Traits of NORDIC ARCHITECTURE II

CONTEXT & HISTORY / LANDSCAPE & CITY /
TYPOLOGY & ORGANISATION / SPACE & MATERIALITY

Edited by

Ilmari Lahdelma
Fernando Nieto
Rosana Rubio
Mari-Sohvi Miettinen

CONTEMPORARY
NORDIC ARCHITECTURE
COURSE
SPRING & AUTUMN
2021

TAMPERE UNIVERSITY
SCHOOL OF ARCHITECTURE

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Tampere University, Faculty of Built Environment, School of Architecture.
Contemporary Nordic Architecture [*Pohjoismainen nykyarkkitehtuuri*].
Master's level course. Spring & autumn 2021.

Traits of Nordic architecture [*Pohjoismaisen arkkitehtuurin piirteet*]
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Editors' note: The Contemporary Nordic Architecture course works as an introduction to experimental research methods on the field of architecture. All works are made by master's level students that are in the process of getting acquainted with academic processes and writing, and are presented in this book as such. Due to this the editors wish to note, that some minor errors may appear in the text.

CONTENT

PREFACE

Introduction
Contemporary Nordic Architecture course. Spring 2020

In 1958, Swedish historian Thomas Paulsson published his pioneering and comprehensive book *Scandinavian Architecture*; the first serious attempt to present a unified history of Danish, Finnish, Norwegian and Swedish architecture. Surprisingly, he included Finland as an Scandinavian country even though, generally speaking, it is the term 'Nordic' the one that embraces the proper Scandinavian countries, which share strong historical, cultural and linguistic ties, i.e. Denmark, Norway and Sweden, together with two others, Finland and Iceland, which share just some of the ties mentioned. The course this book portrays adopts the term "Nordic" with the aim to be all-inclusive with all these five countries' architecture. However, Greenland has been left out, although it is also considered a Nordic territory.

The content and outcomes of the Contemporary Nordic Architecture course this book gathers build upon the ideas that triggered Paulsson's book already in the late 1950s. His thoughts have been the mottoes for the course, which has aimed to address and deliver an updated version of what is understood by "contemporary Nordic architecture", taking into account the novel phenomenon that Paulsson traced: a shared history of architecture examples from the refereed countries, starting in the Iron Age and ending in the year when the book was written. His vision was still in force in the 1990s when American Historian Marian C. Donnelly built on Paulsson's work in another book, *Architecture in the Scandinavian Countries*, as well as the environmentalist approach given by Norwegian architect and theoretician Christian Norberg-Schulz in his book *Nightlands: Nordic Building*. The big temporary and geographical scope covered by these books allowed Paulsson, and years later Donnelly and Norberg-Schulz, to conceptualise and update the idea of what "Scandinavian" (or "Nordic" according to our labelling) architecture really meant (in the 1950s and in the 1990s respectively) by identifying common features across countries, despite their own idiosyncrasies. Today, in the context of the globalization phenomenon, we have asked ourselves how these communal and differential architectural characteristics have evolved, changed or even disappeared. Likewise, we have inquired if it is still pertinent to refer to such as "Nordic architecture" as an overarching concept.

One of the goals of this course has been to cast doubt on whether there is a clear notion about the label "Nordic architecture" or, otherwise, if it is a mere simplification used for contextual categorisation, namely a taxonomy of buildings within a specific milieu.

At the time when *Scandinavian Architecture* was written, it was very pertinent to address this issue due to the huge attention given worldwide to the work by Nordic modern architects since the 1930s; although, surprisingly, no book had had tackled the issue comprehensibly until then. Equally, in the 1990s, when *Architecture in the Scandinavian Countries* and *Nightlands* were written, the books' content was also proved useful in the context of the advent of postmodern architecture and the need for references to build upon a new architectural era. Similarly, today, we could argue that contemporary Nordic architecture has been as much as influential in the international sphere as their modern predecessors were. Accordingly, we have asked ourselves how the work of our contemporary workmates has transformed the very concept of what has been understood historically as Nordic architecture, what the inherited features are, and what the new ones they have incorporated are, and also, how specifically they have influenced worldwide.

Moreover, we have queried if the historical high average standard of Scandinavian architecture, in Paulsson's own words, "higher than in most countries", remains as such, and if Nordic architecture can be still regarded to be leading the architectural quality standards worldwide within the context of phenomenon such us the climate change and demographic challenges.

In short, we have been curious about tailing the thread of Nordic architecture knowledge, within the context of the Nordic countries and abroad.

The book covers the work developed by the students at the course. Their projects were addressed through four major tasks inspired in a series of thematic lectures that gave an overview of Nordic architecture recent history: from the commencement of the Modern Movement, in the early 20th century, till nowadays. Students in the class, mainly working in groups, contributed to the course outcomes with their own research about the comparison of two selected case studies, each framed withing these temporal scopes.

Project. Tailing the threads of Nordic architecture theories and practices

The aim of the course assignment has been to reflect on how architectural knowledge is produced, transferred, assimilated and transformed, as a product of a continuous and trans-generational transfer of theories and practices within the context of the Nordic countries. For this purpose, the students have constructed an argument through the comparison of two case studies, following the series of sequential tasks explained below. Thus, the projects have aimed to trace how the Nordic idiosyncrasy has permeated in contemporary theories and practices in the specific projects tackled, from which general conclusions can be extracted.

Methodology, tasks and course's dynamics.
Context & History. Landscape & City. Typology & Organisation. Space & Materiality

The course has unfolded by following a mixed methodology, comprising lecture-based learning and design-based research, aiming for the students to acquire and to present their knowledge.

The groups of students in the course have made a comparative study of two relevant architectural examples, a 20th century example (from 1920s onwards), and a contemporary one (from year 2000 onwards). Both examples have been assessed from the perspective of the four sub-themes in the course: 1) their relationship with the Nordic context and history; 2) their connection with their physical built environment and natural context; 3) their building typology and their programmatic organization; and 4) their spatial and material characteristics. Finally, there has been a conclusive task, where the students have had the chance to summarize their findings through a small design project.

The analyses have been both graphical (with free choice of the technique) and textual, so the students have had the chance to develop their drawing and verbal skills to address architecture critically.

The assignment has been developed progressively through the following 'playful' tasks, which guided the student's research projects:

-*Task 1. Context & History.* In this task the case studies have been analysed through an exchange of temporal and/or physical context, shown in a collage or visualization.

-Task 2. *Landscape & City*. In this task the buildings have been drawn in a different kind of environment than the original one. In some cases, the locations of the two case studies have been swapped.

-*Task 3. Typology & Organisation.* Here, the distinctive typological features of the buildings are drawn and diagrammed and, afterwards, they have been overstated.

-*Task 4. Space & Materiality.* In this assignment, the façade material has been changed or altered. In some cases, the materiality of the two case studies has been swapped.

-Conclusion. To wrap up the project, students have drafted an small extension of the two buildings, as a summarising statement of their findings.

The outcome of these tasks developed by each team are shown in the book in two-page spreads, after an introduction to the two case studies at stake. Each group's project is colour-coded to ease their identification throughout the book.

The course's dynamics developed as follows. During the first week, each group of students selected the study cases they were going to work on. In the following four weeks, four thematic lectures were given by one of the course teachers, who leaded the correspondent task. Students worked on their project during the following week. The teacher in charge guided the groups on how to address the specific task and gave them feedback. Students were responsible for searching for the information sources (e.g. bibliography, webgraphy, archives and site visits) aided by the teachers and by the librarians at the Tampere University's libraries.

Professor Ilmari Lahdelma and Associate Professor Fernando Nieto have been in charge of the course held at the Tampere University School of Architecture. Postdoctoral Research Fellow Rosana Rubio was also a teacher in the course, together with Univeristy Instructor Mari-Sohvi Miettinen, who also acted as the course coordinator. The German architect Dominik Wach, working at the Swedish architecuture office Cedervall Arkitekter, and the renowned Spanish architect Carlos Puente, made invaluable contributions to the course with their lectures and feedback to the students.

Fernando Nieto and Rosana Rubio

PROJECTS

TAPIOLA GARDEN CITY

"The symbol of the modern times is no longer 'parks in cities' but 'cities in parks', ie. buildings in nature. Thus, will the gardens and the plots together with the neighboring unbuilt areas merge into a large, united garden city, where man and nature can once again find each other so that the freshness and joy can return to cities, from which urbanization had them nearly expelled."
- Otto-Iivari Meurman 1947, Asemakaavaoppi p. 367.

After the second world war a new generation of designers emerged with new housing and suburb design ideologies (Museovirasto, 2009). The housing shortage of the 1950's was a fertile testing ground for these new ideas that rose from the criticism towards unhygienic, crammed "stone cities". The director of the Finnish housing foundation, Heikki von Herzen, wanted to create a new housing area in which the starting point for all planning – from traffic networks to basic services – would be the well-being of the inhabitants. (Tapiolan kilta Ry, 2021a). Tapiola is a "new town" -like open and versatile garden city, which experiments with these new ideologies and has been titled as a masterpiece of Finnish Modernism (Museovirasto, 2009). The name "Tapiola" was a result of a public competition held in 1953. Tapio is an old Finnish word for the god or spirit of the forest, "the king of the forest", The name was seen suitable to describe the nature connection of a garden city. (Tapiolan kilta Ry, 2021a).

The aim of the Tapiola city plan was to create a consistently planned area in which one could live affordably near urban services and still be able to enjoy nature and the vastness of the environment (Tapiolan kilta Ry, 2021a). Heikki von Herzen's original idea behind the architecture of Tapiola was that each separate suburb was to be designed by one single architect. The key aspect of the Tapiola city plan was the consideration of the topography and natural environment and the preservation of vast meadow and greenspaces spreading all the way to the shores of Otsonlahti. (Museovirasto, 2009).

Tapiola was grounded on the lands bought from the Hagalund mansion, which were under the the garden city –like plan made by Otto-Iivari Meurman (1945). The city plan was later developed by Aarne Ervi in the 1960's with the addition of cultural and commercial elements. (Tapiolan kilta Ry, 2021a). The different suburbs of Tapiola host a variety of housing typologies: apartment buildings, row houses, lamellar houses, atrium houses, chain houses and detached houses, which are all freely scattered around each other and the greenery. (Museovirasto, 2009).

Photo 1: Tapiola in 70's
Photo 2: Planned new Tapiola

TAPIOLA GARDEN CITY
INTRODUCTION
TUULIA KIVISTÖ, DARA NERWEYI, ESSI NISONEN, SAARA PALMUJOKI
CONTEMPORARY NORDIC ARCHITECTURE 2021

in architectural design. Tapiola is a renowned “complete work of art”, every last touch has been planned just for it: the city plan, streetscape, parks, gardens, forests, beaches, squares, benches, lighting fixtures, concrete slabs. Many of its original modernist elements have become mainstream, and their uniqueness can be hard to perceive after all this time. (Sinkkilä et al. 2019, p. 138)

The shifting values and the contemporary ideals create challenges in the preservation of Tapiola’s unique landscape and streetscape, as many of the fundamental ideals of Tapiola are seen as outdated or somewhat estranged. For example, the “forest suburb”, which is a starting point of many housing areas of Tapiola, was lazily interpreted in the future stages of Tapiola’s construction. With less focus on careful planning, a scattered built environment ended up symbolizing the disintegration of cities. Landscape architect Ria Ruokonen describes the problem of Tapiolas preservation through the idea of “self-evidency” of the landscape: without a big input of conscious work the most prominent features of Tapiolas landscape could decay; the open green meadows, old trees, forests and the human touch in the flower beds. It is important not to look away and then turn the gaze back when it’s too late: some elements can easily disappear for good. (Sinkkilä et al. 2019, p. 139).

From the beginning of the 2000’s Tapiola has been a subject of fast big scale development. The aim of this development is the renewal of the commercial center to better serve the new “länsimetro”, metro line. The development involves big changes in the traffic connections and the construction of homes for over 2000 people. (Tapiolan kilta Ry, 2021b).

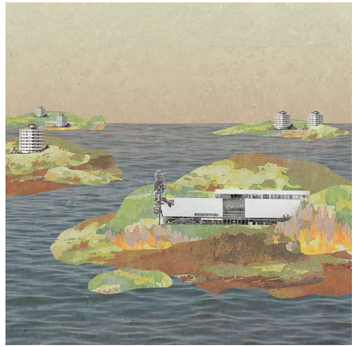
According to the Tapiolan kilta Ry, the inhabitants of Tapiola are being concerned over the pace and the scale of the project and feel like the original values of the Tapiola region are being ignored: the efficiency and volume of the real estate development has its roots in the economic goals of the metro project, rather than the creation of a comfortable residential environment. Like landscape architect Ria Ruokonen, the inhabitants are concerned of the maintenance and renovation of the existing urban structure: the urban greeneries are being neglected and buildings stay unrepaired. The inhabitants would like the future development to be executed through preserving the identity of the cultural landscape and listening to the dwellers. (Tapiolan kilta Ry, 2021b).

Photo 3: Heikintori in 1971
Photo 4: Ainoa

The city of Espoo describes the future development of Tapiola through one of its initial values, urbanity, from the perspective of the 2020’s. It desires to make Tapiola an increasingly diverse area that brings “excellent commercial services and key public services together” which will be made “increasingly comfortable with high-quality pedestrian and cycling routes and new squares that will serve as meeting places”. (Espoon kaupunki, 2021).

We chose to approach this task through a type of self-reflection, to look into the components of the Old Tapiola and the New Tapiola. In our analyses we wanted to dive into the multiple layers of the neighborhood, its history, the different components it consists of and the way all the elements are interlocking and speaking to each other. What is the tone of these conversations? What values have driven and are driving them forward? We decided that we would split Tapiola into bite size pieces and zoom into its different components: housing, commercial environments, cultural environments, area planning and the natural context itself. The approach may be complex, but for us it felt fruitful. Garden cities are formed around many ideals and principles: we were curious to see which ones one could get in touch with.

