. This meant that Sagastua and two small mill buildings had to be moved. Sagastua was lifted by a mobile crane and moved approximately 50 meters, while the two mill houses moved to the storage in the back - one dismantled and one in full size.

 Museumsbulletinen nr. 90, 1/2019 - Norsk Folkemuseum



 Moving Sagastua. Photo from Museumsbulletinen nr. 90, 1/2019 – Norsk Folkemuseum



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Mill buildings placed in storage, one deconstructed, one full size



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### 3.2.3 THE OFFICE PAVILION'S RELEVANCE FOR THE MUSEUM

Value assessment is a primary concern in preservation. Traditional heritage management highlights a building's outstanding value. When assigning world heritage, UNESCO uses the term "outstanding universal value," a criterion that typically favors buildings, structures, or landmarks of high distinction. <sup>10</sup> Preservation is generally engaged in the specific rather than the generic. In the words of Thordis Arrhenius: "preservation tends to deny itself the possibility of being an experiment in the scientific sense, in other words, being repeatable, verifiable, and capable of being tested in a controlled environment." <sup>11</sup>

I want to challenge the conventional approach by speculating on how we can apply such value criteria to mass-produced components. I have investigated the origin of the components in the office pavilion and what potential they possess. My goal is for this research and analysis to be applicable to other similar projects from the same period.

In other words, I have tried to define values and characteristics of the office pavilion that go beyond the unique and specific, which might seem paradoxical when working with such a unique building. But as I have shown through my analysis, if we look closer, the building's main traits are its particular use of materials, the industrial production, its possibility to adapt to the terrain, and its flexible floor plan – characteristics for a specific building era - not represented in Folkemuseet today.

Although the pavilion is attributed to a specific architect, Njål R. Eide, it is the result of shared authorship. The building can

- UNESCO, Operational Guidelines for the Implementation of World Heritage. Paris: World Heritage Center, 2021, §49.
- Otero-Pailos, Langdalen, and Arrhenius, Experimental Preservation, 41.
- 12. "Lov Om Kulturminner [Kulturminneloven] - Lovdata."

 Music video "Rue" by Girl in Red. https://www.youtube.com/ watch?v=3xeAK9A8SOI be considered a high point of a specific architectural period in Norway, with its innovative form, exterior, and interior, provoking strong reactions and wonder. Many would describe it as ugly, while others think it is beautiful in its way. It has already received attention, among others used as a filming location for the music video Rue, by the Norwegian artist Girl in Red.

The first paragraph of Kulturminneloven (the Cultural Heritage Act) states that when a building is being listed, the most important values to preserve are the scientific source value and the experiential value. <sup>12</sup> This correlates to how Folkemuseet is working with their built heritage. FM is not a museum of architecture but a museum of building practices (byggeskikk), with two main goals: communicating stories to a broader audience and conducting research. FM is supposed to be a testing ground for new forms of preservation, with continuous development as its goal.



Strategy

The museum's strategic plan has an overall theme: "Norway in the world and the world in Norway" ("Norge i verden og verden i Norge,") which unfolds in three prioritized research areas:

- The design of daily life (Dagliglivets utforming)
- Problematizing Norwegian-ness (Problematisering av det norske)
- The rise of modern Norway (Fremveksten av det moderne Norge)

Incorporating the office pavilion into FM matches the museum's goals and underpins the museum's overall purpose. As my research has shown, the building has a high symbolic value; it tells a tale of a historical period, an industry, and a large-scale development, which can tell us something about our modern society. As the main factor for national wealth and the basis for Norway's welfare society, my argument is that the story of Norway as an oil nation deserves to be told in Folkemuseet, alongside the other chapters of our building history. In addition to the petroleum history, the pavilion will disseminate the Norwegian aluminum production and the building technology that arose from offshore developments. The pavilion is a suitable exhibition space with its open floor plan and the possibility for exhibition elements suspended from the roof structure. Its constructive ela moving operation.

The building would require new special expertise, and the Museum staff would need to expand their knowledge following the prioritized research areas.

ements hold high quality and have already proven to withstand

The office pavilion embeds a high documentation value, and my research has only scratched the surface. At the museum, this investigation will continue. It will act as a reference object where one can research similar building technology. As an important source of knowledge, it should be incorporated into the museum's "building archive." Placed side by side with log buildings and a stave church, the office pavilion could become an audience favorite and will be an important arena for dissemination and teaching. This could lead to extra visitors, which again would benefit Folkemuseet.

#### **3.2.4 PLACEMENT**

The museum collection follows a strong organizing principle, categorized according to geography. Western Norway is represented to the west in the museum, Southern Norway to the south, etc., and buildings from the same parts of the country are usually grouped together.

After testing different scenarios, I propose to place the office pavilion just below Kong Oscar II's collection, close to where the new buildings from Finnmark were placed. This is the only area representing individual buildings, not determined by geography, including Sagastua, a bedehus, a skoleste, and an open-air theatre, among others. In my opinion, this eclectic mix of buildings could very well accommodate the office pavilion.

Right above Bedehuset, next to the main road, one can find a small plateau in the sloping terrain covered by pine trees, which is suited for the office pavilion. The site is positioned right outside Zone A of the municipality's listing of the museum, but still close enough for the pavilion to act as a shielded indoor viewing platform where visitors can see the Stave Church and view

13. Dahl, "Bislettbekken og byens fysiognomi."

terrain.

building methods.<sup>13</sup>

large parts of the rest of the collection. Due to the terrain, the pavilion will be in the prominent company, but still not visible from the center of Kong Oscar II's collection because of the

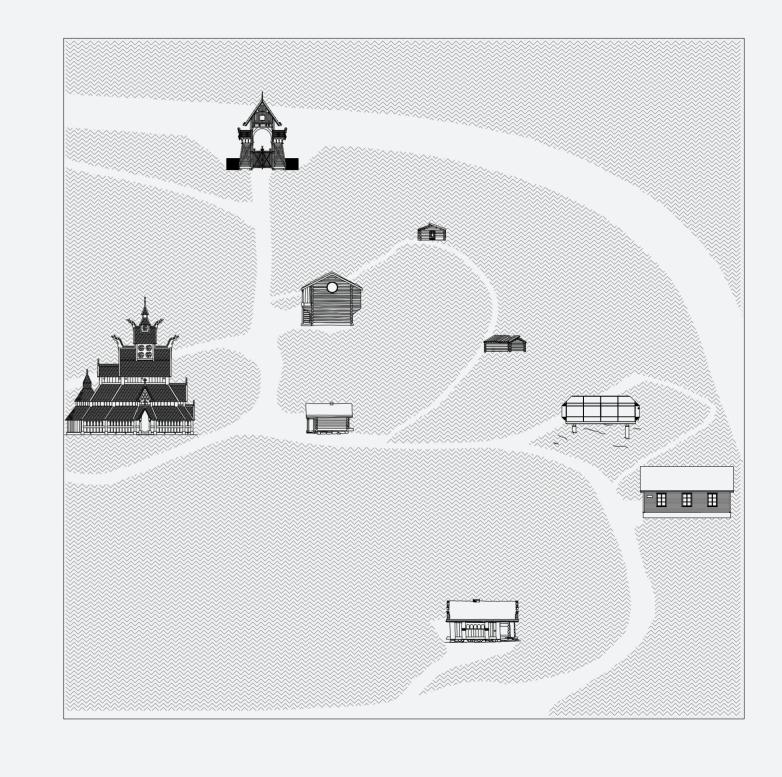
A portal is placed at the top of Kong Oscar II's collection. In her Ph.D. Bislettbekken og byens fysiognomi. Kristianiaprovisorier omkring 1900, Mathilde Simonsen Dahl argues that the portal is a mediator between new industry and older building heritage. It was built in the "old Norwegian style" as a model for the current

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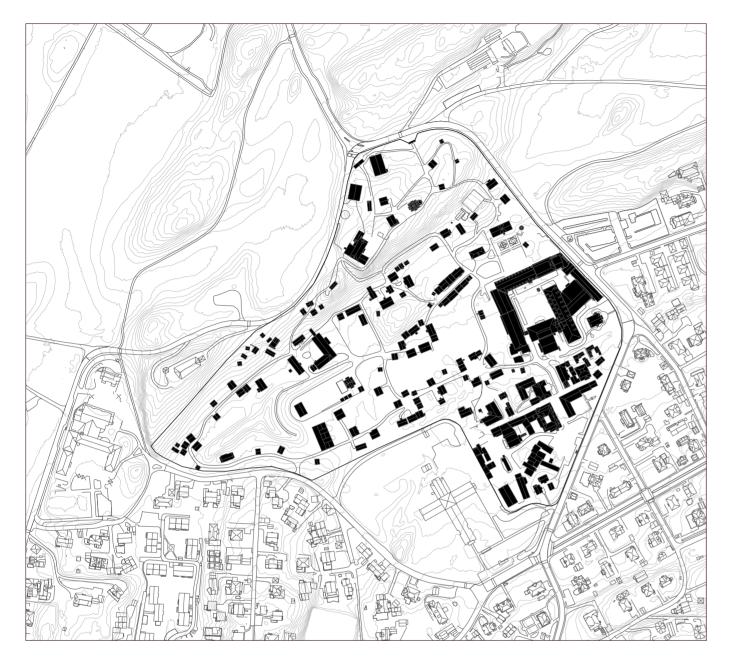
The portal was initially built for Norges Kunst- og Industriutstilling in 1883, made by Sagbrukforeningen, and designed by architect Holm Munthe (1848-1898). The bulk of the exhibition took place at Tullinløkka, but a smaller section was located in Slottsparken, where the portal served as an entrance. The dismantling of the exhibition coincided with the moving operation and reassembling of Gol Stave Church in the summer of 1884. Following several negotiations, the portal was moved to Bygdøy and became part of the permanent collection of Kong Oscar II.<sup>14</sup>

"The stave church portal in Slottsparken, set up for the royal guests' promenade from the castle, through the city to the reference works forms a condensed example. Contemporary technology (mechanical rafters), stave church references, the exhibition in the city and the ongoing relocation of the Gol stave church along new railway routes to the landscape park on Bygdøy were intertwined through walks in the park and along the streets as current events, with as strong a presence in the city as in the daily press. Framed by the city's more enduring architecture." <sup>15</sup>

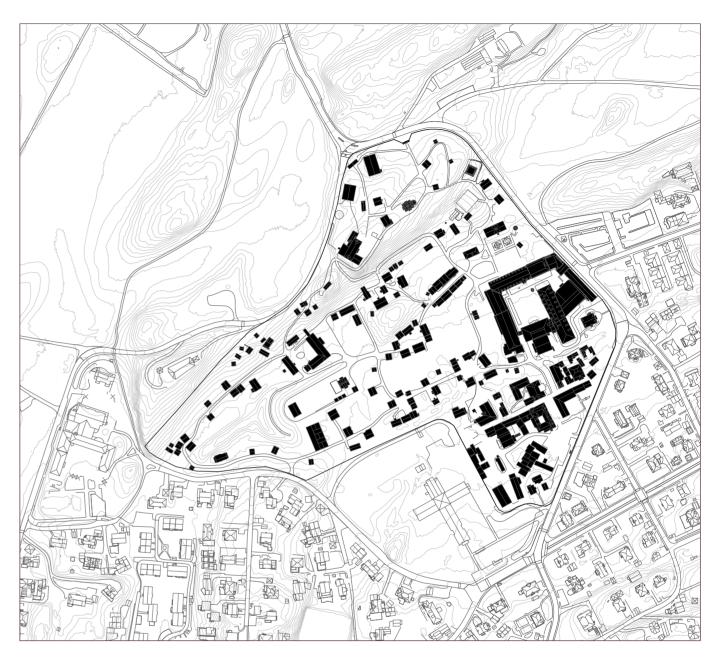
As I interpret Simonsen Dahl, the portal symbolizes the transition into the modern world: the gate to absolute modernity. A place where stave churches, log buildings, and steel pavilions can co-exist, if not in a perfect symbiosis, but at least as an intriguing collection of buildings that represent interesting stages of Norwegian architectural history. 14. Dahl, 176. 15. Dahl, 175.