Photo 5: Tapiola in 1971
Photo 6: Tapiola in 1969



CONTEXT AND HISTORY; HEIKINTORI MEETS AINOA

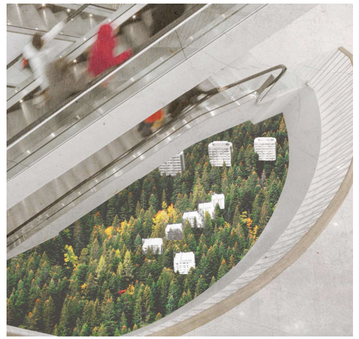
HEIKINTORI
Architect: Aarne Ervi
Location: Espoo, Finland
Building finished: 1968
Floor area: 9500 m2

In 1954, a design competition was held in the center of Tapiola, which was won by architect Aarne Ervi. Department store, Heikintori, was built in 1968, based on this proposal. It is considered to be the oldest shopping center in Finland. (Tapiolan Kilta, 2021).

The glorification of America that began in the 70s, was also reflected in Ervi's plans. Heikintori was designed with the idea that people spend their time in the commercial center from morning to night. It was important that the de- partment store included wide range of different activities and services so there would be some- thing for everyone. Indoor aisles were called 'Shopping street of eternal summer'. The aim of the shopping street was to act as a stage for customers' social encounters. (Bonsdorff, 2005).

In our illustration we wanted to study the meaning of a garden city through the abstracation of the nature element. What does nature mean in the context of a city, how does it affect it? What is the role of the nature in relation to the built environment, how would "Tapiola island city" look like?

Picture 7: Tapiola Island City



CONTEXT AND HISTORY; HEIKINTORI MEETS AINOA

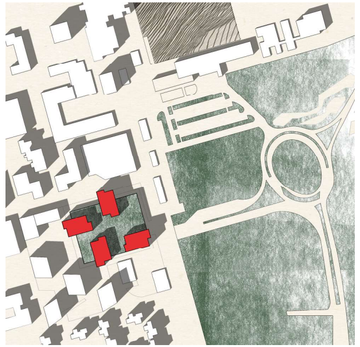
AINOA
Architect: SARC, Innovarch
Building finished: 2019
Floor area: 50 000 m2

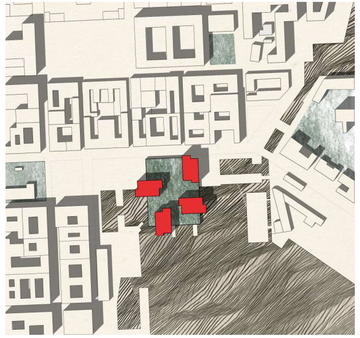
Tapiola was initially named in a competition, the name "Tapiola" getting its inspiration from Kalevala, the Finnish national epic, and the ancient Finnish forest spirit Tapio. The new shopping center Ainoa was named after the same idea, as it is described to get its architectural inspiration from Kalevala: the oak paneling details and the egg-shaped squares that gather the shops and services together subtly reflect the national epic (Kauppakeskus Ainoa, 2019). Aino is a character from the Kalevala epic, but unlike "Tapio", Aino is not a spirit: she is a young girl who escapes unfortunate circumstances in her life into the sea and turns into a fish. Aino who was a character created by the author Lönnrot himself, not mentioned in the original folklore which Kalevala is based on.

AINOA was completed in three steps, the first in 2013 and the final completion in 2019. Ainoa is located in a busy traffic hub, and it sits on top of the newly built metro line and a public transportation terminal. The building complex combines commercial spaces, housing and traffic. Compared to the Heikintori mall located next to it, Ainoa seems to strive towards being a center of a larger area, the whole Espoo, whereas Heikintori was a local center.

We found the quote "As we are located in the Tapiola garden city, the nature has been brought inside the shopping centre" from Ainoa's website. Looking into imagery of the mall's interiors we struggled to find greenery in the way we comprehend it. We found an image from one of the egg-shaped squares looking three floors down at a small round carpet, with, let's say, a 2 meters diameter. Looking at the image we then started pondering what "bringin nature inside the shopping centre" actually means, what it does and doesn't look like.

Picture 8: Bringin nature inside the shopping centre Ainoa
Photo 7: Greenery interiors inside the shopping centre





LANDSCAPE AND CITY ANALYSIS; TAPIOLA MEETS TAMMELA

KAUPPATORI
Planner: J. A. Ehrenström
Location: Helsinki, Finland
Implementation: 1812

Up until the 1800s Helsinki's Kauppatori was a fishing pier, eventually being designated to be reconstructed as a market and dock following Ehrenström's 1812 city plan (Tyynilä, 2001). Later, around the year 1890, the decision to build a railway track nearby was made, with the train passing underneath the by then busy dockside market (Hieranta and Laurila, 2005).

Transporting Ainoa's rooftop apartment blocks to this site, one can find the same ingredients: a nearby body of water, a rail-based transportation system, and busy commercial activity at your doorstep, a central location. Does the resulting recipe change drastically? Probably. With the harbor flanked by residential buildings, do Ainoa's apartments find a more suitable spot for themselves in an urban rather than rural context?

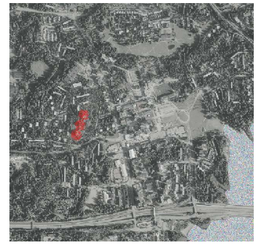
Picture 9: Kirjokansi Apartments in Tapiola
Picture 10: Kirjokansi Apartments in Kauppatori

LANDSCAPE AND CITY ANALYSIS; AINOA MEETS KAUPPATORI

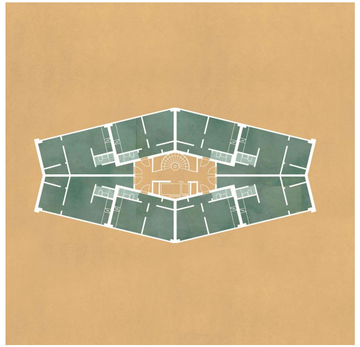
TAMMELA
Planner: F. L. Calonius
Location: Tampere, Finland
Implementation: 1877

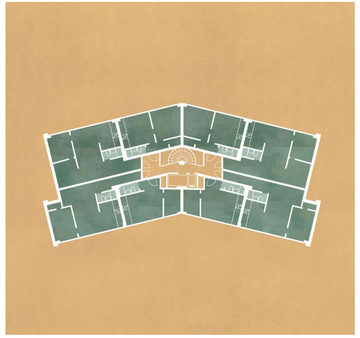
Tammela as it can be seen today is a result of rebuilding efforts during the 60s and 70s. Concrete apartment buildings were made (Laurila, 2015) with areas reserved for parks in the modernist style, and though it was built at a similar time to Tapiola with similar values, one can observe vastly different outcomes. For Tapiola nature serves as a backdrop; the homogenous forestry is peppered with modern white apartment buildings. Tammela inverts this, and compartmentalizes the green spaces in accordance to the wider grid that structures the neighborhood.

Taking Tapiola's hip-flask apartments, trees and all, and placing them in Tammela can inject the dense vegetation and different treatment of nature into a more urban setting. What results is a juxtaposition of mixing "man-made" with "natural", and a space where these programs are more insulated.



Picture 11: Hip-Flask Apartments in Tapiola
Picture 12: Hip-Flask Apartments in Kauppatori





TYPOLOGY & ORGANISATION; TASKUMATTI

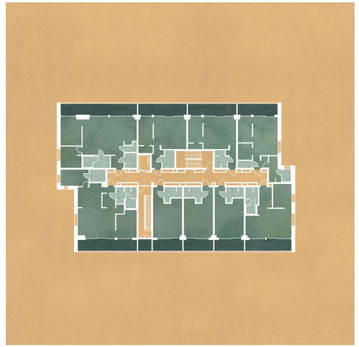
TASKUMATTI
Planner: Viljo Revell
Built: 1958-1961

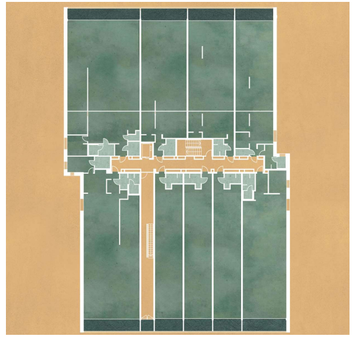
True to modernism the buildings stand like ships in the nature. The buildings have a convex shape to maximize the amount of sunlight entering through horizontal ribbon windows. The floorplans are efficient with staircases in core of the building mass and the apartment entrances twisting around it. The unique wing-shaped roofs bring a special touch to the skyline of Tapiola. Despite the urgent need of dwelling during the time of construction the goal was to provide living comfort through looser distances and following the example of garden cities. The goal seems to be reached quite well, Tapiola is still well known for its quality living.

The hip-flask (Taskumatti) apartments of Tapiola get their moniker from their unique shape, which features convex facades to maximize how much light each apartment receives. In reality, however, hip flasks have an arching shape that can't be achieved by the mirroring approach of the original spatial layout. By translating the apartments downward, instead of reflecting the same residential unit, we can achieve this crescent shape to interesting effect. The funnel shapes of the entry ways are eliminated, as well as the awkward angles in the storage spaces, and the core is given a more secondary quality.

Compromises exist as well, as some kitchens now have uneven shapes, and the southern façade now doesn't get as much exposure to sunlight.

Picture 13: The floor-plan of Hip-Flask Apartments
Picture 14: The modificated floor-plan of Hip-Flask Apartments





TYPOLOGY & ORGANISATION; KIRJOKANSI

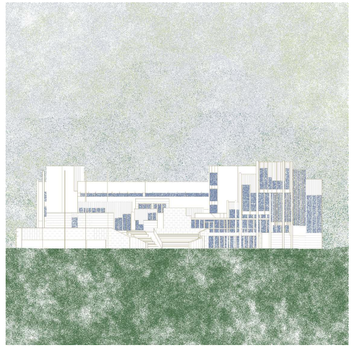
KIRJOKANSI
Planner: Arkkitehdit SARC
Built: 2017

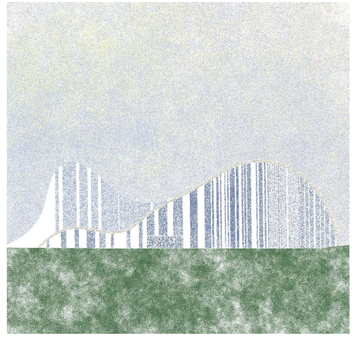
The mimicking of Kalevala aesthetic continues from the mall to dwelling, but mostly in written form only. Kirjokansi refers to the sky or sampo of the tales told in Kalevala. On the website of Kirjokansi garden city is mentioned often. Seems like the apartments are sold with the notion of close distance to a special place. The ideal of gaining daylight is approached with big, glazed balconies covering two facades. There is a long corridor dividing the building in two. The blocks are located on top of Ainoa-mall and the roof functions as a yard to residents. The roofs have been inspired by the older Tapiola with an addition of wood.

What was most unexpected in studying the floorplans of Ainoa's apartment blocks is their almost total lack of symmetry. In what is seen as a highly commercial set of apartment buildings, only three rooms seem to have been copied and pasted, with the other six each having a unique layout. As opposed to the previous study, this building's core is asymmetrical, which leads to interesting moments such as the second staircase. One can infer whatever negotiation process may have been responsible for these introductions, but what results is either way a more complicated left-over space to format into dwellings. The walls are mostly concentrated towards the

core, leaving a more open plan for the living spaces. To exaggerate this, the apartments are elongated to ape the vastness of the interiors, with walls scattered haphazardly throughout to simulate the unequal apartment arrangements. The structures around the glazed walls are minimized to ensure as little interruption to the inhabitant's views outside as possible.

Picture 15: The floor-plan of KirjokansiApartments
Picture 16: The modificated floor-plan of Kirjokansi Apartments





SPACE & MATERIALITY; MOONS GLADE MEETS NEW MOON

ESPOO CULTURAL CENTRE
Architect: Arto Sipinen
Location: Espoo, Finland
Building finished: 1986-1989

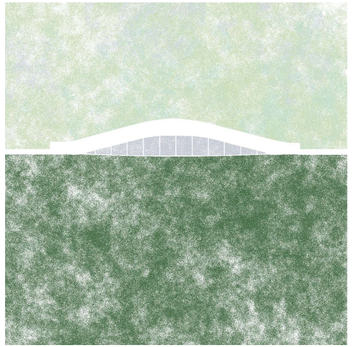
When Espoo was given a status of a city on the 1st of January in 1972 the decision upon constructing the Espoo Cultural Centre was made. The plot for the cultural house is located near the Tapiola Central Basin, where Aarne Ervi had located a theatre building in the original city plan in 1954. The decision led to an architecture competition, which was completed in 1980. From 60 competition entries the proposal Kuunsilta (Moon Glade) by Arto Sipinen ended up winning. The Cultural centre is a multi-purpose building which hots the concert hall, theatre hall, a gallery, the Tapiola Library, Espoo Music Institute, the Tapiola Citizen's Office and an adult Education Centre. Arto Sipinen had worked at Alvar Aalto's office in the late 1950's, and traces of Aalto's monumental building tradition can be seen in the building.

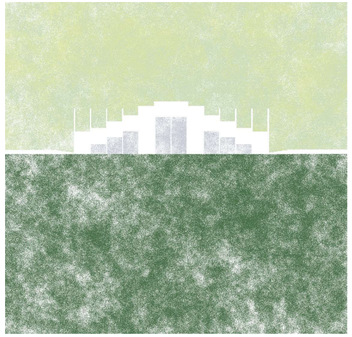
The back of the building faces the Kulttuuriaukio square, and the building opens up and cascades towards the central basin. The building's massing and fragmented, vertical architectural elements strongly differ from Tapiola's building tradition. The main reason for the building's unique massing comes from structural solutions: the supporting columns of the foyers are located outside the

building and attached to the building with beams. The building is still a natural part of its surroundings, as it is linked to the memorable esthetic of Tapiola through the white shade of the facade. The white facade is com-posed of brushed white sandstone bricks, travertine tiles and glass. The soft interior of the building contrasts the exterior with the use of birch and terrazzo concrete.

The reimaged cultural center follows the highness and the openings of the orginal one. It is interesting how the building still keeps the monumentality after changing the shape to organic.

Picture 17: The Espoo Cultural Centre
Picture 18: The modificated Cultural Centre





SPACE & MATERIALITY; NEW MOON MEETS MOONS GLADE

NEW MOON
Architect: Verstas Arkkitehdit, Arkkitehdit Mustonen, Loci maisem-arkkitehdit
Building finished: under furt-her development

The key aim for the architecture competition was to better connect the liveliness of the Cultural Centre to the Kulttuuriaukio square, and better connect the square to its surroundings. (Espoon kaupunki, 2019a) The proposal "New moon" of Verstas uses many of the same architectural components as Arto Sipinen in connecting a particular architectural language to its surroundings through materiality and the handling and activation of the public space.

Spatial functionality and efficiency was a key element in the competition proposal and the evaluation criteria. "New Moon" connects many functions underground to the old cultural centre continuing spatial and functional series. The new theatre which leads people in and sinks in the ground and on the other hand its roof rises on top of the ground to form a strong esthetical element, a white arching shape. The facades of the extension are much more stripped in esthetical elements and could be even said that they are submissive to the original cultural centre. The effect of the building comes through its sculptural, neat shapes. The stripping of details and the big scale of the facade elements seems to be a very typical contemporary way to create architectural language.

To conserve the monumental components of the original Tapiola Cultural Centre, the reimaged "New Moon" expresses a familiar monumentality but differs in a symmetrical way. (Espoon kaupunki, 2019b).

Picture 19: The New Moon
Picture 20: The modificated New Moon

ADDITION; HOTEL GARDEN CITY

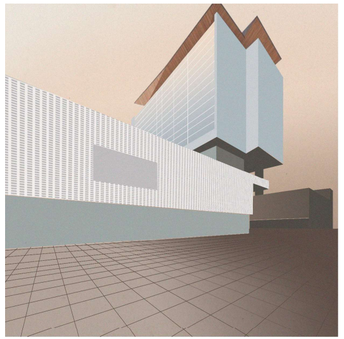
HOTEL GARDEN CITY
Architect:Aarne Ervi
Location: Espoo, Finland
Building finished: 1974

One notable difference between old and new Tapiola is their respective relationships to nature. In the modernist style, Tapiola's old building are placed smack-dab in the middle of the woods or immediately next to bodies of water. The architecture draws from the forests and lakes by being near it and forcing one to engage with the other. Meanwhile, new Tapiola is much more urban and creates its connection to nature through allegory. A wooden column here, a turf grass carpet there, a fountain, a skylight. In more commercial projects, the natural world is bought off-the-shelf and brought inside.

The poetic connections between forms that maximize utility, and the nearby woods are the main forms of interactions between the built and natural environments. In the case of Ainoa, there is the connection to Finnish myth to consider as well: the Kalevala. In the drawing, the original Sokos hotel has an addition, with 3 rows appended to the building. 3 is a notable number as it is the number of mills found in the Sampo, and is the number of days Väinämöinen and his possee (together a trio) traveled from Pohjala before the witch caught up with them. The singular column underneath represents a tree, branching out

to support the life above in domestic spaces (which take up most of the building's volume and hang past the design's footprint for economic reasons). The rhythm of the old building is continued, though not unchanged.

Picture 21: The Hotel Garden City
Picture 22: The Hotel Garden City with addition



ADDITION; AINOA

AINOA & KIRJOKANSI APARTMENTS
Architect: SARC, Innovarch
Location: Espoo, Finland
Finished: 2019 -2020

The newest additions to Tapiola are recent, the shopping mall of Ainoa and the apartment buildings located on top of it are branded to fit a certain lifestyle, one that fits the capitalistic values our society currently host.

Making the new addition to an already new surrounding we wanted to look even further to future with a glimpse of post-humanism. The newest layer to new parts of Tapiola is the actual nature playing with the idea of rewilding. In the utopistic future nature has reclaimed it's existence in the manmade environment; pollinators, mycelium, plants, birds and animals are back. While Ainoa was built, previous buildings were teared down and construction site was well known at least for the daily commuters from Espoo to Helsinki. The current way of building should take the environmental aspects more into consideration, not only as pretty words but as actions.

Picture 23: Ainoa and Kirjokansi Apartments
Picture 24: Nature takes control of Ainoa

CONCLUSION

Diving into the layers of Tapiola we wanted to understand the tone of their discussions, the driving values. What did we find? Something old, something new, and some things we had probably predicted in some way.

Approaching Tapiola through tasks that concentrated on certain specific traits, and our chosen strategy in doing so – comparing different building types in different occasions – had its pros and cons. We went through various reflections, and in some way stayed away from deep diving into certain entities while hopping from building to building. But in some way we feel like we dove deep, deep into the underlying themes and a broader context regarding this iconic garden city.

The core idea of Tapiola was to scatter housing and services effortlessly in the surrounding greenery, to create a network that brings joy and ease to the everyday lives of Tapiola's residents, to interwove different built and unbuilt environments into something new and unseen. Our varying zoomings showcased different meanings of nature and nature connection in different buildings and scales.

One observation that could be made in the transition from the old Tapiola into the new Tapiola is the role of values. The core idea behind the whole architectural thinking of Tapiola was, in Otto-Iivari Meurman's words, to place cities in parks, buildings in nature. In the oldest parts of Tapiola this value is prominent: from old and new aerial imagery it's hard to notice housing from amongst the trees. The networks seems green, and the majority of it is unified into one big green belt. Later in the 60's and 70's when the cultural and commercial part of Tapiola was built and enlarged, a new typology emerged, perhaps almost by accident: parks in cities. The cultural hall, the swimming hall, hotel, central basin and the oldest commercial buildings form a zone which is dominated by light colored paved surfaces, from which greenery is emerging with restraint.

As Tapiola continued to evolve, the idea of "cities in parks" seems to have been associated with only the oldest parts of housing areas. The new housing has been built next to, on top and behind the commercial and cultural areas, and it has continued with the same "look" of controlled greenery as a decoration, the old, lush garden city as its background.

In a way it seems like time has stopped in the greenest of suburbs: they are staying as they are, getting greener and greener, as if sucking the nature "from" the new areas, taking responsibility over being the garden city. The old Tapiola has become a referral. Something one can point at and say "there it is, a garden city". What is being done now under the same flag has a different set of values behind it, reflecting certain, very different ideas of well-being of the 21st century; the market economy, prosperity, accessibility, nostalgia.

Photo 8: Hip-Flask Apartments
Photo 9: Building complex planned on the Merituulentie plot.

Surrounded by old ideals, creating a whole new historical layer, a new interpretation. The question might be, should the new Tapiola call itself a garden city? Should it invent an identity for itself that reflects the difference between contemporary times and the past, rather than trying to create wobbly bridges towards the modernist ideals? Because it is quite apparent that the new Tapiola is something very different from what old Tapiola is.

References:

Espoon kaupunki, 2021. Tapiola. Available [Accessed 16.5.2021]: https://www.espoo.fi/en-US/Housing_and_environment/Districts/Tapiola

Museovirasto, 2009. Valtakunnallisesti merkittävät rakennetut kulttuuriympäristöt RKY – Tapiola. Available [Accessed 16.5.2021]: http://www.rky.fi/read/asp/r_kohde_det.aspx?KOHDE_ID=1359

Tapiolan Kilta Ry, 2021a. Tapiolan historia kulttuurimaisemana. Available [Accessed 16.5.2021]: https://www.tapiolankilta.fi/tapiola/tapiolan-historia/

Tapiolan Kilta Ry, 2021b. Tapiolan kehitysprojekti 2000-2020. Available [Accessed 16.5.2021]: https://www.tapiolankilta.fi/tapiola/tapiolan-kehitysprojekti-20002020/tapiolan-kehitysprojekti-20002020/

Sinkkilä, Jyrki; Pihkala Aapo; Emilia Weckman 2019. Maiseman tekijät. Näkökulmia maisema-arkkitehtuuriin. Kappale: Tiivistyvä Puutarhakaupunki, s. 136-145

Bonsdorff, Mikko 2005. Heikintorin Tavaratalon Rakennushistoriaselvitys. Arkkitehtitoimmisto Okulus Oy

Tapiolan Kilta Ry 2021. www.tapiolankilta.fi

Suomalaisen kirjallisuuden seura, 2021. Aino-runo ja sen taustat. Available [Accessed 16.5.2021]: http://aino.finlit.fi/omeka/ohjeet/taustaa

Kauppakeskus Ainoa, 2019. Ainoan Tarina. Available [Accessed 16.5.2021]: https://www.ainoatapiola.fi/ainoa-story

Tyynilä, M (2001). Ehrström, Johan Albrecht (1762 – 1847). Available [26.03.2021] https://kansallisbiografia.fi/kansallisbiografia/henkilo/4497

Hieranta, J., Laurila, S. (2005). Suuri Satamarata. Available [26.03.2021] http://www.seisake.net/satamarata/historia.php

Laurila, J. (April, 2015). "Kyl siellä saa olla se mustamakkarameininkinsä": Tammelan alueen identiteetti asukkaiden näkökulmasta. Tampere University. Available [26.03.2021] https://trepo.tuni.fi/bitstream/handle/10024/97403/GRADU-1434459157.pdf?sequence=1&isAllowed=y

Urala, Risto ja Urala, Susanna 2018. Kiinteistö Oy Raitinlukko, Tapiola. Rakennushistorial-linen selvitys. Studio U2 Arkkitehdit Oy.Tapiola Walk 2018. mycourses.aalto.fi > kurs-sit > Taiteiden ja suunnittelun korkeakoulu > Arkkitehtuurin laitos > ARK-E1011 - Nordic Modernism, 14.09.2018-26.10.2018 > Osiot > Materiaalit

Espoon kaupunki, 2019a. Cultural Centre and Kulttuuriaukio Square architectural competition. Available [Accessed 16.5.2021]: https://www.espoo.fi/fi-FI/Asuminen_ja_ymparisto/Kaavoitus/Arkkitehtuurikilpailut/Kulttuurikeskuksen_ja_Kulttuuriaukion_arkkitehtuurikilpailu

Espoon kaupunki, 2019b. Uusikuun esittelu. Available [Accessed 16.5.2021]: https://www.espoo.fi/download/noname/%7B73DB8AAA-443A-4E07-BF20-3B4C6F8248E7%7D/109674

Tapiolan kirjokansi 2021. tapiolankirjokansi.fi

Lagus, Antti 2017. Projektiuutiset. Kauppakeskus Ainoa. https://www.projektiuutiset.fi/kauppakeskus-ainoa/

Image references:

Photo 1: Kuvaaja tuntematon 1969-1970. Espoon Kaupunginmuseo.https://www.finna.fi/

Photo 2: Sarc Architects. https://sarc.fi/reference/kaupunkikeskus-tapiola-2/

Photo 3: Lehtonen, Kai R1971. Espoon kaupungin museo. https://www.finna.fi/

Photo 4: Kirsi Borg. Esitys. Ainoa Tapiola. https://docplayer.fi/71415316-Tapiolan-uudistumisen-infotilaisuus-kauppakeskus-ainoa-kehittyy-kaupallinen-johtaja-kirsi-borg.html

Photo 5: Kanerva, Teuvo 1066-1983. Espoon kaupungin museo. https://finna.fi/

Photo 6: Kanerva, Teuvo 1969. Espoon kaupungin museo. https://finna.fi/

Photo 7: https://innovarch.fi/>projektit >kauppakeskus Ainoa

Photo 8: Kanerva, Teuvo 1966-1983. Espoon kaupunginmuseo. https://www.finna.fi

Photo9: YIT Finland Ltd. https://www.espoo.fi/en-US/Housing_and_environment/Districts/Tapiola/The_western_part_of_the_centre_of_Tapiol(191886)

Image 1: The Aalto House by M. Gaudin.

Image 2: Villa Sarvilahti by K2S Architects.

AALTO HOUSE

Architect : Alvar AALTO
Location : Helsinki, Finland
Building finished : 1936

Alvar AALTO'S House, located in the Munkkiniemi district of western Helsinki, was built between 1934 and 1936. Alvar AALTO lived here with his wife Aino and two children and stayed here until he died in 1994. The single-family House also includes the architect's studio. However, the House is not only a working space, it is a laboratory for experimentation in which Alvar AALTO develops the principles that define his architecture and tests his design and furniture ideas. When designing the House, Alvar AALTO places equal importance on human and functional characteristics. For the architect, "a good house must improve the quality of life of its inhabitants". The main concepts of AALTO'S architecture are attention to the environment through the preservation of the site, natural light through the installation of large windows, scale, circulation, flow, and the removal of barriers between interior and exterior spaces. AALTO uses a variety of materials in the design of his House. Natural stone, wood, brick, are used on the exterior and each of these materials interacts with its surroundings. For the interior, AALTO favors the use of white, wood, metal, leather, textiles, etc, which give the interior space its warm and modern character. (alvaraalto.fi 2021).

VILLA SARVILAHTI

Architect : K2S Architects
Location : Luumäki, Finland
Building finished : 2008

Villa Sarvilahti is located on a hill in the municipality of Luumäki, near Lake Kiviärvi, in southern Finland was designed by K2S Architects. The Villa is a second home for pharmacist Sarvilahti where he can practice his passions such as hunting, fishing and visual arts. The main concepts of K2S Architects are the attention to innovative approaches, careful detailing, deep contextual understanding and the use of various materials to provide unique spatial experiences. (archdaily.com 2021).