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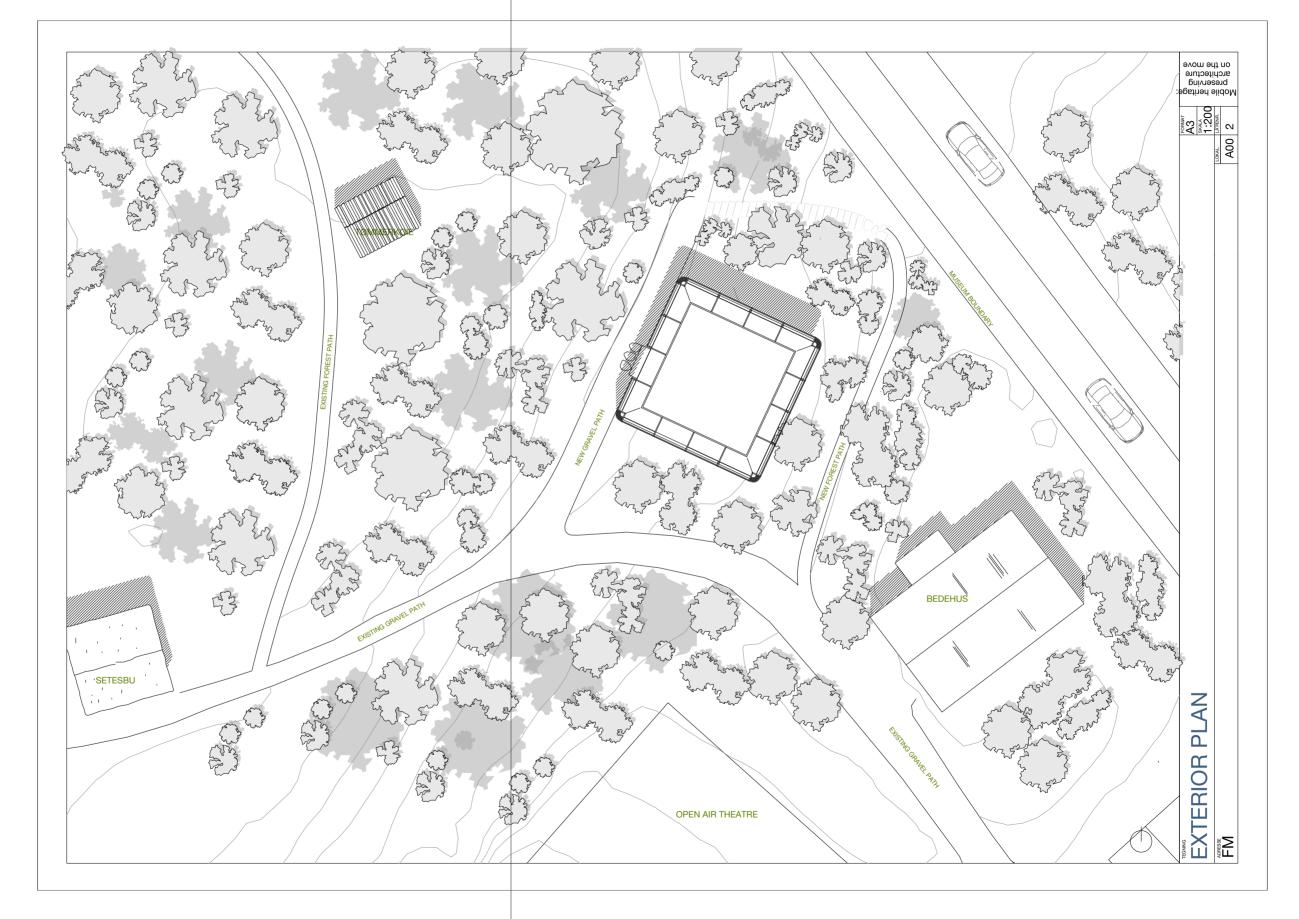


Map of Folkemuseet, 2019 no scale



Map of Folkemuseet, 2023 no scale

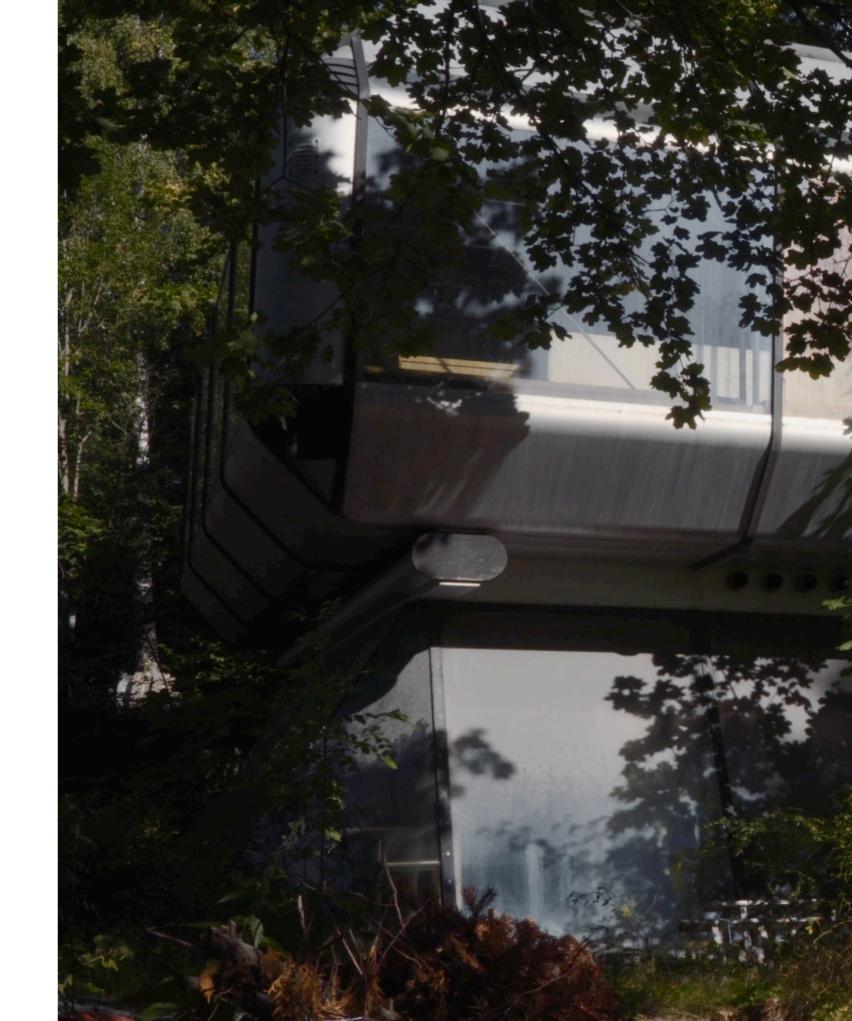
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# 3.3 From a linear to a circular preservation approach

Once the office pavilion enters the museum, my role changes slightly from being exclusively a preservationist architect to include mediation and curation. After having tested many different scenarios on how the building should land, look, and work in its new context, it gradually became clear to me that the most important thing is that the office pavilion should get the same treatment as the rest of the buildings in the museum. The building's main role is to symbolize the stories connected to it and the building practice it represents, and my task is to facilitate this.

How should it land in the terrain? How should one enter? Does it need a toilet? How should it be used? How little can I do while maintaining the building and the museum's best interest?

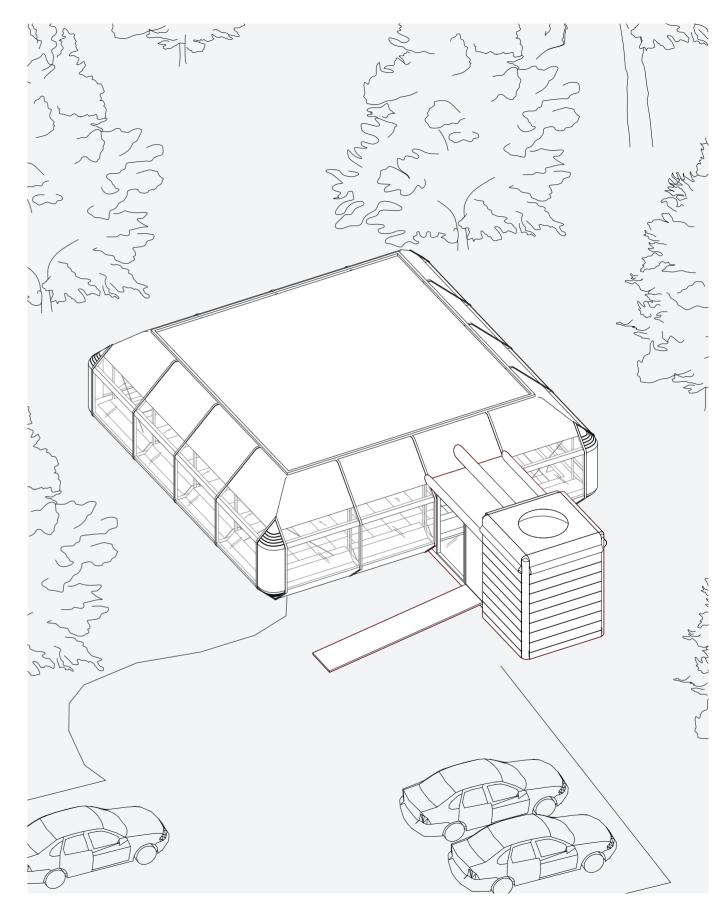


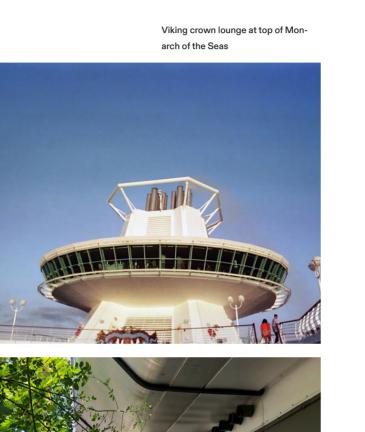
#### 3.3.1 PLUG-INS

A distinct characteristic of this building is that it needs plug-ins to function, and how the specific use determines how the plug-ins are shaped. In other words, what is placed in the plug-in defines how the building can be used.

The original plug-in resembled a jet bridge/loading platform one walks through to enter a cruise ship or an airplane. It contained two small bathrooms, a mini-kitchen, a wardrobe, an entrance, and technical installations – all necessary facilities in a small office. It followed the original intention of the building, being detachable and leaving little impact on the ground. Jet bridge/loading platform found on Vippetangen in Oslo, for boardning cruise-ships

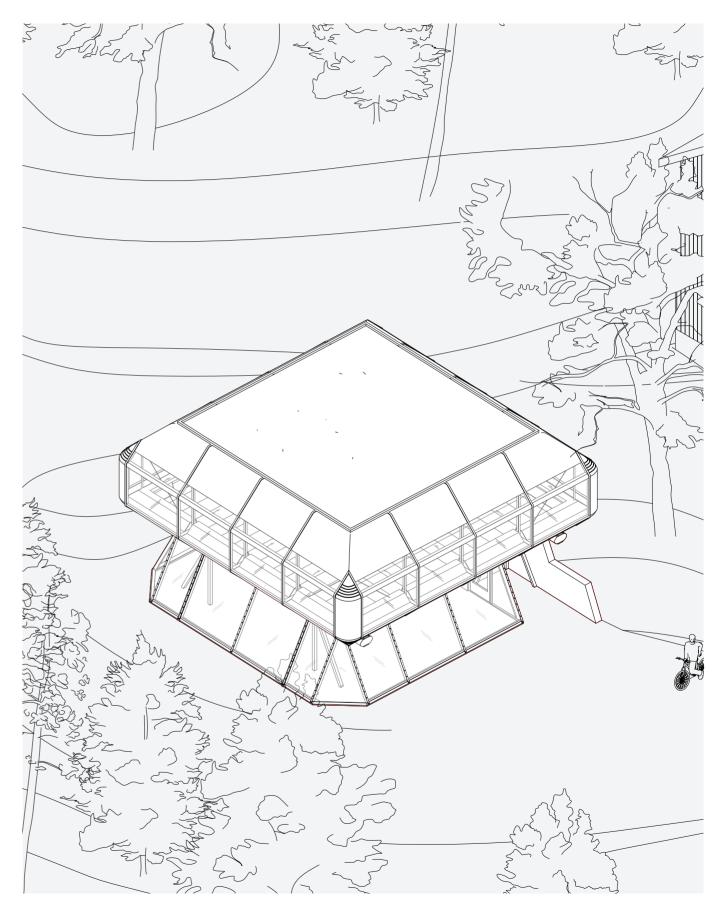






The second and current plug-in, the glass cone, resembles the bottom of a cruise ship viewing platform. It contains a larger bathroom, a larger kitchen, a larger entrance area, and more space for office workers - all necessary facilities in a slightly bigger office. It does *not* follow the original intention of the building: the staircase has pierced through the construction, and the pavilion has much impact on the ground.



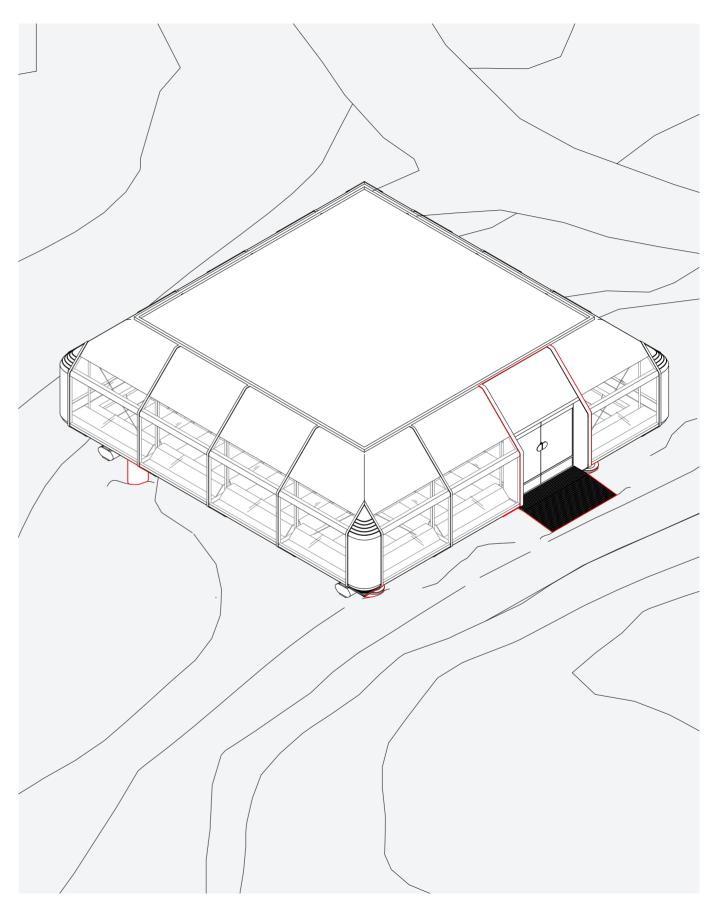


My project proposes a third type of plug-in, defined by its new use. It extends 60 cm into the envelope and contains only an entrance, which turns the pavilion into a museum object. There is no need for a kitchen, a toilet or other office facilities. The important thing in its new context is accessibility, not compromising the original construction's shape or modularity, and keeping the space climatized. It is placed on columns in a sloped terrain, leaving the pavilion at level with the ground from one side and elevated on the other. Just like a stabbur or a loft, this leaves space under the pavilion to store spare parts or for animals to shelter. The air underneath emphasizes how the building is decontextualized, still movable, and leaving little impact on the ground.