Villa Sarvilahti is integrated between the trees of the hillside, overlooking the estate and enjoying a breathtaking view of the lake. In fact, the interior spaces are framed on the landscape and the terraces create a connection between the interior and exterior spaces. The Villa has a contemporary style reminiscent of Alvar Aalto's architecture, particularly in the use of materials. As Aalto had done before, K2S Architects have mainly used white color as well as wooden elements on the exterior of the Villa. The interior is also wooded with textile elements that give it a modern and warm character. (thedesignhome.com 2021).

Image 3: Aalto House located in the context of the Marina Bay Singapore in the 21st century. First original image by E. Ingervo & P. Ingervo. Second original image by S. Annala. Altered by authors.

AALTO HOUSE

For its time, the Aalto House is very modern and has elements of functionalism. The design of the Aalto House emphasizes the use of natural light and breaks down the barriers of interior and exterior spaces. AALTO pays great attention to detail and he was one of the first architects to take these essential elements into account.

Thus, the Aalto House is a true Scandinavian interpretation of the international style of the time. The Aalto House was designed as a personal House, but also as an architectural studio for architects in an intact environment. This latter point shows the desire to use the natural environment as a starting point for the design. (navi.finnisharchitecture.fi 2021).

The Aalto House was designed with simple functions such as a comfortable space for living and working. The façade close to the street, the use of natural light and the orientation of the rooms towards the garden show the need to distance oneself from the external context and to create a link with the natural context. The Aalto House is also a very holistic and coherent design, taking into consideration all interior and exterior spaces, materials, furniture and details.

The House combines modern materials and vocabulary with tradition through experimentation with various structural and material ideas. The use of simple and clean materials softens the formal language of modern architecture. The architects designed every detail and piece of furniture in the House, which is evidence of an omniscient architect's role. (alvaraalto.fi 2021).

The collage we made is to place the Aalto House in a very dense and modern urban context. The purpose of this integration is to project the House into the heart of an environment opposite to its own. The House is thus located in the middle of the Marina Bay of present Singapore. It can be seen that despite its small size, the modern and simple lines of the project seem to blend into the landscape. Placed on the riverfront, the House seems to mark the entrance to the skyscraper district. This collage shows how the Aalto House can adapt to the present moment and a different and foreign context.

Image 4: Villa Sarvilahti located in the context of Roussillon in France. A village dating from the 17th and 18th century. First original image by b-europe.com. Second original image by K2S Architects. Altered by authors.

VILLA SARVILAHTI

The Villa Sarvilahti shows how the minimalist and simple approach is still very distinct from Nordic architecture after many years. The contemporary Finnish Villa also has hints of Aalto through the choice of materials for example, which may be an implication of Aalto's significant and lasting influence on Finnish architecture. This building is also a good example of the recent trend in the 21st century, where architects are trying to build more ecologically with local materials.

The Villa still retains Finnish traditions such as the bath and sauna, which is a great example of combining tradition with today's modern design. The interests and lifestyle of the inhabitant who hunts, fishes and engages in visual arts are reflected in the design's connection to nature, outdoor functions and make the house personal and unique for the inhabitant. (archello.com 2021).

By comparing the two cases studied, we can perhaps analyze whether our homes have shifted from work to leisure. The choices of materials and design of the building were made with durability and sustainability in mind. The walls of the main building are thicker than normal, thermal insulation materials have been carefully employed, and geothermal energy is used as the heat source. All the wood is of domestic origin and wood fiber is used as thermal insulation. The surrounding landscape has been left in its natural state as much as possible. The building reflects an ecological approach, respectful of the environment and with a direct relationship with the site and the landscape. Thanks to the collage, the

Villa Sarvilahti is now located in a small typical village in the south of France. Placed in a different context than its own, surrounded by other older houses, our objective was to see how the Villa could be perceived. However, despite a very different context composed of old houses with bright colors, the Villa seems to have made a discreet place for itself and blends into the landscape. Adjacent to an old traditional colored house, similarities appear. The Villa Sarvilahti seems to want to imitate its neighbors without being too visible. Transported into another era, the Villa fits naturally into this atypical landscape.

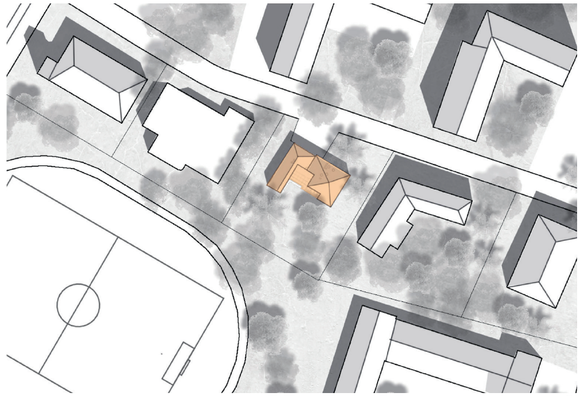


Image 5: Original image by Archeyes. Altered by authors. 1 : 1250

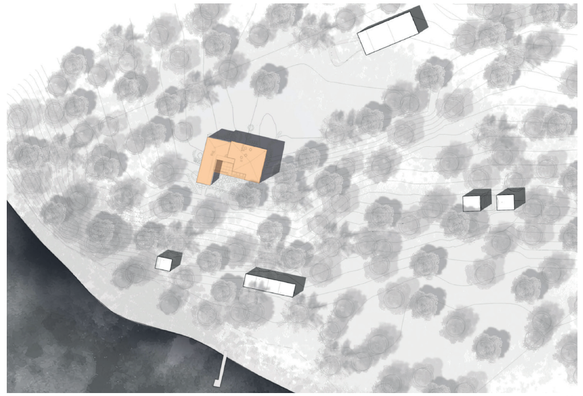


Image 6: Original images by Archeyes & Archdaily. Altered by authors. 1 : 1250

AALTO HOUSE

The Aalto House is located in a residential area in Riihitie in the Munkkiniemi district of Helsinki, which is a medium-density single-family residential area. The area is located on the shores of the Gulf of Finland and the villa is about 400 meters from the sea. (alvaraalto.fi 2021).

To preserve the privacy of the House, the openings on the street frontage are relatively closed and are smaller and more discreet, while the rear of the House, which faces south, opens generously onto the garden. In its original location, the Aalto House is surrounded by a strict coordinate system of rectangular plots and rows of houses. For comparison purposes, we have swapped the locations between our two study cases, since they are similar in size and shape.

Here, the Aalto House is located on the site of Villa Sarvilahti. On this new site, the Aalto House is surrounded by nature, water, sloping ground and a lot of empty space. At first glance, one might think that the Aalto House was designed to be here. It fits perfectly between the two smaller buildings closer to the lake, and the whole building and its upstairs terrace open nicely to the lake. The Aalto House fits rather well in this new, larger and much less dense environment.

Nevertheless, the location of the terraces, the intersections, the openings and the general composition show how different sites and contexts can be and how much precise preliminary study is necessary. Although the Aalto House fits well into its new environment, it is clear that it was designed specifically for its location.

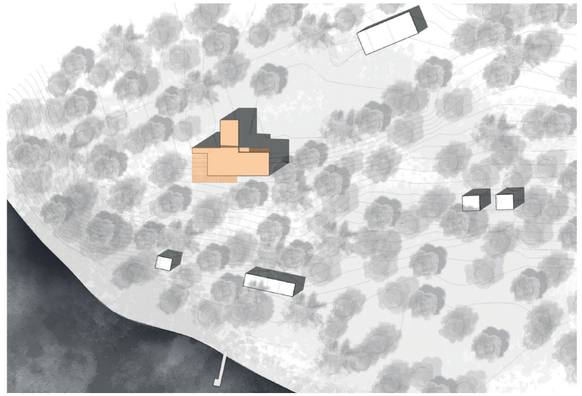


Image 7: Original image by Archdaily. Altered by authors. 1 : 1250

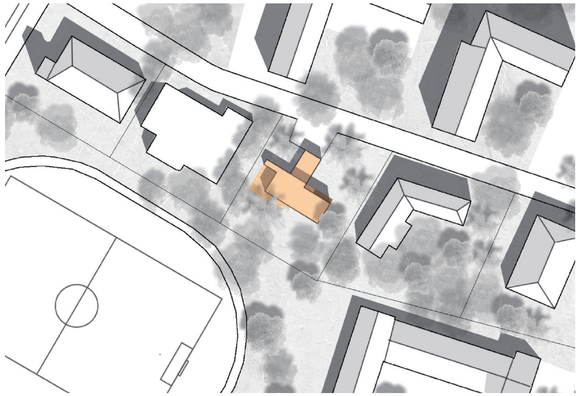


Image 8: Original images Archdaily & Archeyes. Altered by authors. 1 : 1250

VILLA SARVILAHTI

The Villa Sarvilahti is located on the shore of Lake Kivijärvi in the municipality of Luumäki, Finland. The shoreline is a natural environment that has been left in its natural state as much as possible. The Villa is located on top of the hill, which gives it a 360° view and dominates the hunting area. It is located in a forest of tall and thin trees. The Villa is mainly open in the south direction, which is also the direction of the lake. In keeping with Finnish tradition, traditional functions such as the sauna and bath are separated from the main building and spread over the area. (archdaily.com 2021).

The Villa Sarvilahti now stands in place of the Aalto House. The size and shape of the Villa are similar to that of the Aalto House, which allows it to somehow fit into the new location. Its horizontal and narrow shape allows almost every room to have a nice view of the backyard. The part that intersects toward the street is large, and it makes the whole building move deeper into the middle of the site. This creates an overly large front yard and takes space away from the back yard. However, this cross-section has a workspace on the first floor that could be used as a home office and successfully used separately from the personal home. Almost all of the windows face the backyard and there are very few windows facing the street, which can create more privacy and quiet inside the Villa. The small main entrance terrace on the right side creates a quiet entrance and relationship to the front yard. The other main terraces and the building itself mainly overlook the neighbor on the left, which is quite unpleasant.

Compared to the Aalto House, it can be seen that Villa Sarvilahti has a harder time adapting to its new location. This is mainly due to the different locations of the terraces and the large intersecting parts. These elements make it more difficult for Villa Sarvilahti to adapt to a new, smaller plot than the one it was designed for.

1 : 500

Image 9: Original image by Archeyes. Altered by Authors.

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Image 10: Original image by Archeyes. Altered by Authors.

AALTO HOUSE

Like much of AALTO'S work, the execution of the House's plans reflects a thoughtful and ideal arrangement of rooms. This attention to detail and desire to create pleasant living spaces is evident in the Aalto House. Therefore, we decided to focus more on the facades of the House.

One thing that is striking about this project is the openings. Again, AALTO took care to place the windows in the right places, each with a specific view of a part of the landscape. It is this precise positioning that allows the interior spaces to be bathed in natural light. Originally, our two case studies had similar elements: few but carefully placed windows and wood siding in addition to the white façade.

We chose to exaggerate the shapes of the houses and similar façade elements such as windows and areas of wood siding. In the Aalto House, we therefore, imagined a much more open façade. Initially, the building was low, and the goal was to see how the project could behave and interact with the exterior with a few extra levels.

So, to further exaggerate our comparison, we also decided to play with the height of the building, extended the wood area and added more windows lined up on top of each other. It is interesting to see how the extra height makes the Aalto House look more like an apartment building or an office building.

We can see that the building looks less delicate and much more imposing. Also, the multitude of openings makes reading the volume and spaces more complex. However, the linear repetition of the windows loses the initial intention of the carefully studied views from inside the House.

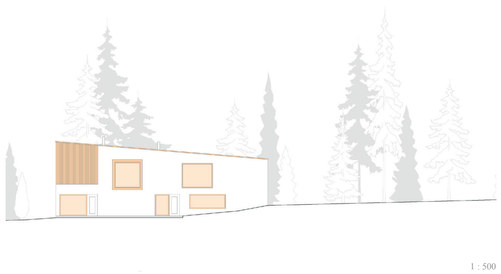

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Image 11: Original image by Archdaily. Altered by authors.

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Image 12: Original image by Archdaily. Altered by authors.

VILLA SARVILAHTI

After this first opposition was made, we turned to the case of the Villa Sarvilahti. Unlike the Aalto House, the Villa Sarvilahti is located on a much steeper site and is set on a gentle slope. Like the Aalto House, the Villa also has few openings, but these are also well thought out to open to specific views and are much more generous than in the Aalto House.

So we decided to play with the slope of the land and make the building seem much more sunken and anchored in its site. To do this, we exaggerated the shape and extended the length of the building. We also duplicated the wood cladding in different areas of the Villa, which is different from the Aalto House, which extended one area of wood cladding. And finally, we also added more of the three types of randomly positioned windows.

We can see that this modification gives the Villa Sarvilahti a more squashed look but at the same time, it is more hidden in its environment. The repetition of the types of openings and the wooden cladding allows the building to keep an aesthetic coherence while offering other views on the environment. Interestingly, the extra length makes the Villa look more like a public building, a library or a school.

It seems to us that in the face of our two proposed exaggerations the Villa seems to fit better with our modifications. The repetition of the elements in a longer and lower building allows it to better cling to the context and the initial purposes. Beyond the comparison of the strengths and weaknesses of the two projects, these oppositions allowed us to better understand the volumetry of the houses but also to analyze the layout of the spaces and the openings put in place by the architects.

After this study, we can see that in both projects, the architects have devoted themselves to the layout of the rooms between them and to the light that penetrates them. This attention to detail gives each interior space-specific qualities and a unique atmosphere.