It has been discussed between my supervisors, colleagues, and me, whether the office pavilion should include a toilet and water, as there is a need for more toilets for visitors and workers in the museum. I argue that it is not this building's job to provide these facilities, as it should be treated exactly like the other buildings in the museum. Not needing to lay pipes also simplifies the moving operation. If the need changes as time pass, the pavilion can easily receive a new plug-in holding whatever is required – which was the intention of the modular system in the first place.

The Norwegian Petroleum museum (oljemuseet) in Stavanger.





From a linear to a circular preservation approach

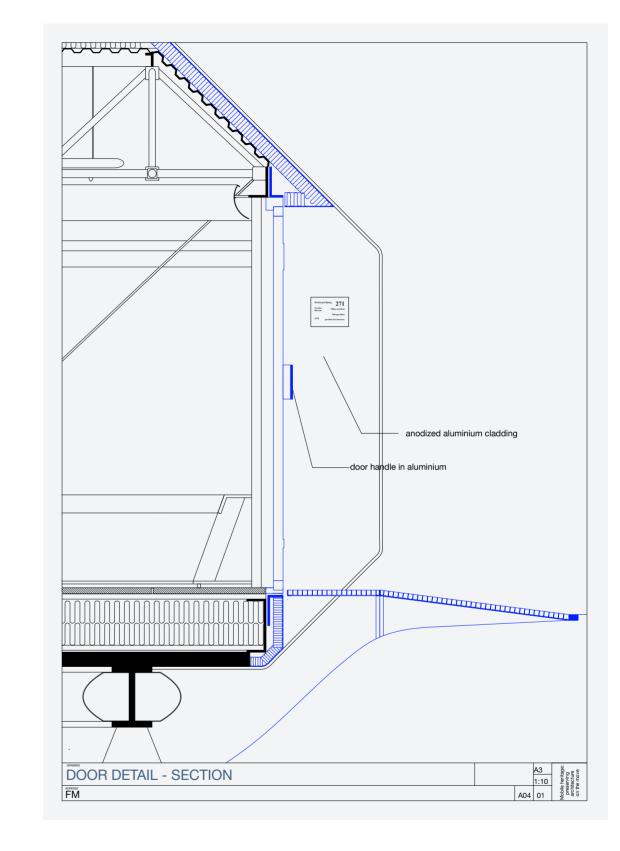
#### 3.3.2 THE OFFICE PAVILION'S NEW USE AND DESIGN

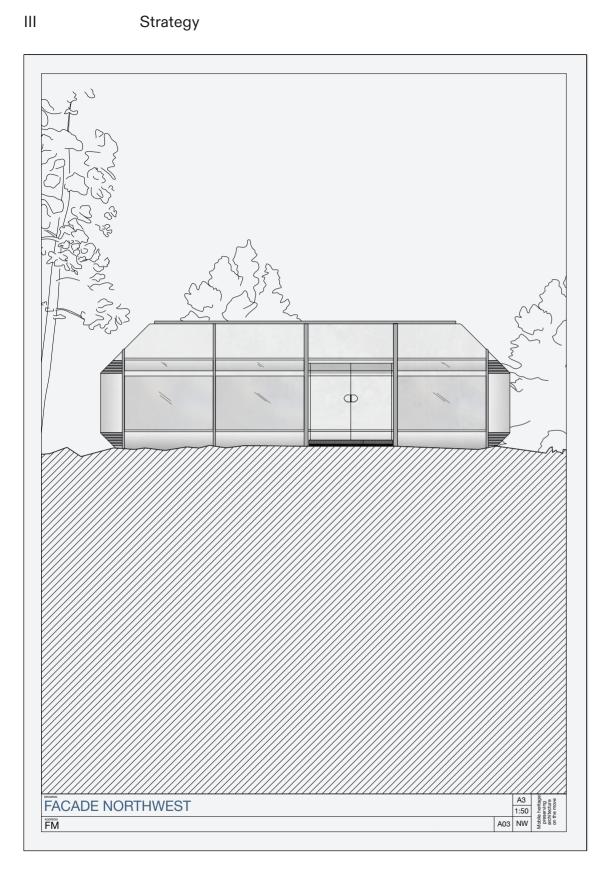
Like a satellite of the oil museum in Stavanger, the office pavilion will rest on thick rounded steel columns designed as scenographic interpretations of the North Sea's oil installations. The new entrance is hidden on the backside of the pavilion not to compromise the exterior. It is pushed 60 cm into the envelope, placed right outside the existing steel columns, not to compromise the visible construction and cladded in anodized aluminum plates. A steel grid ramp has been installed up to the entrance. A gravel path is laid from the ramp, connecting the pavilion to the existing paths in the museum.

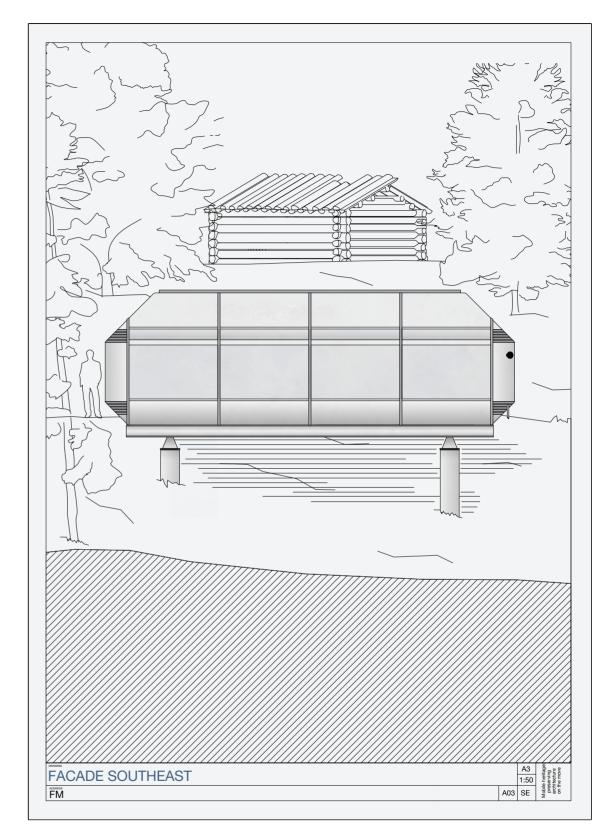
Like on the oil platforms and cruise ships Eide designed, the office pavilion originally had a blue wall-to-wall carpet. I have yet to be able to figure out where they were produced, but they should be recreated to add color to the exhibition. A couple of desks from the architectural office could be recreated, exhibiting technical drawings of oil platforms and cruise ships. Shelves and drawers like the ones one can find today can also be reproduced and include parts of the archive as an interactive exhibition.

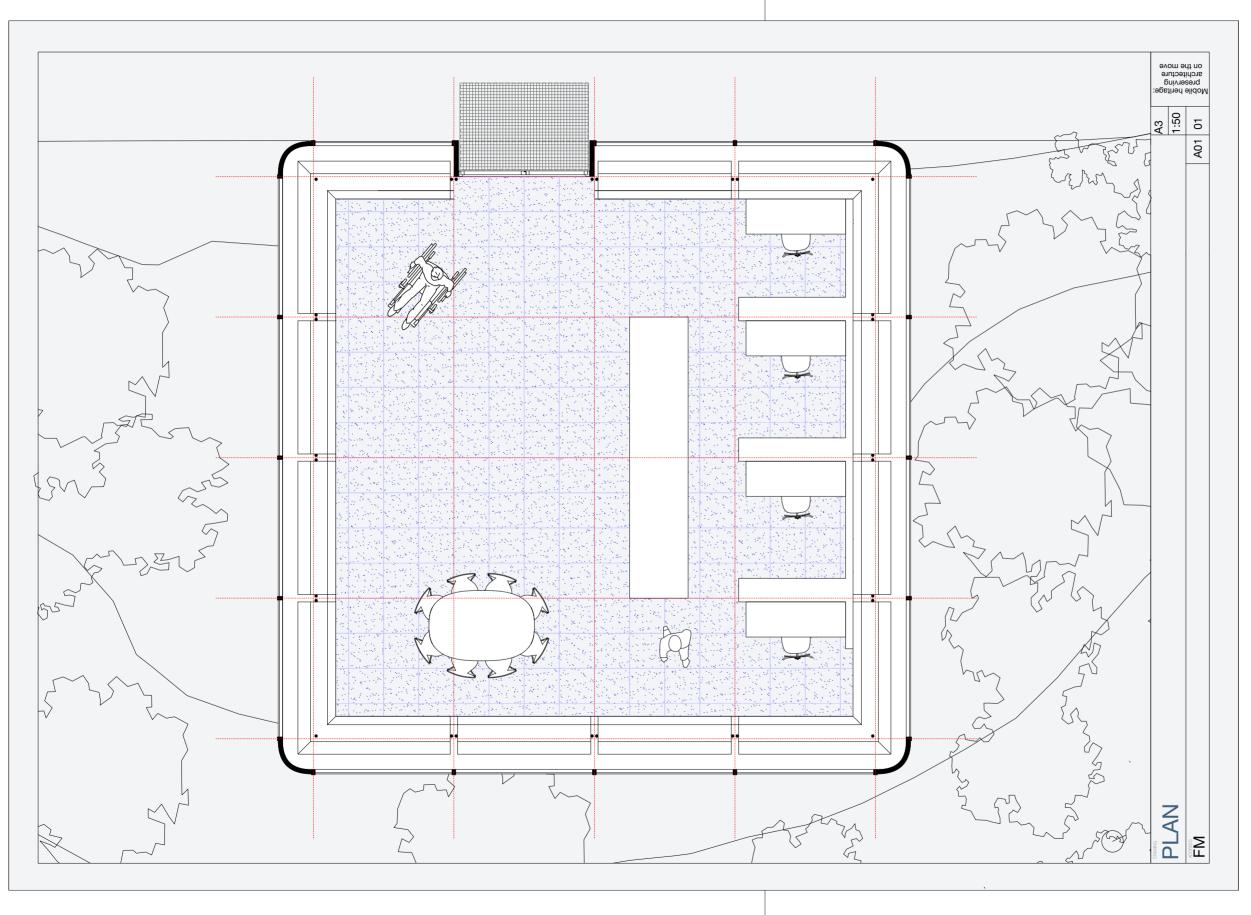
The original wooden place-built interior shelves that follow the inside of the envelope would have to be recreated as they are marked by mold. Scale models of cruise ships, oil platforms, and the two versions of the office pavilion could be exhibited on the shelves.

Firstly, the exhibition should be an arena for sharing stories of the Norwegian petroleum and cruise ship business. It should convey how office life could have felt in the 1980s and leave space open for workshops and various use. Secondly, it should be a place for the museum to research building practices from the 1970s and 80s.









#### **3.4.3 EXPERIMENTAL PRESERVATION**

In a paper called "Unwrapping Toxic Heritage: Strategies for Handling Timescape and Risk in Museum," Anne-Sofie Hjemdal and Terje Planke uncover how the museum's buildings are infused with toxic and harmful chemical substances, as the result of an effort to make the materials last forever.<sup>16</sup> Because of outdated methods of material preservation by using toxic chemicals such as Carbolineum and Bernakre, "a number of buildings at open-air museums are toxic and becomes a biological risk for both nature, the people working at the museums and their guests." They argue that, in the future, one needs to explore how toxic timber should be handled, as it is still unknown how it behaves. They conclude by proposing a change in perspectives from "a linear and toxic to a circular or ecological approach," with more focus on the intangible cultural heritage as opposed to the material itself.

Modular buildings have circular aspects written into their DNA, which makes it unnatural to freeze time. Changeable, standardized components make it easy to replace, for instance, a rotten log in a timber building or a steel beam in the office pavilion. I propose making the pavilion a place for research and experimenting with standardized and specific components. How are the components produced? How should they be treated? How would one produce them today? How can one improve the building's energy consumption? These are all questions one could answer after having properly investigated the building.