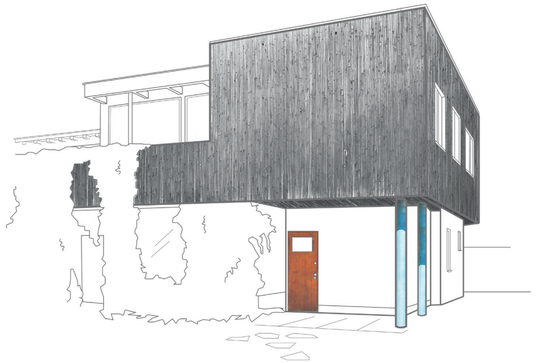


Image 13: Sketch by S. Annala. Altered by authors.

Image 14: Sketch by S. Annala. Altered by authors.

AALTO HOUSE

The special feature of the Aalto House is that its materiality is directly linked to the interior layout of the spaces. Designed as both a house and an office, AALTO wanted this characteristic to be visible from the outside of the House. Thus, the office is wrapped in stained wood slats while the private living spaces are contained within the white brick volume covered with lime.

The design of this House allowed Aino and Alvar AALTO to experiment with many elements such as structure and materials. Natural light and the orientation of the rooms and terraces were also important factors in the design, which is why the main living spaces open up to the south and the garden. AALTO was very attentive to every detail and wanted to make the House as warm and welcoming as possible. All interiors are meticulously designed and furnished by him. Although the front of the House may appear severe and austere, it contrasts with the much more open rear elevation.

In fact, it has been noted that the House is defined by contrasts, from the garden fence, which delimits the perimeter of the plot, half brick and half wood, to the relative openness of the ground floor to the smaller rooms on the upper floor. (archeyes.com 2021).

Through this change in materiality, we wanted to retain the essential characteristics of AALTO'S design. However, we also wanted to see how the House would react to this new materiality that's appearance is harder and colder compared to the original wood. We decided to use corten steel, which colours are similar to those of the wood used for the smaller elements. It can be seen that this modification gives the House a more contemporary, modern and perhaps even more assertive character. However, although the House remains well integrated we feel that the wood allows it to blend in more with its landscape surroundings.

Image 15: Sketch by S. Annala. Altered by authors.

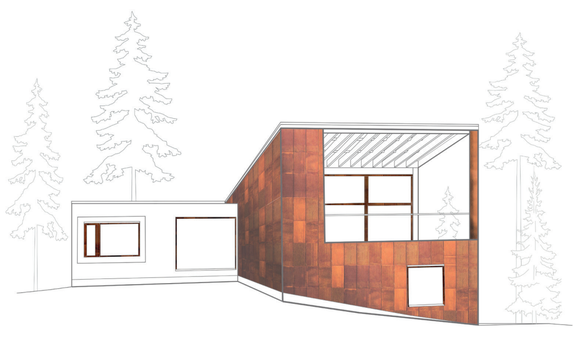


Image 16: Sketch by S. Annala. Altered by authors.

VILLA SARVILAHTI

The main Villa Sarvilahti building, plastered in white, is situated on the top of the hill and dominates the site. The two-storey main volume is set into the hillside and appears to be hidden. The single-storey library wing defines the main entrance courtyard. The architects chose to reveal the openings to the passageway with a materiality different from the rest of the Villa. The terraces on both floors and the details of the window door frames in solid oak complement the simple volumes of the concrete. One of the characteristics of the Villa is that it is characterised by a palette of sober material choices both inside and out. The materiality of Villa Sarvilahti is visually very similar to the Aalto House. We therefore chose to use corten steel here too in order to compare the two cases. (archdaily.com 2021).

We covered one of the Villa's volumes totally with corten and created a larger part that pushes outward. This is similar to the Aalto House's corten part and makes a stronger link with the two cases. This addition may at first seem very conspicuous and give the Villa a much more assertive and severe character. However, when the Villa is placed in its surrounding context, this materiality allows it to blend even more into the landscape. As the colour of the steel is similar to that of wood, the Villa seems to disappear in the middle of the forest. We also deleted one wall from the terrace which leaves a singular pilar like in the Aalto House.

This modification opens up the terrace to the other direction as well and changes the spatiality also. In spite of these modifications, it can be seen that the contemporary elements of the Villa remain very visible.

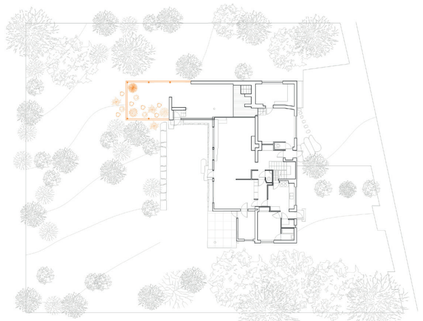


Image 17: Original plan of Aalto House by Archeyes. Altered by authors. 1 : 500

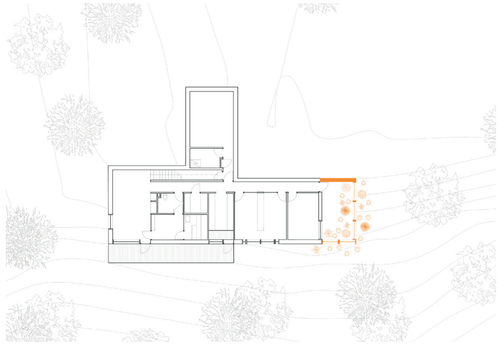


Image 18: Original plan of Villa Sarvilahti by Archdaily. Altered by authors. 1 : 500

AALTO HOUSE

Originally, the House was also intended to be Alvar AALTO'S studio and office, as well as his residence. However, AALTO always separated his private life from his work, which is why his office occupies a separate wing of the building. He designed a spacious and bright office that opens to the outside. The rest of the House is divided into two floors, placing the living areas and amenities on the first floor and the bedrooms on the second floor. This conceptual division of space is also visible on the exterior through the use of different materials. The office and living areas are cleverly separated by a sliding door in the living room. It forms an almost invisible boundary between the two parts of the House and allows the space to be shaped according to need. Another important characteristic of AALTO'S projects is the perfect relationship of these buildings with the landscape. AALTO considers outdoor spaces to be just as important as indoor spaces. His wife, Aino AALTO, took great interest in the House's garden and transformed it into a warm and welcoming space. The outdoors became the family's favourite space. (archeyes.com 2021). In order to continue this continuity and to further strengthen the link with the landscape, our addition is to install a winter garden in the continuity of the wing of the House. The aim was to preserve as much of the project's massing as possible. This addition creates a buffer space between the interior and exterior and creates a dissolved link between the two environments.

VILLA SARVILAHTI

Although the Villa consists of two main volumes, the architects have added multiple smaller independent volumes, including the garage and sauna, which are scattered throughout the estate. The main building consists of a large rectangular two-storey volume containing the main living areas and a second smaller volume containing the library and workspace which enters perpendicular to the main volume in the middle. The intersection of the two volumes defines the space of the external entrance courtyard. The majority of the interior rooms open nicely to carefully framed views of the surrounding landscape. The architects paid close attention to the site and the relationship of the house to the landscape. To accentuate this connection with the exterior, the architects have installed terraces on both levels, which act as a buffer between the interior and the exterior. (archdaily.com 2021).

As with the Aalto House, the spaces in the Villa are very well thought out and fit together perfectly. Thus, we did not feel it was necessary to add an annex. However, in order to follow the same approach as the Aalto House and to be able to compare our two case studies, we also chose to extend one of the wings of the Villa to underline the link between the building and its environment. Again, the aim was not to distort the overall volume of the project. We, therefore, created a room adjacent to the guest room, a winter garden that opens onto the forest and offers a view from the room.

OVERALL CONCLUSION

The study of these two projects allowed us to understand every detail of the design of the two houses, to compare them and to note their important features. Although they are from two different construction periods, many similarities can be seen. The Villa Sarvilahti appealed to us from the start because of its interior spaces and materiality. The atmosphere that seemed to emanate from it gave it a very familiar air from the Aalto House. It was clear that the two houses are set in very different geographical and historical contexts. Despite this, each was relatively well designed and could adapt to a different environment. Both projects are also revealed by strong facade elements. These elements, although sometimes subtle, contribute greatly to the architectural identity of the projects. The same applies to the materials used by the architects. In particular in the Aalto House, the materials of the facades, beyond being aesthetic, participate in differentiating public and private spaces from the outside. The materials, therefore, play an essential role.

Finally, we were able to see that in both the Villa Sarvilahti and the Aalto House, the relationship with the landscape was a key element in the design of the projects. Each framing generates views and light that give the spaces a particular atmosphere. One might wonder if K2S Architects were inspired by the Aalto House.

References:

20th CENTURY ARCHITECTURE. "The Aalto House". Architecture-hisotry.org. (online) Retrieved from http://architecture-history.org/architects/architects/aalto/objects/1935-1936,%20THE%20AALTO%20HOUSE,%20Finland,%20Helsinki.html, (accessed on 12 March 2021).

ABLE, Aaron. "Riihitie 20: The Aalto Family Home, Studio & Laboratory". Apartment therapy, 04.18.2019. (online) Retrieved from https://www.apartmenttherapy.com/alvar-aaltos-home-studio-helsi-95194, (accessed on 12 March 2021).

ALVAR AALTO. "The Aalto House". Alvar AALTO. (online) Retrieved from https://www.alvaraalto.fi/en/architecture/the-aalto-house/, (accessed on 12 March 2021).

ALVAR AALTO FOUNDATION. "The Aalto House, Helsinki, Finland". YouTube.com, 10.09.2020. (online) Retrieved from https://youtu.be/Me8uYQhtAXc, (accessed on 12 March 2021).

ARCHELLO. "Villa Sarvilahti". Archello.com. (online) Retrieved from https://archello.com/story/31060/attachments/photos-videos/5, (accessed on 12 March 2021).

ARCHEYES. "The Alvar Aalto House in Helsinki / Alvar Aalto". Archeyes, 08.26.2016. (online) Retrieved from https://archeyes.com/the-aalto-house-alvar-aalto/, (accessed on 12 March 2021).

ARCHDAILY. "Villa Sarvilahti / K2S Architects". Archdaily. (online) Retrieved from https://www.archdaily.com/550485/villa-sarvilahti-k2s-architects?ad_source=search&ad_medium=search_result_projects, (accessed on 15 March 2021).

DIVISARE. "Alvar Aalto / The Aalto House". Divisare.com. (online) Retrieved from https://divisare.com/projects/424056-alvar-aalto-mary-gaudin-the-aalto-house, (accessed on 12 March 2021).

ICONIC HOUSES. "The Alvar Aalto House". Iconichouses.org. (online) Retrieved from https://www.iconichouses.org/specials/alvar-aalto/design-aalto, (accessed on 12 March 2021).

MID-CENTURY HOME. "The First Alvar Aalto House and Studio". Mid-Century Home. (online) Retrieved from https://www.midcenturyhome.com/the-first-alvar-aalto-house-and-studio/, (accessed on 12 March 2021).

NAVI.FINNISH ARCHITECTURE. "The Aalto House". Navi.finnisharchitecture.fi. (online) Retrieved from https://finnisharchitecture.fi/the-aalto-house/, (accessed on 12 March 2021).

THE DESIGN HOME. "Villa Sarvilahti by K2S Architects". Thedesignhome.com, 11.27.2013. (online) Retrieved from https://thedesignhome.com/architecture/villa-sarvilahti-k2s-architects/, (accessed on 12 March 2021).

THE MODERN HOUSE. "Best in Class: The Modern House's dispatch from Alvar Aalto's house and studio in Helsinki". The Modern House. (online) Retrieved from https://www.themodernhouse.com/journal/alvar-aaltos-house-and-studio-in-helsinki-2/, (accessed on 12 March 2021).

TTS Drone. "Alvar Aalto - Alvar Aallon kotitalo / The Aalto House". YouTube.com, 10.13.2018. (online) Retrieved from https://youtu.be/8l4CdMtyLX0, (accessed on 12 March 2021).

Image references:

Image 1: Divisare.com, retrieved 20.04.2021 from https://divisare.com/projects/424056-alvar-aalto-mary-gaudin-the-aalto-house

Image 2: Archdaily.com, retrieved 20.04.2021 from https://www.archdaily.com/550485/villa-sarvilahti-k2s-architects?ad_source=search&ad_medium=search_result_projects

Image 3: Alvar Aalto.fi, retrieved 15.03.2021 from https://www.alvaraalto.fi/en/architecture/the-aalto-house/ & original image by S. Annala.