The circular notion of protection corresponds to the conceptual framework of "experimental preservation." Preservation is the act of keeping something intact or preventing something from

Hjemdahl and Planke, "Dødelige Hjem - Perspektiver På Den Faglige Ideen Om Evigheten." 17. Otero-Pailos, Langdalen, and Arrhenius, Experimental Preser-

vation, 11.

through research.

being damaged. On the other hand, an experiment is to learn something by testing. The two words - experiment and preservation - have, as pointed out by Jorge Otero Pailos in the text "Experimental Preservation: The Potential of Not-Me Creations," until recently, "been kept at a safe distance from each other." 17 But as he argues, there is a need to experiment with objects to advance knowledge about them. There is little established expertise in the field of preservation regarding buildings from the 1970s and 80s. The office pavilion was built as an experiment in 1978. My intention is to continue this "experimental tradition" by making the office pavilion into a place of experimentation on how it needs to be preserved. I want to protect the building

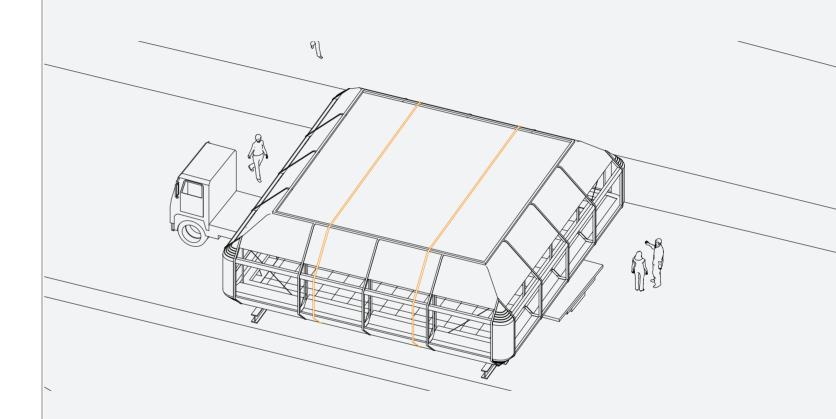
This experiment starts by moving the building to the museum.

Strategy

## 3.4 Moving evaluation

This diploma project is essentially about movement. As shown, in a figurative sense, the office pavilion represents a technological movement, which can tell us a story about Norway today. In concrete terms, the building is a movable object. I have identified three different moving strategies in-depth.

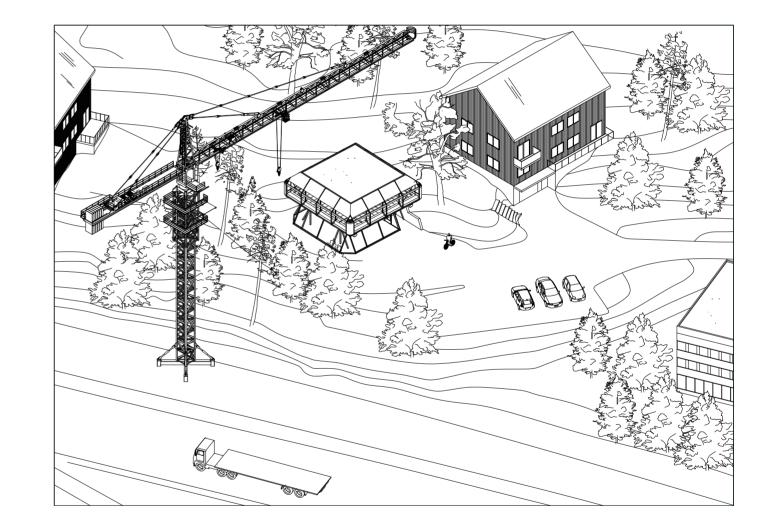
The first is a relocation in its entirety, the second is a complete disassembling of the whole structure, and the third is about dismantling it into the four intended modules.



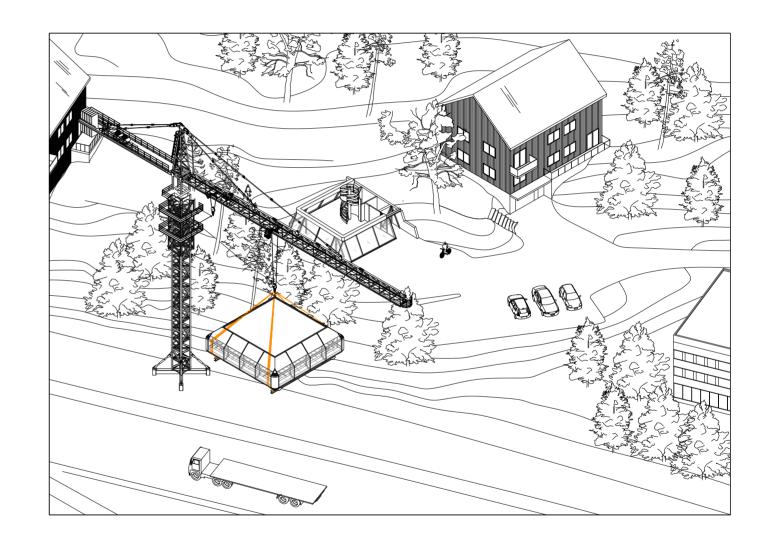
#### **3.4.1 RELOCATION IN ITS ENTIRETY**

The first method is the one used when the building was moved in 1990. Unfortunately, no information on the method exists regarding lifting procedures. It makes the most sense from a structural point of view to lift the first floor from beneath the two main girders. The transportation of the building would, like 32 years ago, need to take place at night via E18. The driving route would have to be checked for challenges regarding the width of the pavilion. This would most lightly present problems when exiting E18 towards Bygdøy.

Transportation out of the plot with a lorry is impossible due to the limited width of the local road. The truck would therefore have to be loaded from E18.

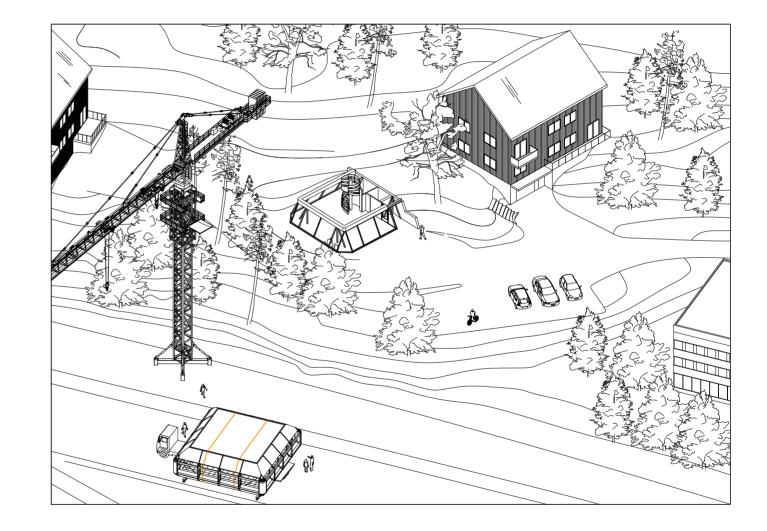


A large crane would be needed to lift the building directly from the site to the truck. Whether the crane can be parked in the parking lot on the site or if it must be parked on the side of E18 would have to be checked more closely.



The truck would then drive the pavilion to its new location, where a new crane would lift it onto its new foundation.

Evaluation: A relocation in its entirety is probably the gentlest method for safekeeping the building, as it has already been proven to work, but renting a large crane and special transport would be costly. However, it would save labor in dismantling and reassembling the building, which in turn would lower costs compared to the other methods. But considering the road width and size of the tunnels, as well as the fact that several building parts would have to be replaced anyways, a different solution would be recommended. However, after having discussed the project with an engineer, it was made clear that if the building were to be moved in its entirety, the easiest way would be to transport it with a helicopter.



Strategy

#### **3.4.2 COMPLETE DISASSEMBLY OF THE BUILDING**

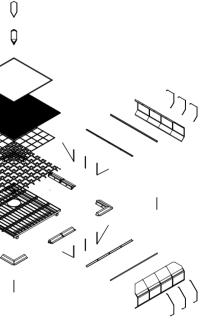
The second method proposes a complete dismantling of the building. This means every single component would be taken apart. It could be done as an experiment to learn about the construction, for instance, by a group of students.

Evaluation: This alternative is the simplest in terms of lifting and transport, but could be challenging in terms of labor. It would also be the solution possibly creating the most damage to the construction, and it would probably not be any cheaper than the two other methods. However, it could be the method where one would learn the most about the construction and the materials. It would be an excellent way to directly recycle and replace relevant modules and uncover critical errors.

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Moving evaluation

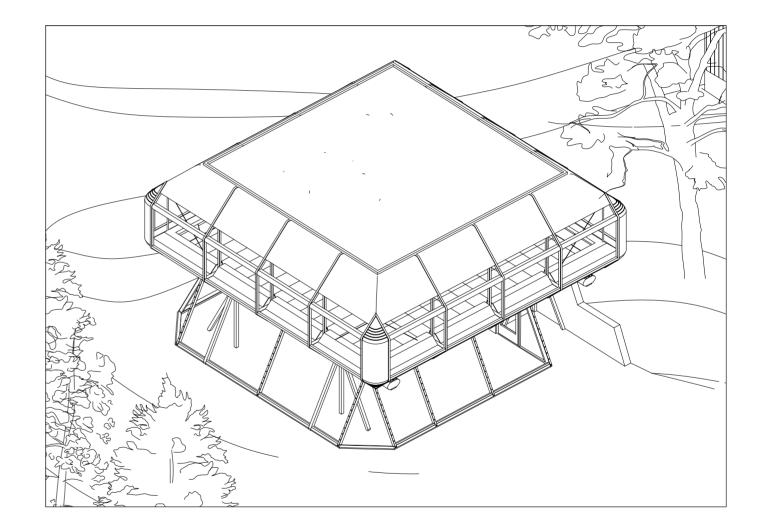


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#### 3.4.3 DISMANTLE THE BUILDING INTO FOUR PIECES

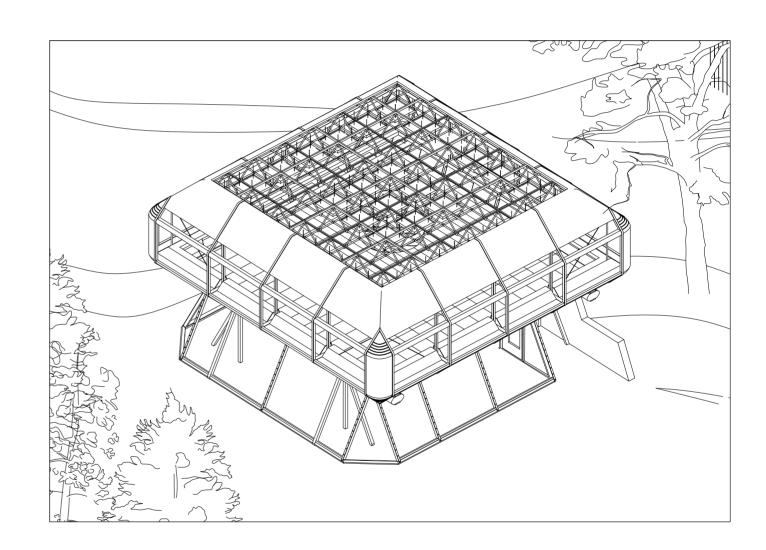
The third method is similar to how the construction was intended to be moved: by dismantling the building in four pieces. Why wasn't it used in 1990? Was it too good to be true? The construction of the building supposedly allows the volume to be separated into four pieces. In this case, one would disconnect two modules from the middle of the building and two modules from the outside, each with a width of 2.4 m. This method of dismantling means that several steel elements must be cut. The transportation of the main modules could be done by regular trucks.

The following would have to be done to implement this method:



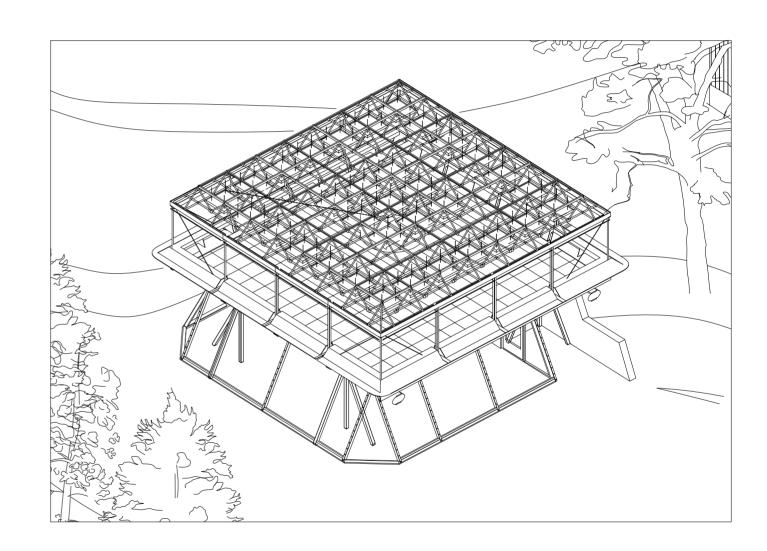
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Firstly, one would have to dismantle the roof, including the insu-lation and the steel sheets.

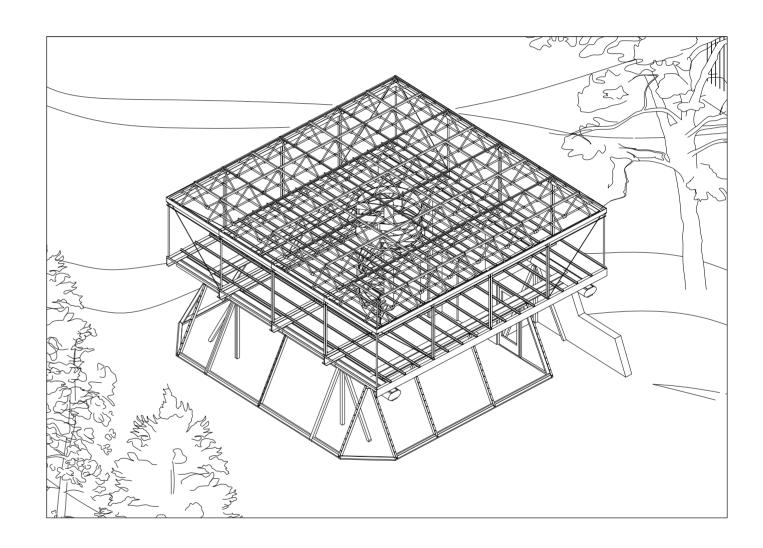


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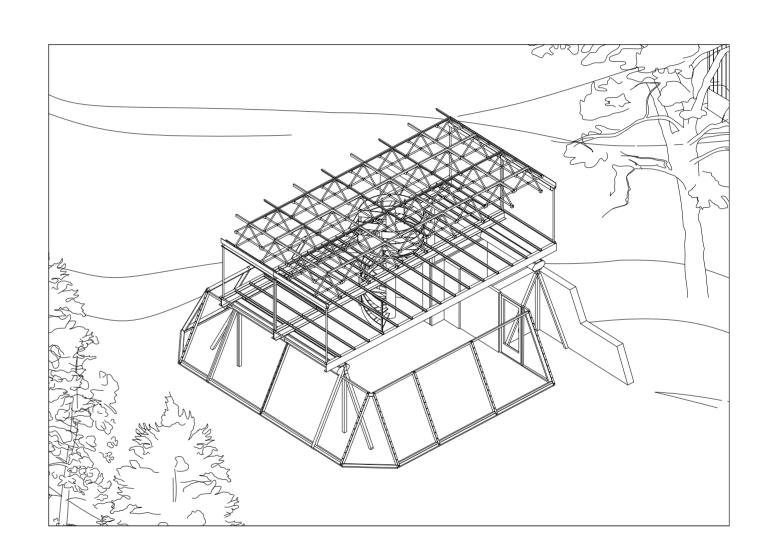
. Secondly, one would have to remove all fixed furniture, includ-ing wooden benches, lamps, and the ventilation system.



Thirdly one would have to disassemble the facade system and the floorboards. Then one would have to reinforce the stairwell and cut through the edge beam of the roof structure and the floor beams.



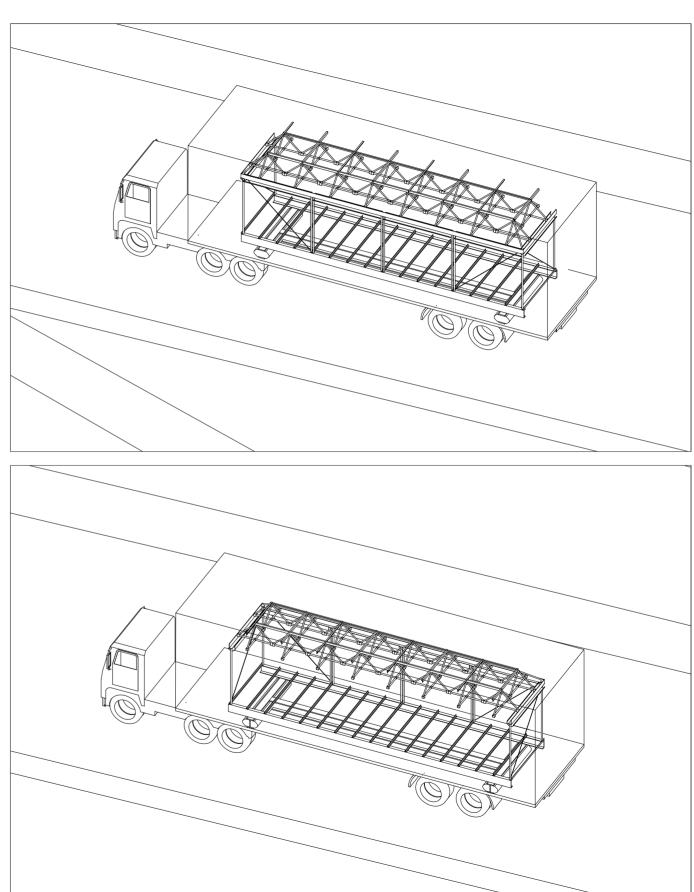
Then one could remove the two outer module pieces



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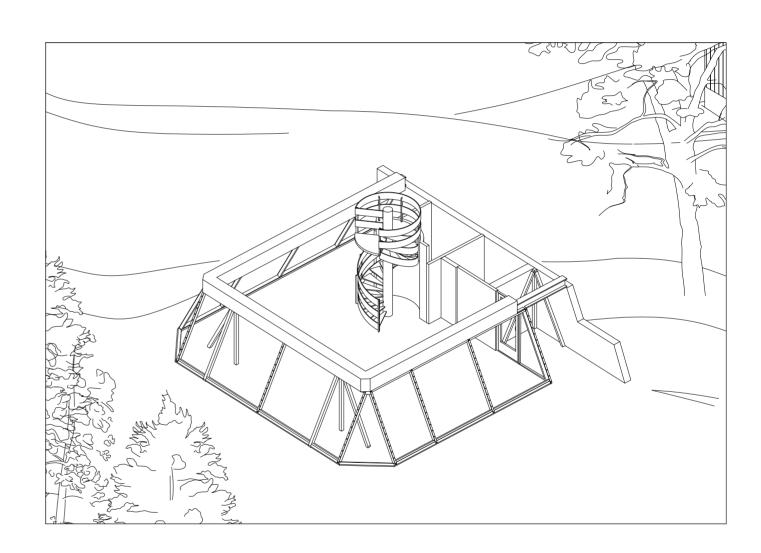
Strategy

and place them in a reinforced box on a truck.



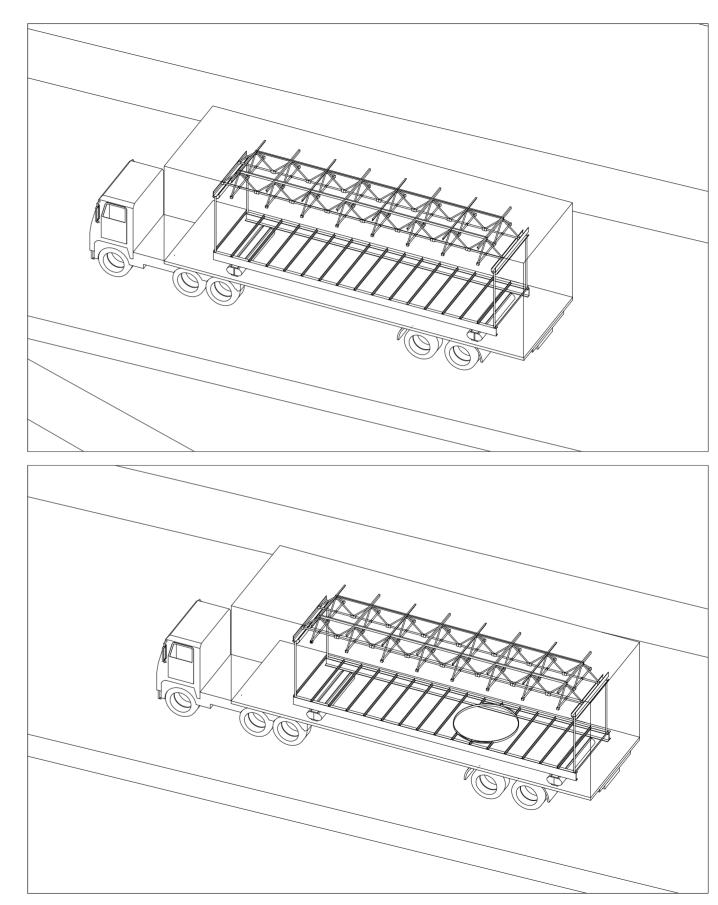
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And finally, one would do the same with the two middle modules



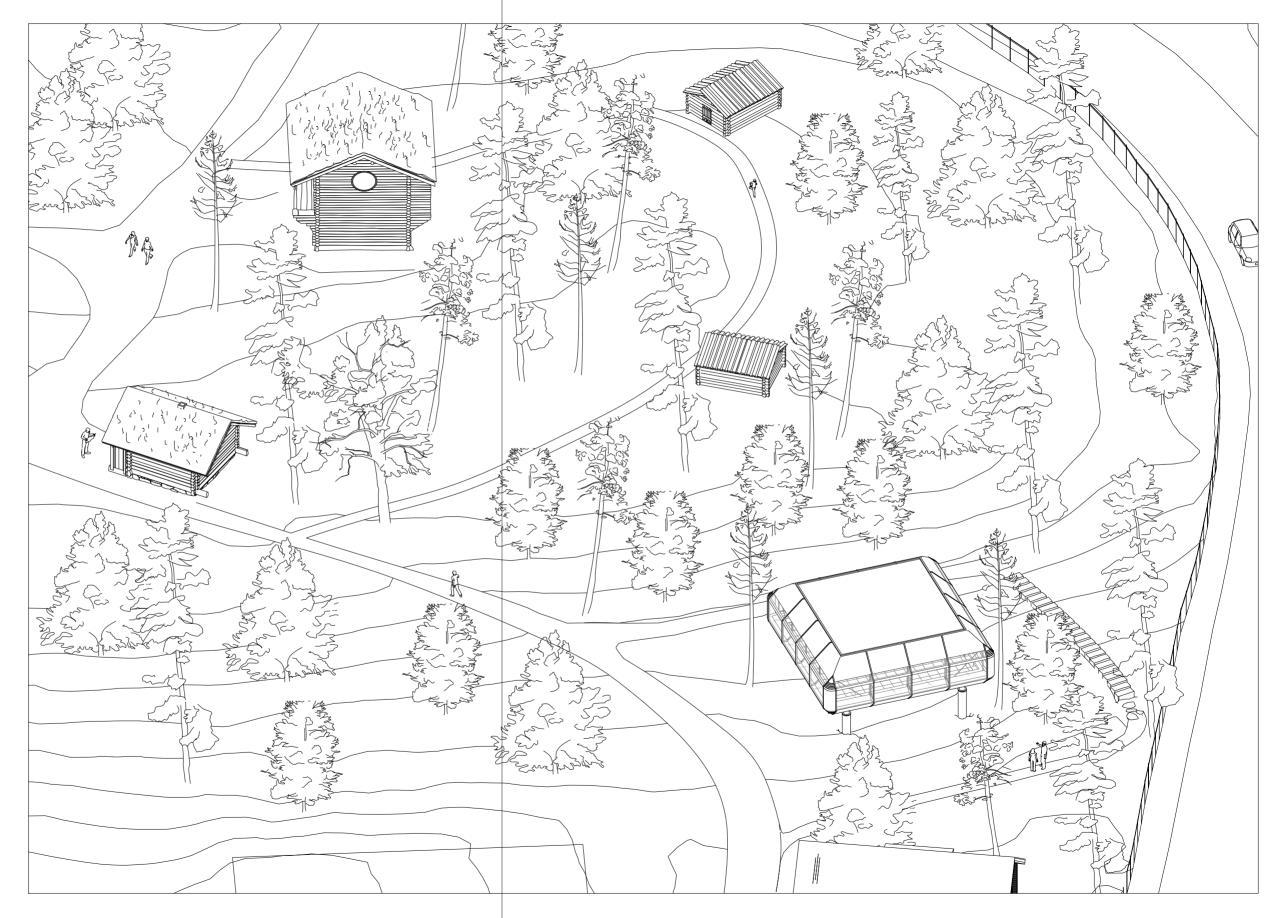
and drive them to their new site, where the same procedure would have to be carried out in the opposite order.

Evaluation: Moving the pavilion in four pieces is a solution that could be less problematic concerning transport and lifting. But because one would then have to cut through several parts of the support system, the risk for damage would be greater. However, the pieces that would have to be cut are all standard steel elements that could easily be replaced or welded together.



Strategy

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- 1894-1946 Norsk Folkemuseum." Accessed December 5, 2022. https://norskfolkemuseum. no/18941946.
- 2. Dahl, Mathilde Simonsen. "Bislettbekken og byens fysiognomi : Kristianiaprovisorier omkring 1900." *xii, 371*, 2020. https://aho.brage.unit.no/aho-xmlui/handle/11250/2675713.
- 3. "Forskrift Om Fredning Av Bygdøy Kulturmiljø, Oslo Kommune," n.d.
- 4. Hjemdahl, Anne-Sofie, and Terje Planke. "Dødelige Hjem Perspektiver På Den Faglige Ideen Om Evigheten," 2020.
- "Kindredhuset Norsk utvandrermuseum." Accessed December 6, 2022. https://utvandrermuseet. no/kindredhuset.
- "Lov Om Kulturminner [Kulturminneloven] Lovdata." Accessed November 22, 2022. https:// lovdata.no/dokument/NL/lov/1978-06-09-50.
- "Om Norsk Folkemuseum Norsk Folkemuseum." Accessed November 22, 2022. https:// norskfolkemuseum.no/om-norsk-folkemuseum.
- 8. Otero-Pailos, Jorge, Erik Fenstad Langdalen, and Thordis Arrhenius. *Experimental Preservation*. Zürich: Lars Müller Publ, 2016.
- 9. "Sagastua Norsk Folkemuseum." Accessed December 8, 2022. https://norskfolkemuseum.no/ sagastua.