Image 4: Archdaily.com, retrieved 15.03.2021 from https://www.archdaily.com/550485/villa-sarvilahti-k2s-architects?ad_source=search&ad_medium=search_result_ & B-europe, retrieved 15.3.2021 from https://www.b-europe.com/FR/Blog/Villages-Provence

Image 5 & 8: Archeyes.com, retrieved 22.03.2021 from https://archeyes.com/the-aalto-house-alvar-aalto/

Image 6 & 7: Archdaily.com, retrieved 22.03.2021 from https://www.archdaily.com/550485/villa-sarvilahti-k2s-architects?ad_source=search&ad_medium=search_result_projects

Image 9 & 10: Archeyes.com, retrieved 07.04.2021 from https://archeyes.com/the-aalto-house-alvar-aalto/

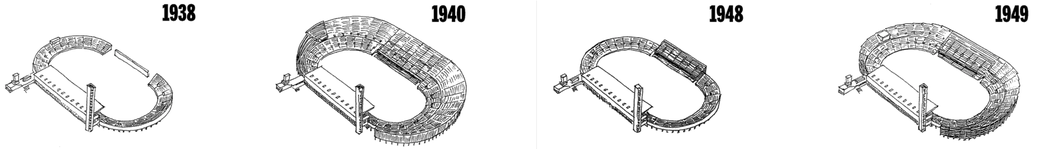
Image 11 & 12: Archdaily.com, retrieved 07.04.2021 from https://www.archdaily.com/550485/villa-sarvilahti-k2s-architects?ad_source=search&ad_medium=search_result_projects

Image 13 & 14: Sketch by S. Annala

Image 15 & 16: Sketch by S. Annala

Image 17: Archeyes.com, retrieved 22.03.2021 from https://archeyes.com/the-aalto-house-alvar-aalto/

Image 18: Archdaily.com, retrieved 22.03.2021 from https://www.archdaily.com/550485/villa-sarvilahti-k2s-architects?ad_source=-search&ad_medium=search_result_projects



Helsinki Olympic Stadium from 1938. (Unkown author) [1]

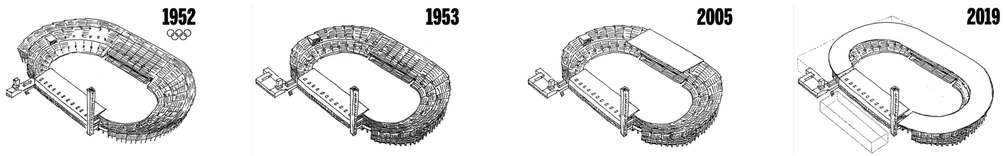
HELSINKI OLYMPIC STADIUM (1938)

Finland's largest arena, the Helsinki Olympic Stadium, has a history almost as old as Finland's independence. It is located in the Töölö district outside of the city center of the Finnish capital city. As the young nation dreamed of hosting the Summer 1940 Olympic Games, an architectural competition for the center of the sports activities was held. The modern functionalistic design submited by the architects Yrjö Lindegren and Toivo Jäntti won the competition and construction began in 1934. The stadium was completed in 1938. However, the face of the Olympic Stadium has changed considerably during the decades. The Olympic Stadium has been renovated eight times since its original completion (Uotila, N., 2020). It was expanded already in 1950's as the Olympic Games were moved to 1952 because of the second world war. The current general appearance of the building dates to the 1950's, when office spaces were added and the exterior walls were cladded with wood panels. In addition to the 1952 Olympic Games the Helsinki Olympic Stadium has served as the venue for two World Athletics Championships (1983, 2005) and three European Championships (1971, 1994, 2012) (urheilumuseo.fi, 2020). The stadium undergone a major renovation in 1990-1994 and was again renovated just before the World Championships in Athletics in 2005, when the canopy covering only the east stands was added (Uotila, N., 2020).

Uotila, N. (2020). Retrieved 17.05.2021 from https://www.finnishdesignshop.com/design-stories/architecture/helsinki-olympic-stadium

urheilumuseo.fi. (2020) Retrieved 17.05.2021 from https://www.urheilumuseo.fi/en/exhibit/2008-helsingin-olympiastadion-1938%E2%80%922008/

Evolution of Helsinki Stadium between 1938 and 2019 [3]



Helsinki Olympic Stadium from 2020. (Wellu Hämäläinen) [2]

THE RENOVATED HELSINKI OLYMPIC STADIUM (2020)

In August 2020 the Stadium has been reopened after over four years of extensive renovation designed by Kimmo Lintula (K2S Architects) & Kari Raimoranta (Architects NRT). While the Stadium has been renovated with great respect towards the original architecture, it has also undergone great changes to meet the 21st century's standards for a multipurpose arena.
The conservation respected and preserved the original 1930s and 1950s architecture (toposmagazine.com, 2020).
It was important to ensure that as well the the conservation and the revitalizing of the stadium respond both to all future requirements of international sports events while preserving cultural values of the heritage. As it remains instantly recognisable, the Stadium is now more comfortable, more accessible, and more functional as its needed these days (toposmagazine.com, 2020).

The Stadium was extended with 20,000 square meters underground. The architects replaced the old bench rows with new individual seats and added a new canopy which now covers the stands almost entirely. Also new entrances to the stands and the public galleries under the structures ensure the free flow for the public during the events (K2S architects, 2020).

It was also a goal to use materials which are attached to the history of the stadium: white concrete, wood, and glass in the new parts built merge smoothly into the existing parts of the building (K2S architects, 2020).

Marketing and Communication Olympic Stadium Helsinki (2020) Retrieved 17.05.2021 from https://www.toposmagazine.com/helsinki-olympic-stadium/

Pintos P. (2020) Retrieved 17.05.2021 from https://www.archdaily.com/950755/helsinki-olympic-stadium-k2s-architects-plus-architects-nrt

Helsinki Olympic Stadium from 1938 in its original settings. (Unkown author) [4]

The Helsinki Olympic Stadium from 1938 in a mountain in Halti, Finland. (Emma Svensson & Unknown Author) [5] Altered by authors.

HELSINKI OLYMPIC STADIUM (1938)

The Olympic Stadium from 1938 in Helsinki has always been an iconic landmark of Finland and Finnish functionalism and therefore it has a significant national value for the country.

“From the beginning, the Olympic Games were regarded as an international image campaign: Finland, still a young nation at the time, wanted to show the world that it was a modern country. To achieve this goal, the Olympic venues and other buildings were designed according to modern functionalist principles and the latest construction engineering was boldly applied in the construction work.” (finnisharchitecture, 2021) The use of concrete was a completely new way of building for the era and showed the countries wish to fit into these days trends, to be seen as a modern and powerfull nation. The tower of the Helsinki Olympic Stadium represents a distinct landmark with a height of 72.71 metres (238.5 ft). For the architects it symbolises the guard of the stadium and it used to be associated with the symbolic notion indicating the final spurt when seen by the marathon runners. (stadion.fi, 2020) The different stages of the stadium represent the evolution of Finland architecture’s trends, values, ideals and identity. During the evolution of the building, you can see the changes in the materiality of the façade.

The Stadium was always supposed to be a symbol of Finland at an international level and visible ladmark. The original location outside of the city center is wisely chosen with the tower being seen from far and giving the wide views above the city and landscape.

We were wondering, how the stadium would look like in a clear, typipcal Finnish landscape, far from the dense civilization to emphasize its monumentality and outstanding white façade. On top of a Tunturi in Lapland the lower building looks almost like a part of the landscape but the tower pointing out skywards looks even more visible than in its original setting.

Olympistadion Helsinki-Finland, Retrieved 17.05.2021 from : https://www.stadion.fi/en/attraction/visit-the-tower

Finnish architecture. Retrieved 17.05.2021 from https://finnisharchitecture.fi/olympic-stadium/

The renovated Helsinki Olympic Stadium from 2020 in its original settings. (Tuomas Uusheimo) [6]

The renovated Helsinki Olympic Stadium (2020) in Echo lake, United States. (Evan Clark & Tuomas Uusheimo) [7] Altered by authors.

THE RENOVATED HELSINKI OLYMPIC STADIUM (2020)

The renovated Olympic Stadium is still in the same place between the lower buildings of the outer city of Helsinki and the Djurgarden, surrounded by parking lots and other sports buildings.

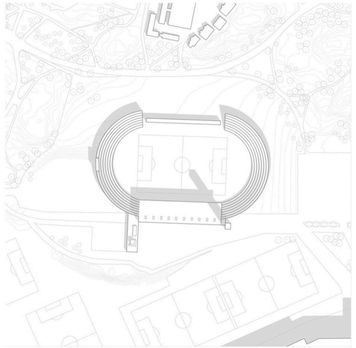
In this area the tower still seems to be very high compared to the lower buildings along the street. But since the city of Helsinki has grown and new building heights have risen since the last decades, it is not the highest tower pointing out in Helsinki anymore. Altough, all of those high rises are situated outside of the city center as the city of Helsinki still has the desire to protect it’s historic silhouette. (helsinkihighrise, 2021)

The Stadium had to adapt to its several new usages during the decades after the Olympic Games in 1952 where it was originally build for. Through time every renovation was aimed to have the most innovative features of her time as it is nowadays too. Recycled wood was used for the new seats, made nearby in Salo, Southern Finland and the use of the wood can be perceived as a wish to be a part of the landscape more than stand out of it. (K2S Architects, 2020)

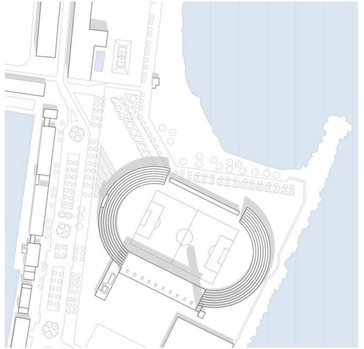
That is why this time we decided to situate the building on a lakeside in between a dense forest and scenic mountain range. The dark foresty environment, and the mirroring of the building by the surface of the lake points out especially the new facade wich shows the respect of adaptation, away from the dense growing city, and actual intention of the architects using natural materials to fit the building in today’s trends of sustainability while still standing out and being a visible symbol for Finnish Identity and Finland being a country pushing sustainability and innovations forward.

Helsinki Highrise, (2020) Retrieved 17.05.2021 from : https://www.helsinkihighrise.fi/

Pintos P. (2020) Retrieved 17.05.2021 from https://www.archdaily.com/950755/helsinki-olympic-stadium-k2s-architects-plus-architects-nrt



The Helsinki Olympic Stadium from 1938 located in Helsinki



The Helsinki Olympic Stadium from 1938 located in the beach in Barcelona

HELSINKI OLYMPIC STADIUM (1938)

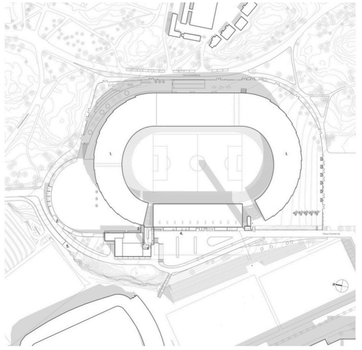
In the original site plan, the stadium was in a big city but in a large park. So despite its size the Stadium doesn't impact the layout of the urban surroundings too much. It is surrounded with nature and soccer fields and with only few buildings so it was a landmark for the city and visible from long distance too, especially the tower.

Since the Old Olympic Stadium was a landmark in the original landscape we wanted to see if it can be one in a slightly denser area. We chose the location of the "W Hotel" because it's a landmark in the barcelonian beach panorama. Putting this Stadium here is a bit problematic since it's not the same size as the "W Hotel" so the surroundings had to be sligthly adapted.

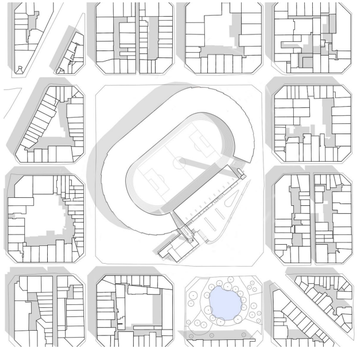
When it's close to the sea the tower could act not only as a lighthouse but also as an international sign, when you're coming in Barcelona from the sea, you'll see it.

The first aim while building this Stadium in Finland was to make a statement that Finland can be international and be a part of the functionalism movement. When we see the building in there in Barcelona, we aren't so surprised. Barcelona can have functionalist and brutalist buildings too and it fits in the surroundings. Also, the white color of the building is closed to the Mediterranean looks so having this building close to the sea and the beach can fit nicely.

Site plans by authors.



The renovated Helsinki Olympic Stadium located in Helsinki [8]



The renovated Helsinki Olympic Stadium located in the center of Barcelona instead of the Sagrada Familia [9]

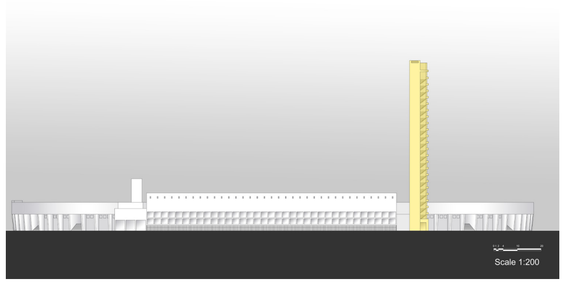
THE RENOVATED HELSINKI OLYMPIC STADIUM (2020)

In the new site plan from 2020, the stadium is still in the same park and surroundings but now there are more buildings built close to it, the tower of the stadium is no longer the highest structure in Helsinki and the new façade is as important. It's still a landmark for the city but for different reasons: wood façades related to the woods and sustainability of Finnish tradition and they are linked to the park where it is too.

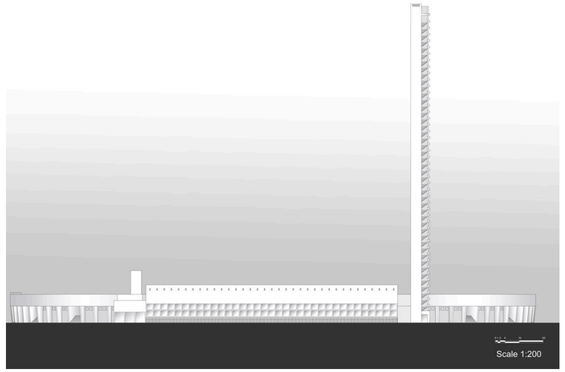
To examine the opposite case of its original setting in a park and how it works in a completely different environment the renovated Olympic stadium was put into the very dense cityscape of Barcelona. In order to keep the context of being a country's national landmark the building is replacing the well known Sagrada Familia and its surrounding. Because of the oversized dimension of the Stadium its complicated to have it in a different layout than its original one, especially in a very dense grid like the center of Barcelona.

Strong from close, weak from far – As now in Helsinki as well, the tower of the Stadium will not be visible from far away because of the height of the surrounding buildings, so it is more about the building itself in its new setting. It is hidden in the cityscape and people will be lead through the city and suddenly be surprised by the building's appearance and the eyecatching facade.

Both Sagrada Familia and the Olympic Stadium are innovative for their time with new materials and construction techniques and trying to stand out. But the Olympic Stadium acting as a symbol of Finland with the use of wood isn't anymore a symbol of this country because the codes between Spain and Finland aren't the same. While the Olympic Stadium is a symbol of independency and statement from Finland toward the World, the Sagrada Familia is more of a cultural, religious and artistic symbol of Spain.