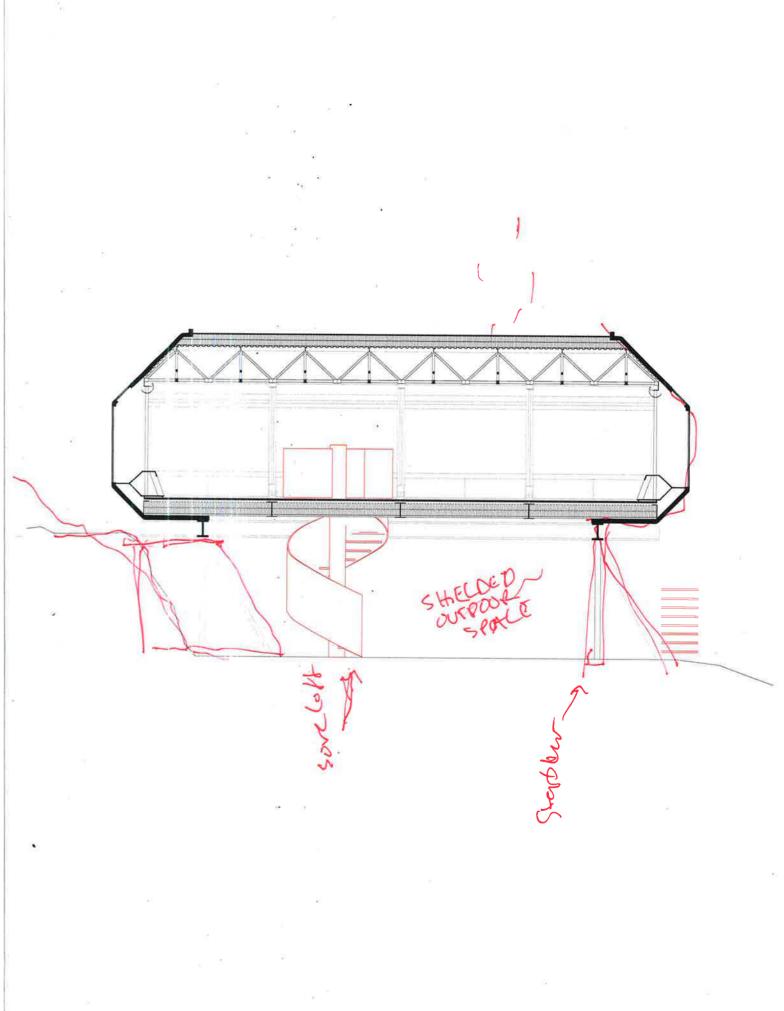
## FIGURE LIST

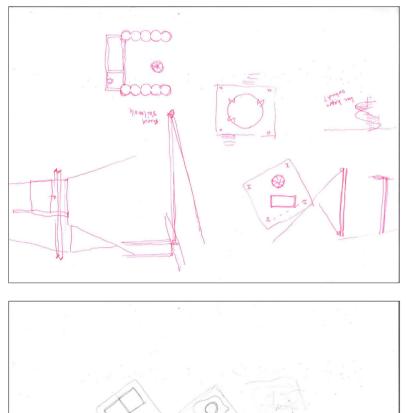
- Midlertidig godkjennelse og approbasjonsbetingelser for flytting av kontorbygg på Gnr. 41 BNR. 218. Bærum Kommune, 1990.05.08
- 2. Kindredhuset. Photo by Erik Mostue, Domkirkeodden. Collected from Digitalt museum
- Kjellebergstua fra Valle i Setesdal. "Gammelstog" til venstre (årestue fra siste halvdel av 1600-tallet), "Nyestog" til høyre (fra tidlig på 1700-tallet). Fotografert på Norsk folkemuseum 1942.
- 4. "Sagastua", copy of Kjellbergstua. Photo by Anne-Lise Reinsfelt / Norwegian Folk Museum, 2010
- 5. Moving Sagastua. Photo from Museumsbulletinen nr. 90, 1/2019 Norsk Folkemuseum
- 6. Viking crown lounge at top of Monarch of the Seas
- 7. The Norwegian Petroleum museum (oljemuseet) in Stavanger.

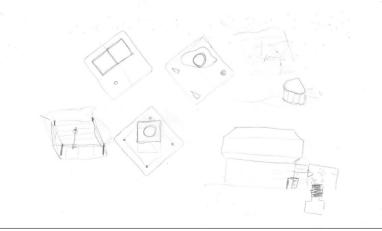
Strategy

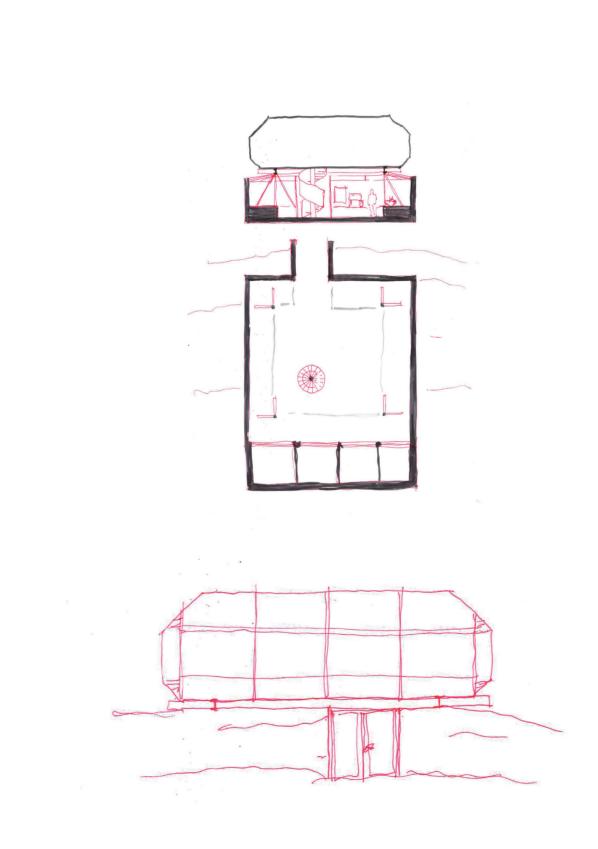
# 3.5 Process material

The following pages show an uncurated part of my process.



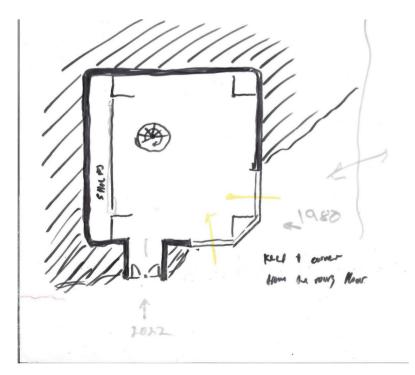


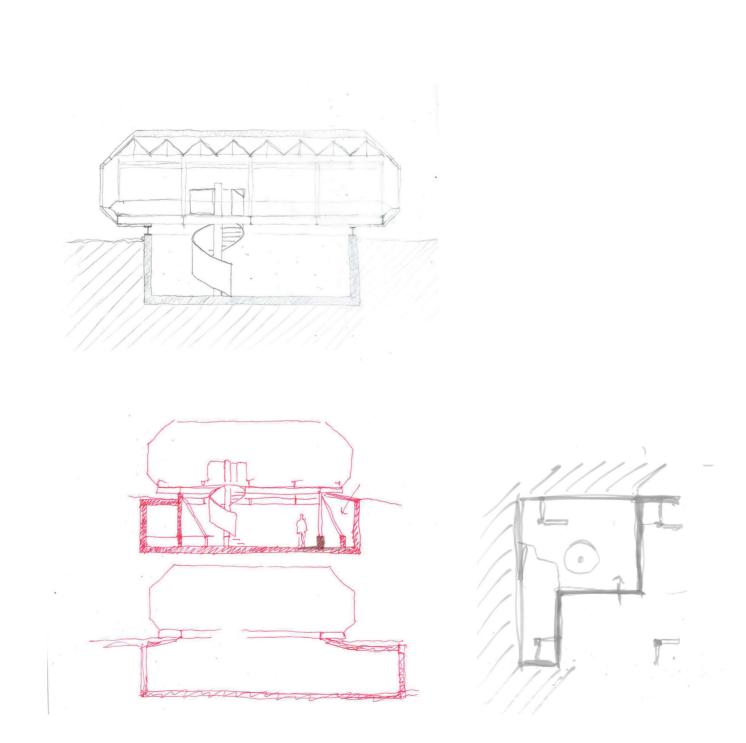




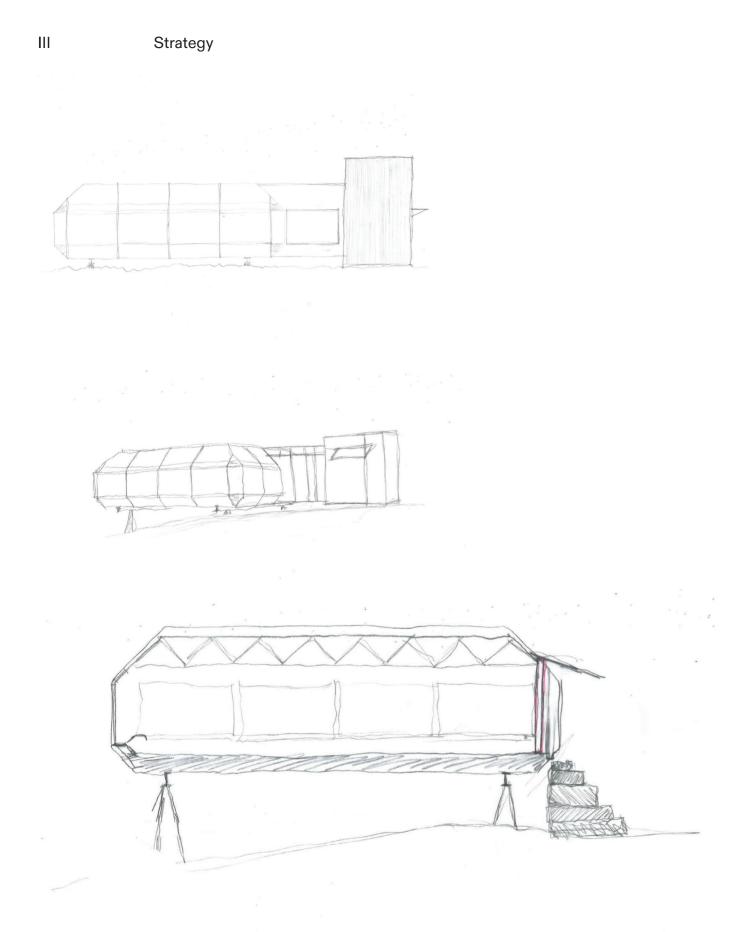
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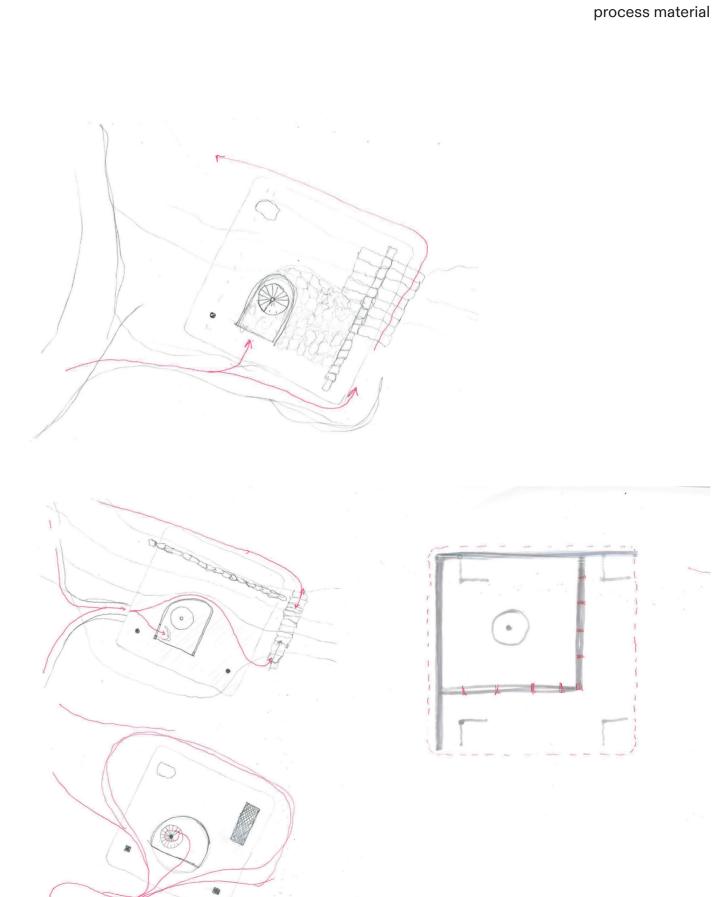