Highlighted, the high of the tower in the Stadium, as a landmark in the landscape.



Exaggeration of the high of the tower, as a tree growing up.

HELSINKI OLYMPIC STADIUM (1938)

When we first looked at the original version of the Helsinki Olympic Stadium, the thing that really stood out was the tower. Then through our reading of articles and reviews about the building it was clear. The tower was a brutalist symbol, it was a landmark and its purpose was to be seen and recognized internationally : following the purpose of the whole project : being a symbol of Finland in the International world of Modern Architecture. The tower height was a reference to the measurement of the gold-medal won by Matti Järvinen in javelin throw in 1932 Summer Olympics in United States (Architectuul, 2013).

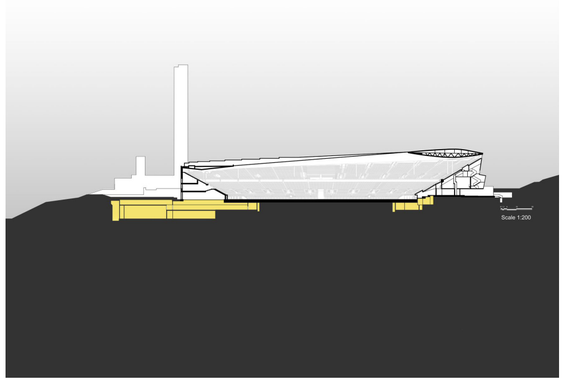
So in this project, it's not just about having this vertical and horizontal line defining the façade it's about this tower as a proud emblem of Finland at that time.

Nowadays, this tower isn't the highest building in this area of Helsinki, it's still known in the World as an heritage but the Stadium isn't the only built edifice in the area, there is another stadium next to it and a lot of new tower in Helsinki downtown, higher than this one. So for our exaggeration of this original version of the Stadium we chose to emphasize the height of the tower. In 1938, the purpose was to grow up in the air and in the world with this tower, what if through the years it didn't stopped to grow ?

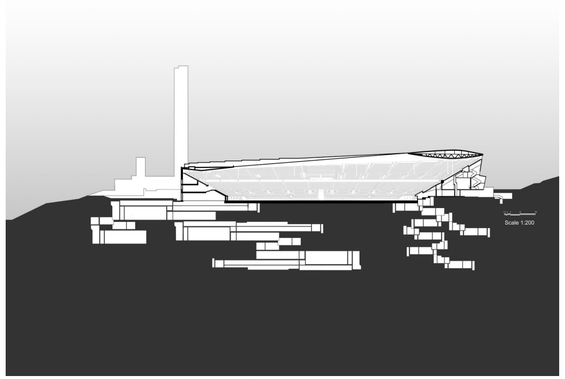
This is why we tried to achieve here by having a tower twice higher than the original one. It accentuate the horizontal and vertical aspect of the Stadium and it also allow the tower to continue being a landmark for people in the area and a constant reminder of the growing influence of Finlande internationnally.

Elevation drawings by authors.

Architectuul. (2013) Retrieved 17.05.2020 from http://architectuul.com/architecture/helsinki-olympic-stadium



Highlighted, the depth of the new addition to the Helsinki Olympic Stadium. [10]



Exaggeration of the depth of the addition to the Helsinki Olympic Stadium, as roots of a tree growing down. [11]

THE RENOVATED HELSINKI OLYMPIC STADIUM (2020)

While the Helsinki Olympic Stadium has been renovated with great respect towards the original architecture, it has also undergone great changes to meet the 21st century standards for a multipurpose arena. An important feature of the reconstruction completed in 2020 was an underground extension. With a completely new part of 20,000 square meters underground the amount of warm indoor space was doubled: new sports halls, indoor running track, auditorium, new changing rooms and a logistics area were built. (toposmagazine.com, 2020)

While the original version of the Stadium tried to grow up, this latest renovation grows down and we decided to emphasize the underground growth by adding more levels.

It could be considered as a symbolic reminder that the stadium (and also Finland itself) not only grows in height but is also firmly attached to the ground with solid roots providing stability. Conceptually speaking we can tell that Finland is attached to its origins, traditions and history and by having this renovation growing down like this, it can allow to the original version of the Stadium to prosper as a testimony of what Finland is about.
If we compare the version we made of what could have been an exaggerate version of the 1938's version of the Stadium to the latest renovation of it we can understand better why they decided to build underground. While the first version was growing up the last version is growing down to allow the first version to last in time as it is.

Finally, the Stadium can be pictured as a tree that grow up where anyone can see it but also underground to be able to last.

Marketing and Communication Olympic Stadium Helsinki (2020) Retrieved 17.05.2021 from https://www.toposmagazine.com/helsinki-olympic-stadium/

Helsinki Olympic Stadium from 1938 with its white concrete façade. (Unknown Author) [12]

Modified façades of the Helsinki Olympic Stadium from 1938, with wood façade. (Unknown Author) [13] Altered by authors.

HELSINKI OLYMPIC STADIUM (1938)

When Toivo Jäntti and Yrjö Lindegren were chosen as the winners in an open architectural competition for the stadium in 1933 - it is said that the entire description of their proposal was the laconic comment: “To be built of concrete.” The white, smoothly rendered walls, ribbon windows and roof-top terraces were pure functionalism, and the 72-meter-high tower, the highest landmark in Helsinki, rose above the stadium thanks to the latest advances in concrete construction techniques. (Finnisharchitecture, 2020).

And if we look at the old traditionnal houses in Finland the use of wood was almost systematic so wood was a traditionnal material and using concrete for the stadium was a statement, to include Finland in the new modern era in architecture. But the latest renovation of the Stadium include a new canopy visible in façade and in interior : in wood.

So we decided to switch the tower and the the façade of the original version of the Stadium in wood, first because we wanted to see what it could have been if the statement of the architect was “To be built of wood” and not concrete, as a way to use a finnish traditional material and also to finally switch façade between the first version of the stadium and the renovated one, what if the first version used traditionnal material in façade and the latest version used concrete, a more modern one ?

By changing the façade in wood we also, as a reference to our idea of seing this building as tree growing, changed the materiality of the tower to wood, it’s smaller because in wood it’s complicated to go that high.

Finnish architecture. Retrieved 17.05.2021 from https://finnisharchitecture.fi/olympic-stadium/

Helsinki Olympic Stadium from 2020 with its wood and concrete façade (Tuomas Uusheimo) [6]

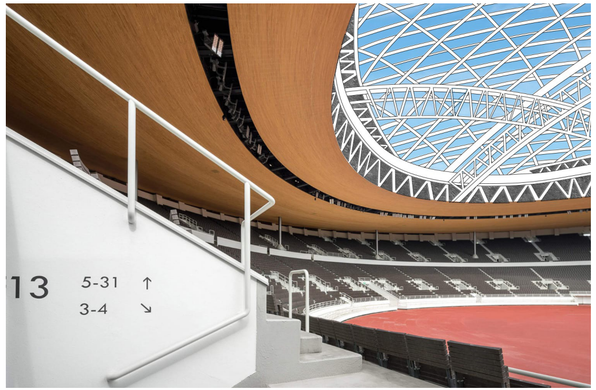
Modified façades of the Helsinki Olympic Stadium from 2020, with all white concrete façade. (Tuomas Uusheimo) [14] Altered by authors.

THE RENOVATED HELSINKI OLYMPIC STADIUM (2020)

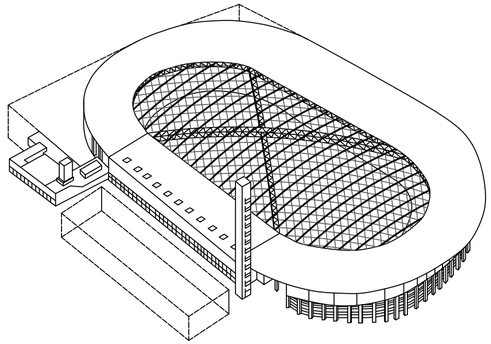
The Stadium’s external architecture of 2020 combines the restored 1930s concrete architecture and the renovated parts of the 1950s with a new North stadium square, where food and beverage kiosks in concrete serve audiences. The various elements make up a familiar and recognisable monument in human dimensions.
The materials in old and new parts of the whole are timeless and durable: white concrete, brick, wood, and glass. The inner surface of the new canopy is lined with wood, and a modern wood composite serves as the material for the seats.

The material choices honor the Stadium’s history: in the 1950’s, both temporary and permanent wooden structures were added to the concrete Stadium.
They chose to renovate every material and to use wood in addition to that, so we decided to switch the façade material of the renovated Stadium into white concrete, to see what it would have been if the statement of this addition was the same of the architects of the original version of the Stadium.

In conclusion, it’s really interesting to see that at first the Stadium aim to be modern, to be international and with this its materality too: the use of a very modern material: concrete. While the latest version of the Stadium aim to go back to the traditionnal finnish material and use wood for its canopy and addition in façade. By switching them it’s finally difficult to know if the first version was initially in wood, or concrete, and if the latest version was planned to be in white concrete or in wood too. They both want to be a symbol for Finland but in different times so they used different tactics.



Helsinki Olympic Stadium from 2020 with authors final addition. [15] Altered by authors.



Helsinki Olympic Stadium from 2020 with authors final addition. [16]] Altered by authors.

HELSINKI OLYMPIC STADIUM (1938)

The two versions of the Helsinki Olympic Stadium are a great example of the evolution of Nordic Architecture.

The old Olympic Stadium with its minimalistic, functionalist and pure design represents the innovative Nordic Nation in a worldwide context. New solutions of concrete structures facilitated the construction of complex and high rise buildings. The design stood out from the nature surroundings of the Djurgarden Park and the importance was rather the visibility and the face to the outside while staying pure and functionalistic inside.

The evolution through the decades is clearly visible in the stage of the 2020 renovated Olympic Stadium. While its materials evolution adapts to the old Stadiums fabric to keep the historic face, a change of material on the outside façade now adapts to the urban context of the park. The special structure of the concrete enabled the constructors to undermine the building for a minor extension underground which is quite unusual nowadays. With the renovation the country points out again its innovative ways of construction.

In addition to their actual use as sports arenas, nowadays Nordic Stadiums such as the Friends Arena or the Tele Arena in Stockholm are used for multiple events such as cultural shows, theaters and concerts. They are built with adaptable roofs, which can be closed during rain, snow or cold temperatures.

On the base of this, we decided to try a closed roof structure on top of the renovated Stadium. The sketches show the Idea of the addition which ensures, that the Stadium field can be used dry and snow-free during all seasons of the year. It also adapts to the modern Nordic appearance of the Stadium. Through the glass structure, the fields and seats are light up naturally and fresh air can circulate through openings.

References:

Uotila, N. (2020). Retrieved 17.05.2021 from https://www.finnishdesignshop.com/design-stories/architecture/helsinki-olympic-stadium

urheilumuseo.fi. (2020) Retrieved 17.05.2021 from https://www.urheilumuseo.fi/en/exhibit/2008-helsingin-olympiastadion-1938%E2%80%922008/

Architectuul. (2013) Retrieved 17.05.2020 from http://architectuul.com/architecture/helsinki-olympic-stadium

Finnish architecture. Retrieved 17.05.2021 from https://finnisharchitecture.fi/olympic-stadium/

Marketing and Communication Olympic Stadium Helsinki (2020) Retrieved 17.05.2021 from https://www.toposmagazine.com/helsinki-olympic-stadium/

Pintos P. (2020) Retrieved 17.05.2021 from https://www.archdaily.com/950755/helsinki-olympic-stadium-k2s-architects-plus-architects-nrt

Olympistadion Helsinki-Finland, Retrieved 17.05.2021 from : https://www.stadion.fi/en/attraction/visit-the-tower

Helsinki Highrise, (2020) Retrieved 17.05.2021 from : https://www.helsinkihighrise.fi/

Image references:

[1] Unknown author, (1938). Olympiastadion, Helsinki Olympic Stadium from 1938. Retrieved from https://www.stadion.fi/fi/uudistunut-stadion/arkkitehtuuri

[2] Wellu Hämäläinen, (2020), Helsinki Olympic Stadium from 2020. Retrieved from https://www.archdaily.com/950755/helsinki-olympic-stadium-k2s-architects-plus-architects-nrt?ad_medium=gallery

[3] Erkki Mäkiö, Museovirasto, (2017) Retrieved from https://suomenkuvalehti.fi/jutut/kotimaa/olympiastadionin-remontti-pieni-budjetti-suuret-suunnitelmat-11-kallista-pilaria-rahat-taas-loppu/

[4] Unknown author, (1938). Olympiastadion, Helsinki Olympic Stadium from 1938. Retrieved from https://www.stadion.fi/fi/uudistunut-stadion/arkkitehtuuri

[5] Emma Svensson (2018). Halti / Finland. Retrieved from https://49peaks.com/2018/08/13/halti-finland/ & [4]. Altered by authors

[6] Tuomas Uusheimo (2020). Helsinki Olympic Stadium from 2020. Retrieved from https://www.archdaily.com/950755/helsinki-olympic-stadium-k2s-architects-plus-architects-nrt?ad_medium=gallery

[7] Evan Clark, the renovated Helsinki Olympic Stadium (2020) in Echo lake, United States. Retrieved from: https://unsplash.com/photos/iJHifryxD0s & [6]. Altered by authors

[8] K2S Architects + Architects NRT, Archdaily. (2020). Helsinki Olympic Stadium. Retrieved from https://www.archdaily.com/950755/helsinki-olympic-stadium-k2s-architects-plus-architects-nrt?ad_medium=gallery & context of Barcelona by us.