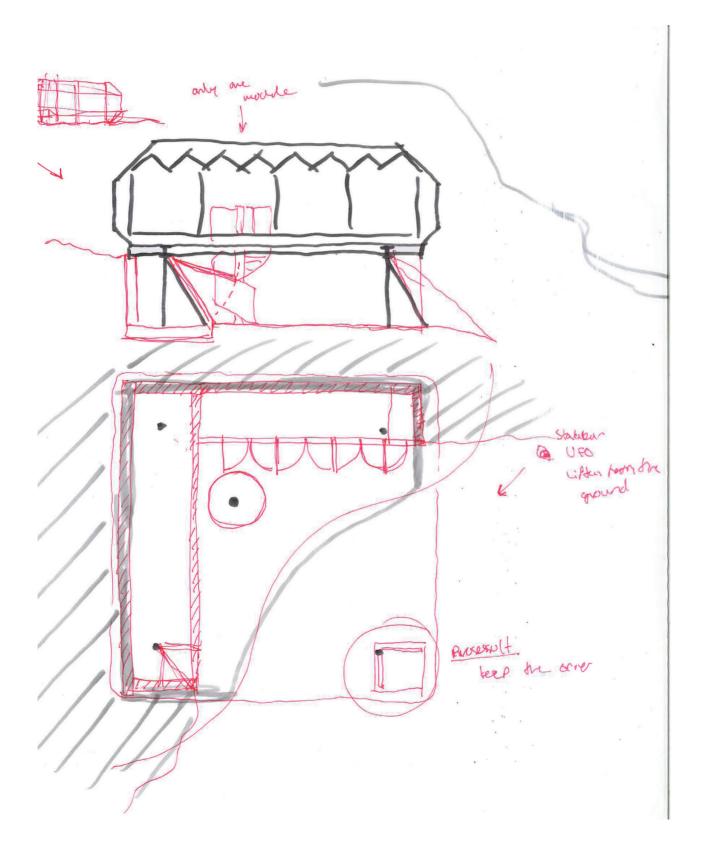


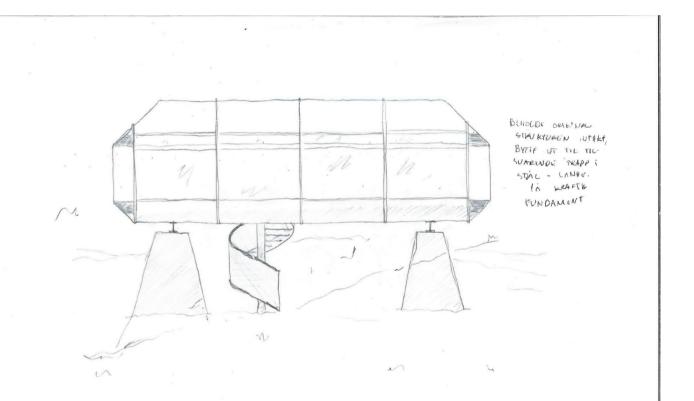


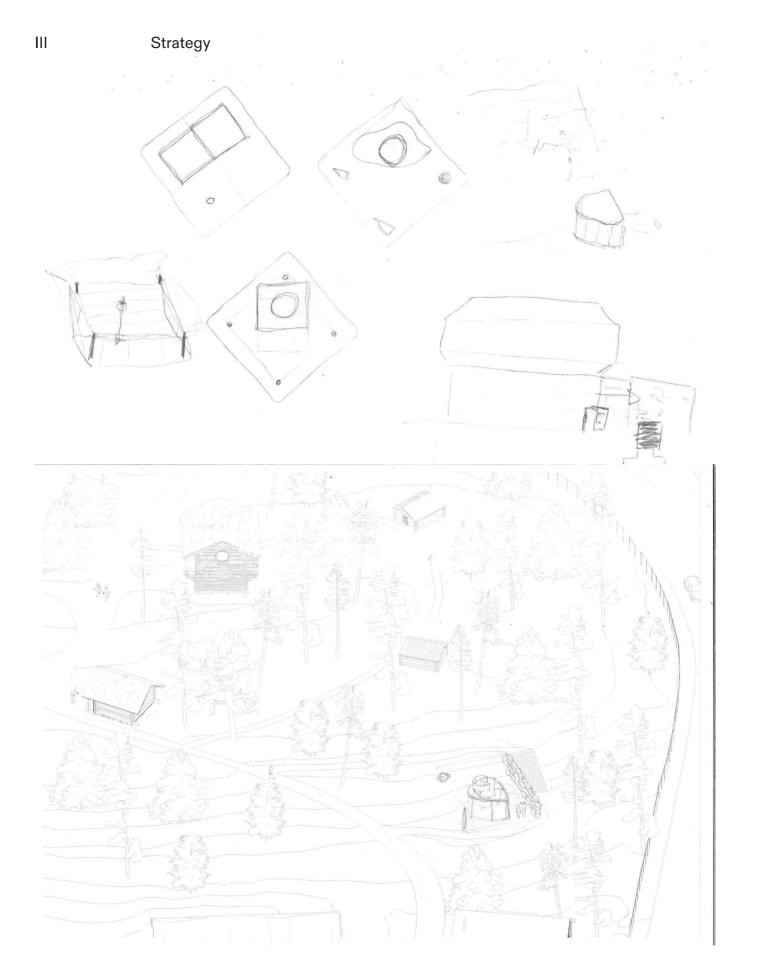
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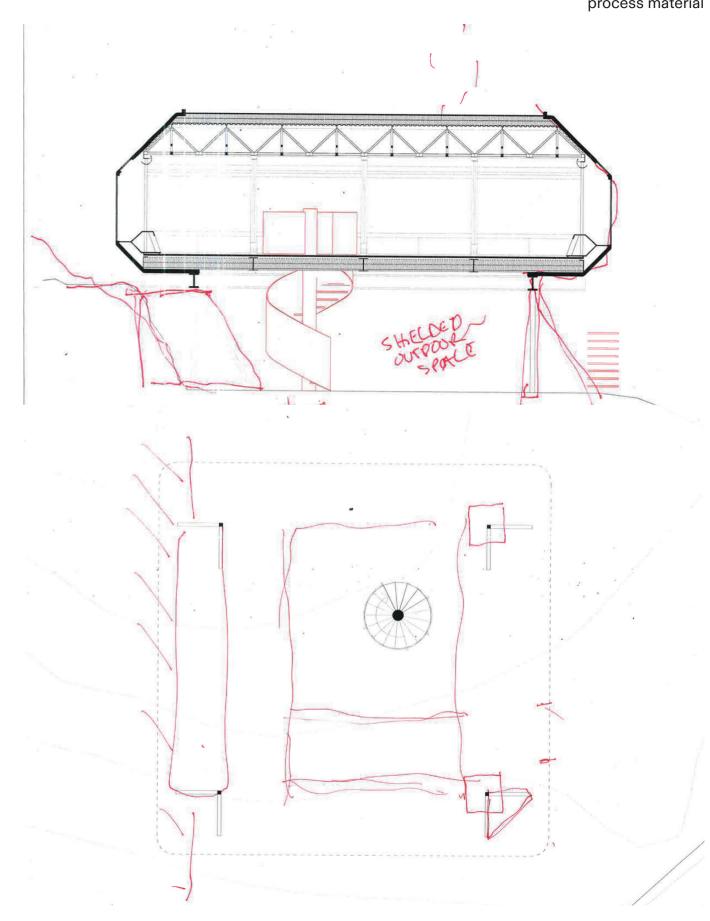


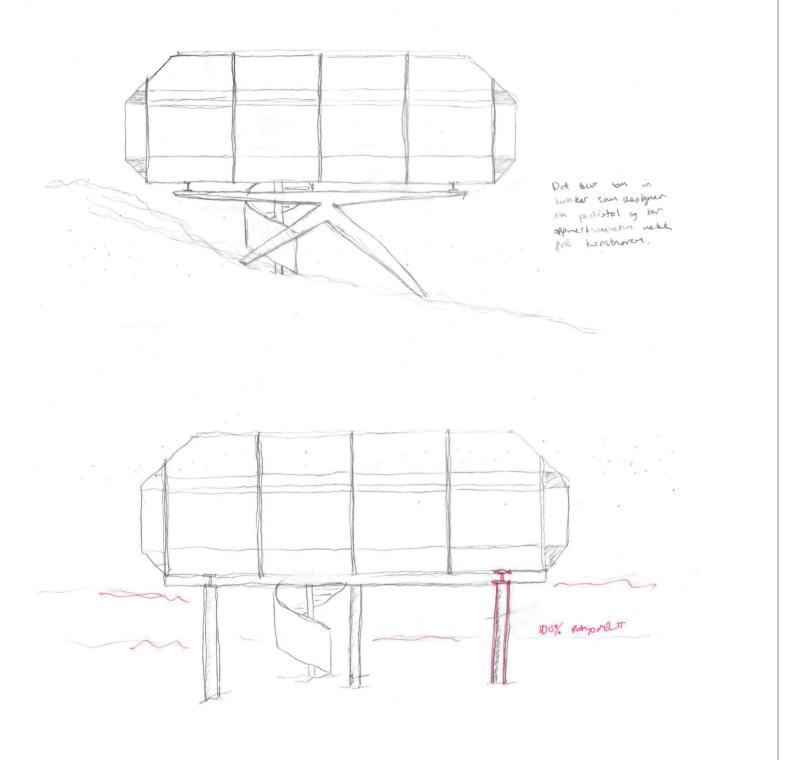


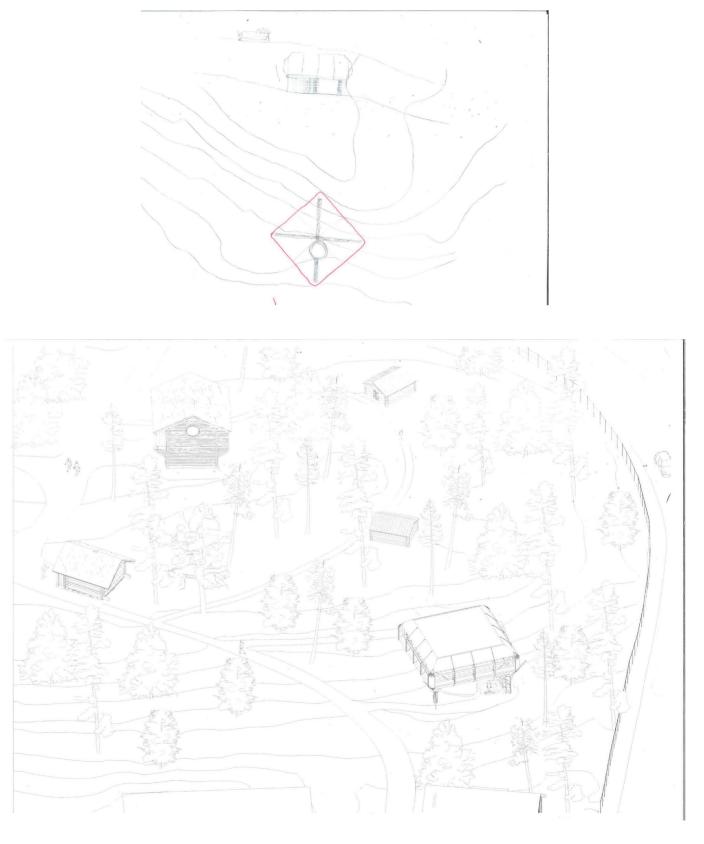
















## process material

# 1.2 **Research and** timeline

A large part of my process has included finding information about Njål R. Eide and his work in all different sectors. At the beginning of the semester, I collected all projects I could find that he was a part of (even though I know there exists many more). I also made a timeline which became an important tool when writing the story of the office pavilion.

Liste over arbeid av Njål R. Eide:

### CRUISESKIP

År	Prosjekt	Oppgåve	Referanse
1960	Europaferga (fergje)	Arkitektane F S Platou, Thomas Bank og Njål Eide – som seinare skulle bli det store namnet innan cruiseskip – hadde lagt opp innreiing av salongar, lugarar og fellesareal på <i>Europaferga</i> .	(Bakka & Dyvi AS, 2007, p. 30)
1961	Holger Danske (fergje)	MS «Holger Danske» var et norsk skip som trafikkerte ruta Oslo– Århus med rederiet DA-NO Linja fra 1961 til 1974. Frå 1974 til 1989 segla ho ruta Oslo–Frederikshavn. I 1989 ble hun seld til Ross Sea Shipping Ltd, Gibraltar, og nytta som flyktningskip/ pilegrimsfergje.	("MS «Holger Danske»," 2022)
		Ansvarleg for innreiing: Arkitekt Thomas C. Bang og Arkitekt Njål R. Eide i arkitektfirmaet F. S. Platou	(Aastad & Aastad, 1960, p. 13)
1980 (1965)	Sagafjor'+0987 (skip)	Norwegian America Cruises (NAC) i samarbeid med Leif Høegh & Co., vart eineeigar av <i>Sagafjord og Vistafjord</i> .	(Kolltveit & Norsk sjøfartsmuseum, 1984, p. 105)
		Det var då behov for omfattande opprusting of modernisering av den 15 år gamle <i>Sagafjord</i> , og rederiet investerte 65 millionar kroner på å gjere skipet til verdas kanskje mest luksuriøse cruiseskip. Innvendig vart lugarar og opphaldsrom nyinnreda etter teikningar av arkitekt Njål R. Eide.	
1980 (1973)	Vistafjord (skip)	Same som over?	
1982	Song of America (skip)	Njål R. Eide did much of the interior. Geir Grung ansvar for eksteriøret, medan den danske arkitekten Mogens Hammer var koordinerande arkitekt for interiøra, kvar Finn Nilsson og Njål R. Eide fekk betydelege oppdrag.	(Kolltveit & Anders Wilhelmsen & Co, 1989) (Bøe & Grung, 2001)
	Cabincruiser i tre	Han er forøvrig i gang med et annet originalt båtprosjekt: en cabincruiser i tre som skal bygges i Hardanger.	( <i>Nationen 1982.07.10</i> , 1982, p. 11)
		Cabincruiseren er på 33 fot og tenkt bygd i 60% mahogny og resten i glassfiber, kvar dekket skal vere i glassfiber belagt med mahogny.	( <i>Aftenposten 1982.11.18</i> , 1982, p. 33)
1984	Royal Princess (skip)	Njål R. Eide sto for komplett design (interiør og eksteriør) av Royal Princess	( <i>Byggekunst</i> =, 1991, p. 190)
		Verdas dyraste cruiseskip. Britisk cruiseskip – luksus for ein milliard. Njål R. Eide har teikna eitt av verdas største og luksuriøse cruiseskip, for det britiske rederiet Peninsular & Oriental Cruiselines, men skal drivast av Princess Cruises i Los Angeles.	( <i>VG 1982.09.29</i> , 1982, p. 5)
1987	Per Klosters skip	Njål R. Eide designer eit skip for Per Kloster.	(Dagens Næringsliv 1987.03.31, 1987)
	Nykonstruerte livbåtar	Harding Safety A/S underteikna kontrakt med Kloster- reiarlaget Royal Viking Line på bygging av to nykonstruerte kombinerte cruisebarkassar/livbåtar. Harding i samarbeid med designaren Njål R. Eide	(Kvinnheringen 1987.08.07, 1987, p. 16)

1988	Sovereign of the Seas (skip)	Geir Grung ansvar for eksteriøret, medan Njål R. Eide saman med Robert Tillberg, Petter Yran, Mogens Hammer, Fletcher McNee og Bernhard Bidault sto for interiøra.	(Bøe & Grung, 2001)
		Her var Njål koordinerande arkitekt og sto for dei fleste av dei store romma.	( <i>Byggekunst</i> =, 1991, p. 190)
	Royal Viking Sun (skip)	Njål var hovudarkitekt for Royal Viking Sun, det fjerde skipet (wikipedia) til Royal Viking Line (konseptdesign, alle store rom og delvis kabinane).	(Byggekunst =, 1991, p. 190)
1990	Nordic Empress	Han hadde også tilsvarande oppgåver(som under) med Nordic Empress (RCCL) i 1988, ferdigstilla i 1990. Her teikna han bl.a. eit stort atrium.	(Byggekunst =, 1991, p. 190)
	Cinderella	(Viking Line), var ferdig i 1990, her teikna han bl.a. ein nattklubb med plass til 1000 gjester	( <i>Byggekunst</i> =, 1991, p. 190)
		Les meir i artikkel i VG om «Norsk nattklubb i Østersjøen».	( <i>VG 1989.12.01</i> , 1989, p. 17)
	Monarch of the Seas	(søsterskip av Sovereign of the Seas). Også her tok Eide seg av konseptet og dei fleste store romma.	( <i>Byggekunst</i> =, 1991, p. 190)
1992	Majesty of the Seas	(søsterskip av Sovereign of the Seas). Også her tok Eide seg av konseptet og dei fleste store romma.	( <i>Byggekunst</i> =, 1991, p. 190)

OFF-SHORE

År	Prosjekt	Oppgåve	Referanse
1975	Statfjord A Condeep	Kvaerner Engineering står for prosjektering av bustadkvarteret på MOBIL's Condeep plattform til Statfjord A feltet. Til den fagmessige handteringa har Kvaerner Engineering engasjert arkitekt MNAL /MNIL Njål R. Eide, som held til i K.E. sitt tidlegare hovudkvarter på Lysaker.	(Kværner industrier, 1975, p. 21)
1977	Hotellplattform på Ekofisk	Arkitekt Njål R. Eide er som del av F. S. Platou AS med å designa bustadplattformene.	( <i>Byggekunst</i> =, 1980, p. 13)
1979	Statfjord A	Statfjord A byrjar å produsere olje. Bustadmodulane er prosjektert av Kværner Engineering med Njål R. Eide, MNAL / MNIF som arkitekt.	( <i>Byggekunst</i> =, 1980, p. 14)
1981	Odinfeltet		
1982	Polycastle	Njål R. Eide er arkitekt for oljehotellet <i>Polycastle</i> som er laga for kring 600 gjester, eit «olje-tempel» bygd for å skape kvile og trivsel for slitne oljearbeidarar langt til havs. Det er ein fast innstallasjon på Magnus-feltet, det nordlegaste oljefeltet som er utbygd i Nordsjøen, oppunder 62. breiddegrad.	(Fædrelandsvennen 1982.07.10, 1982, p. 20)

# PÅ LAND

År	Prosjekt	Oppgåve	Referanse
1973	Dronning Maudsgt. 1-3	med saksbehandlar Njål Eide under arkitektfirma F. S. Platou AS.	( <i>Byggenytt</i> =, 1973)
1979	Villa Martens	5	(Designinteriør: (Oslo), 2003, p. 28)

1982	Vegkro, Undrumshøy	Annlegget er teikna av arkitekt Njål R. Eide, som har teikna ei rekke kjende restaurantar.	(Tønsbergs Blad 1982.07.27, 1982, p. 16)
1990	Nielsen-Nielsen kontorbygg, Magnus Poulssons vei 7, 1366 Lysaker	Njål R. Eide er arkitekt for bygget.	( <i>Byggenytt</i> =, 1991, p. 28)

#### Full timeline of naval history combined with Njål R. Eide's work

#### 1913

П Krisiansandfjord and Bergensfjord arrived in Norway as the first "America-boats". (Kolltveit & Norsk sjøfartsmuseum, 1984, pp. 110, 111, 112)

#### 1924

USA and Canada impose drastic reductions in their immigration quotas and the "traditional" emigrant traffic becomes less important for NAL than originally expected. (Kolltveit & Norsk sjøfartsmuseum, 1984, pp. 110, 111, 112)

#### 1925

The first NAL (Norske Amerika Linjen) cruise was arranged. (Kolltveit & Norsk sjøfartsmuseum, 1984, pp. 111, 112)

#### 1957

□ Njål R. Eide starts working for Architect F.S. Platou.

#### 1960

Europafergen, the 86-88-meter-long ship which could take over 100 guests, is launched in Horten. Architects F S Platou, Thomas Bank, and Njål Eide design the interior of lounges, staterooms, and common areas. (Bakka & Dyvi AS, 2007, p. 30)

#### 1961

Π MS "Holger Danske" was a Norwegian ship that plyed the route Oslo - Århus with the shipping company DA-NO Linja from 1961 to 1974. Architects Thomas C. Bang and Njål R. Eide from the architectural firm F. S. Platou were responsible for the design. (Aastad & Aastad, 1960, p. 13) ("MS «Holger Danske»," 2022)

#### 1964

Njål R. Eide is among three architects who are awarded for a proposal in the competition ETERNIT's typehuskonkurranse. (Byggmesteren: (Oslo, *Trykt utg.*), 1964, p. 8)

#### 1965

Njål truly started his naval career with the assignment as a case architect (in the firm F.S. Platou) for the ship Sagafjord for the Norwegian America *Line.* (*Byggekunst* =, 1991, p. 190)

#### 1973

- Dronning Maudsgt. 1-3 is completed, with the case manager and architect Njål Eide from the architectural firm F. S. Platou AS. (Byggenytt =, 1973)
- The same year the company finishes Sagafjords sister Vistafjord, also for the Norwegian America Line, (Byggekunst = , 1991, p, 190)

### 1974

- Njål R. Eide leaves F. S. Platou and starts for himself in *Maries vei* in Høvik. (Kolltveit, 2016, pp. 466–467)
- Odin-feltet gets discovered, during the drilling of holes 30/10-2. The field is centrally located in the Norwegian part of the North Sea, approx. 22 km northeast of the Frigg field and approx. 250 km northwest of Stavanger. (Esso Norge, 1985)

#### 1975

П

#### 1976

- П 104)
- for use for special building purposes and in offshore contexts. (*Byggekunst* =, 1984, p. 105)
- Π (Adresseavisen 1976.11.20, 1976, p. 11)

#### 1977

#### 1978

П

#### 1979

- architect. (Byggekunst =, 1980, p. 14)
- suited to the terrain, with spectacular fjord views. (Designinteriør: (Oslo), 2003, p. 28)

#### 1980

invested, Njål R. Eide redesigned the two ships into luxurious cruise ships. (Kolltveit & Norsk sjøfartsmuseum, 1984, p. 105)

#### 1981

Nymo A/S in Grimstad. (Esso Norge, 1985) (Byggenytt =, 1983, p. 3)

#### 1982 - period of significance

- different ongoing international projects.

Njål moved to premises at Kværner Engineering in Lysaker where he would work as a consultant for 10 years. (Kolltveit, 2016, pp. 466–467) The same year, Kvaerner Engineering gets assigned the designing task of the residential quarter on MOBIL's Condeep platform for the Statfjord A field. For professional handling, Kvaerner Engineering engages architect MNAL /MNIL Njål R. Eide. (Kværner industrier, 1975, p. 21)

Norman Foster designs an office building for Fred Olsen, which is never built, but might become an inspiration for Niål. (*Byggekunst* =, 1984, p.

In the same year, Njål R. Eide's office takes the initiative to plan building modules in steel, aluminium, glass and other non-combustible materials

Niål is also, together with the Orkanger company Vigor, involved in the development and marketing of a new housing system for offshore oil platforms. There are sections that can be built together according to the need for living quarters on each platform, and particular emphasis has been placed on satisfying the requirements for comfort and fire safety in the new system. Eide is responsible for the design of the modules.

Hotel platforms are being installed at Ekofisk. Architect Niål R. Eide has designed the residential platforms. (Byggekunst =, 1980, p. 13)

Njål builds and moves into the distinctive steel office pavilion, "the UFO", right next to the Klaveness building. (Byggekunst =, 1984, p. 105)

Statfjord A starts producing oil. The housing modules have been designed by Kvaerner Engineering with Njål R. Eide, MNAL / MNIF as the

The same year, Njål R. Eide designed a wooden house for Truls Martens, the founder of Expo-Nova Møbelgalleri in Bygdøy allé. The house is well

The shipping company Leif Høegh & Co became the sole owner of Sagafjord and Vistafjord, two old "America Boats", and with 65 million NOK

Njål's and a larger team develop the Odinfeltet. They are completing living quarters for approx. 60 men for Esso Odin, which is being built by

Now things are starting to pick up in Njål's career. During the year, there are large articles about Njål in no less than 14 newspapers, about at least 6

In one of them, Njål R. Eide is the architect of the Polycastle oil hotel, which has been designed for around 600 guests, an "oil temple" built to

create rest and well-being for tired oil workers far out at sea. (Fædrelandsvennen 1982.07.10, 1982, p. 20)

- In several newspapers, a big deal is also being made about a new British cruise ship with luxury for a billion. Njål R. Eide is designing one of the world's largest and most luxurious cruise ships, Royal Princess, for the British shipping company Peninsular & Oriental Cruiselines, to be operated by Princess Cruises in Los Angeles. (VG 1982.09.29, 1982, p. 5)
- At the same time, the Song of America is done, where Njäl R. Eide did much of the interior. Wärtsilä delivered the ship one day before the scheduled delivery date, and on 3 December, Song of America was christened in Miami by opera singer Beverly Sills, who was the director of the New York City Opera. (Kolltveit & Anders Wilhelmsen & Co, 1989) (Kolltveit, 1986, p. 154)
- He is also working on another original boat project, on a very different scale: a wooden cabin cruiser to be built in Hardanger. (Nationen *1982.07.10*, 1982, p. 11)
- All this, while also developing further the building system tested in the UFO. It is now being used in a roadside-in by E18 in Undrumshøy, which is going to be the first of a chain. (Tønsbergs Blad 1982.07.27, 1982, p. 16)

#### 1984

Royal Princess is launched and sets sail

#### 1987

- Njål R. Eide designs a ship for Per Kloster. (Dagens Næringsliv 1987.03.31, 1987)
- The same year, Harding Safety A/S signed a contract with the Kloster shipping company Royal Viking Line for the construction of two newly constructed combined cruise barges/lifeboats. Njål R. Eide was responsible for the design. (Kvinnheringen 1987.08.07, 1987, p. 16)

#### 1988

- The cruise ship Sovereign of the Seas is ready for the ocean. Geir Grung was responsible for the exterior, while Njål R. Eide together with Robert Tillberg, Petter Yran, Mogens Hammer, Fletcher McNee, and Bernhard Bidault was responsible for the interior. (Bøe & Grung, 2001)
- In the same year, Njål designed, as the chief architect, the cruise ship Royal Viking Sun the fourth ship from Royal Viking Line. (Byggekunst =, 1991, p. 190)

#### 1990

- The UFO gets moved to Arnstein Arnbergs Vei, its current location.
- Njål R. Eide designs an office building for Nielsen-Nielsen. It is located at Magnus Poulssons vei 7, 1366 Lysaker, close to the new location of the UFO. (*Byggenytt* =, 1991, p. 28)