[9] Context of Barcelona by authors & [8]

[10] Highlighted, the depth of the new addition to the Helsinki Olympic Stadium. Elevation drawing by authors based on Archdaily. (2020). Helsinki Olympic Stadium / K2S Architects + Architects NRT : https://www.archdaily.com/950755/helsinki-olympic-stadium-k2s-architects-plus-architects-nrt?ad_medium=gallery & tree drawing by arbreenblog, retrieved

[11] Section of [10] altered by authors.

[12] Unknown author, (1938). Olympiastadion, Helsinki Olympic Stadium from 1938. Retrieved from https://www.stadion.fi/fi/uudistunut-stadion/arkkitehtuuri

[13] Picture [12] altered by authors.

[14] Picture [6] altered by authors.

[15] Wellu Hämäläinen, (2020), Helsinki Olympic Stadium from 2020. Retrieved from https://www.archdaily.com/950755/helsinki-olympic-stadium-k2s-architects-plus-architects-nrt/5fa1c36a-63c0177a730001d6-helsinki-olympic-stadium-k2s-architects-plus-architects-nrt-photo. Altered by authors.

[16] Picture [3] altered by authors.

HELSINKI OLYMPIC STADIUM (1938 AND ITS RENOVATION FROM 2020)
CONCLUSION
LYKKE LEENDERS, KATEŘINA MUSÍLKOVÁ, FABIEN SIGRIST, EMMA COLIN
CONTEMPORARY NORDIC ARCHITECTURE 2021

Image 1. National Pensions Institute (Holma 2017).

Image 2. Urban Environment House (Lahdelma & Mahlamäki architects 2021).

NATIONAL PENSIONS INSTITUTE

Architect: Alvar Aalto
Location: Helsinki, Finland
Building finished: 1956
Floor area: 22 500 m²

National Pensions Institute is an office building located in Taka-Töölö in Helsinki. In the beginning, the building was supposed to be designed and built based on Aino and Alvar Aalto's competition win on a different site. However, when Aalto developed the design, there were problems with the site. This led to choosing to build on another place. New appointed triangular site was bounded by Nordenskjöldinkatu, Messeniuksenkatu and Minna Canthinkatu. (Alvar Aalto Foundation 2017)

Aalto wanted to lighten a generic design of an office building. He managed to create a U-shaped entity, that looks like many individual buildings from the outside, but is well connected inside. The site locates next to a park, and the building mass gets lower towards it. Red brick, copper and black granite is used in the facades. Aalto also designed many new furniture, light fittings, wall claddings and textiles for the building. The building has achieved respect to its quality of materials and implementation (Alvar Aalto Foundation 2017), although people judged it when it was built. They thought that the building was too fancy for its purpose. (Suutari 2020)

URBAN ENVIRONMENT HOUSE

Architect: Lahdelma & Mahlamäki architects
Location: Helsinki, Finland
Building finished: 2020
Floor area: 40 900 m²

Urban Environment House (image 2) was built in 2020 for the Urban Environment Division of the city of Helsinki in Kalasatama (Työpajankatu 8). The surrounding neighbourhood is very urban with very little vegetation. The programme includes working spaces for the urban planners of the city district, auditorium and restaurant spaces and public service facilities. The first two floors are public space in a Nordic spirit. (Lahdelma & Mahlamäki architects 2021)

Urban Environment House is a large building that can be divided into three independent sections. The division can be seen from the outside massing and from the details in the facades. A flexible use of the building over time has been a priority in the design process. The building is almost a zero-energy building. (Lahdelma & Mahlamäki architects 2021)

Urban Environment House gives an impression that it has been built with higher standards than usual with a pursue for ecological solutions. Rooftop terraces with different pavilions and the arch theme in the facade are features that makes this building special.

Image 3. National Pensions Institute placed in Venice
(Szekely 2014; Wikipedia Commons 2014), altered by authors.

NATIONAL PENSIONS INSTITUTE

Materials and simple style of National Pensions Institute represent the 1950s. At that time, Aalto became a leading architect of our country and red brick was something he used in many of his works. (Standertskjöld 2021)

Compared to the buildings built today, National Pensions Institute's main campus distinguishes itself with the abundance of detail. It could be about the ambition of the architect, Alvar Aalto, or just practice of its time, but the building was built with an eye for the details. This finished style can be seen for example when comparing the building with the Urban environment house; there seems to be no visible signs of ventilation or other technical equipment in the ceilings or otherwise. Also, it is not very typical that architect designs the building so comprehensively that even light figures and furniture have their handprint on it.

The building is originally located in the intersection of three roads. This raised the question how it would look like in a different situation, where the landmark building is just one building among others. In the image on the left (Image 3), the main building of National Pensions Institute becomes a part of a canalside architecture in Venice in Italy. This was an interesting test since Aalto travelled a lot to Europe and beyond, but Italy was his favorite (Alvar Aalto 2021).

While it is a funny though experiment to set the National Pensions Institute in the Mediterranean environment, having a monumental piece of architecture alongside the canal feels ultimately a bad idea. The local architects in Venice have clearly had the same epiphany – the existing domed cathedral in the background is built a definite distance away from the canal.

The image highlights the different styles since the National Pension Institute is facing the traditional local buildings. The contrast is clear. Local buildings' facades are colorful, decorative, and full of different shapes, whereas the National Pensions Institute has a neutral color, and a simple and peaceful rectangular form. New surroundings makes the building feel heavy and dark, which is interesting because in its original place in Finland it does not feel like it. Even though Aalto took plenty of influences from Italian building heritage (Pape-Mustonen 2017) these considerations tell that those influences are seen in some other ways.

URBAN ENVIRONMENT HOUSE

It is typical for our time that a new building has the size of a whole city block. A large footprint leads to deep building frames. This is a much debated feature of Helsinki city development that has to do with the lost of scale. Urban Environment House has a relatively deep frame. The lack of daylight is compensated with high ceilings and large windows.

The massing of the building into several sections might tell something about the scale of the building. The aim might have been to make the impression lighter despite the large footprint and to ensure sufficient daylight. The fact that the buildings independent sections can be interpreted from the facade indicates of functionalism thinking that might be behind the massing to make it easier to navigate.

Urban Environment House is said to be nearly a zero-energy building despite the large window surfaces (Lahdelma & Mahlamäki architects 2021). Rooftop terraces with plants are also features that tells a story about the ecological values in this project and these values are hot topics in our time. These values tend to be highlighted in contemporary buildings. How these values achieve their goals is left to be seen.

In the 1950s, the quality could be seen in the smallest details such as unique door handles, railings and other hand made building elements. Today buildings are more based on prefabricated parts that are installed on site. This can be seen as lack of richness and personality in the details even in high quality profiled buildings.

The Urban Environment House represents a relatively high quality building of today. Use of built on site brick facades is a feature that indicates high standards in quality. Also, historical references have become more accepted. The use of an arc theme in the facade positions this building to this decade. Indoors the quality is visible as quality materials put together by an interior designer.

Considering the use of the house (Helsinki environmental agency), we wanted to place the building from dense cityscape into an ironical context of dense Finnish forest (image 4). While in the city the building is just one of many buildings in the city, the Urban environment house creates a focal point in the anonymous plot of land in Finnish woodlands. The change of location reveals the organic features in the massing of this building.

Image 4. Urban Environment House placed in a forest (Lahdelma & Mahlamäki architects 2021; Lankinen 2013), altered by authors.

Image 5. National Pensions Institute on its original site in Töölö.

Image 6. National Pensions Institute located on a new site in Kalasatama.

NATIONAL PENSIONS INSTITUTE

National Pensions Institute locates on a triangular-shaped site in Taka-Töölö (image 5). The site is bounded by three roads, of which Nordenskjöldinkatu and Messeniuksenkatu are bigger, and Minna Canthinkatu smaller. Also, the big main road Mannerheimintie goes close to the site.

The city district in question is dense. All the surrounding city blocks are enclosed, and the buildings have seven floors on average. However, there are also a few parks in the area. In the immediate vicinity, towards southwest of the site there is an elongated park called Kirjailijanpuisto. This makes National Pensions Institute the end of the views from two directions, so the location is very central in the townscape.

Surroundings are taken well into account in the design. Staggered mass has its tallest parts close to the tall surrounding buildings, whereas parts of the building get lower towards the park. Also, there is a courtyard on the site that acts as an addition to the park. The surrounding buildings have plastered facades, so National Pensions Institute stands out from them with brick facades.

As a part of the landscape and city analysis, National Pensions Institute is relocated on a different site in Kalasatama, where the Urban Environment House originally locates (image 6). The switch was interesting, since both of the buildings serve similar functions, but their locations are very different by their nature. Where the original site is in a central location in an old neighborhood of Töölö, the other site in new area of Kalasatama blends more into its grid plan-like environment.

Red brick used in the facades fits well to the context of Kalasatama, where brick is the most used material. This also makes National Pensions Institute blended into the surrounding buildings, whereas in Töölö it stands out from buildings with plaster facades.

Next to the National Pensions Institute on its new site, there is a building of Statistics Finland. Buildings create a fun pair, since both of them have red brick facades, monotonic window rows, and similar type of staggered building mass. The staggered form is seen also in the site plan (image 6).

URBAN ENVIRONMENT HOUSE

The location of Urban Environment House is close to Kalasatama roughly two kilometers from Helsinki railway station (address Työpajankatu 8). The surrounding areas, Kalasatama and Verkkosaari are old factory and harbour areas that are under heavy construction to become a new dense urban city district with housing, offices and businesses (Helsinki 2021). Brick is used in several facades and a large building footprint with a deep frame is also typical in this area.

Urban Environment House forms an enclosed city block together with an L-shaped building (image 7). The surrounding city blocks have relatively deep frames and the organization of blocks is similar to a grid plan. The buildings have different angular shapes. Every block is individual. The surrounding city blocks have eight floors on average. Many of the surrounding city blocks are at least partially enclosed masses. The Urban Environment House is higher than the surrounding buildings at this moment and has the impression of a public building. There will be even higher infill buildings on the now empty plots north to the Urban Environment House (Karttapalvelu Helsinki), which might change the dynamics in the future.

Työpajankatu and Hermannin Rantatie are clearly busier due to the traffic than Työpajanpiha and Tukkutorinkuja which are preserved for mainly for pedestrians. The plots facing north and west forms together with the Urban Environment House a “super block”. The busy roads with traffic are wrapped around the “super block” and the street space between the buildings are for pedestrians.

Placing the Urban Environment House in place of the National Pension Institute makes the building stand out (image 8). While the building works as part of the Kalasatama site plan, having such a large frame depth in the relatively homogenous area with frame depths half of the Urban Environment House looks out of its place.

Facades with varying angles are used widely in Kalasatama, but this concept works rather poorly in the simpler site plan of Taka-Töölö. Having the Urban Environment House as a view end at the Kirjailijanpuisto and Arvo Ylppö Park has a different impression than the National Pension Institute — the other was built right from the beginning as a view end, while the other was designed as part of a grid plan. While it doesn’t fit the site and doesn’t work that well as a view end, an inner yard forms also with this building.

Image 7. Urban Environment House on its original site in Kalasatama.

Image 8. Urban Environment House located on a new site in Töölö.

NATIONAL PENSIONS INSTITUTE

The National Pensions Institute is a distinctly horizontal building, despite its several stories and vast size. The repeating “ribbon windows” in the facade create long stretches of both red brick, glass and patinated copper (image 9).

The original name of the competition entry of the building was called “forum redivivum“, literally “market restored“. As a modernist building, light traffic of pedestrians and car traffic were split into separate platforms, further highlighting the horizontality. In the same way as the Urban Environment House, also the National Pensions Institute has a very rational facade system. Unlike the other building, there is very little playfulness in this rather serious office building.

As part of this excersise we decided to explode elongating the long facade to the South-West further (image 10). The result resembles the main office of some nameless large corporation - not too far from the function of the original building.

Staggered building mass creates an impression of cluster of different buildings instead of one. This was something that Aalto aimed at in the design (Alvar Aalto Foundation 2017). Overall the elevation looks like city silhouette.

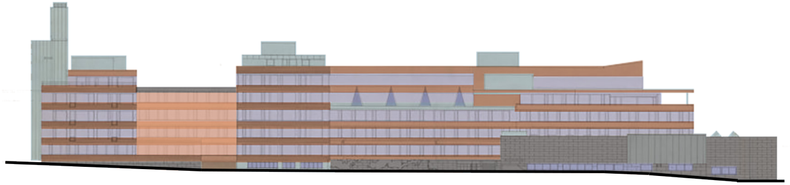


Image 9. Elevation to the southwest (Alvar Aalto Foundation 1955), altered by authors.

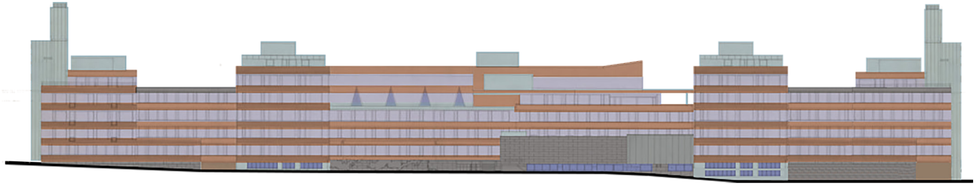


Image 10. Elevation to the southwest with elongated vertical facade (Alvar Aalto Foundation 1955), altered by authors.

URBAN ENVIRONMENT HOUSE

The look of the Urban Environment House represents a contemporary office building with its relatively rational grid-based facade and with a high rate of windows. However, sculpture-like brick vaults bring playfulness to the facade and make it more interesting by forming visible contrast with the grid motive (image 11). The arches form a definite wow-effect to the building.

The strong effect of arch and grid-based openings are enhanced with the use of brick. It is also notable that the glasses are approximately few bricks deep in the facade. This greatly affects the general feel of the facade.

Since the grid motive is clearly the dominant feature in the facades, we wanted to see to which extent the arch motive could be increased, and how it would affect the look and feel of the facade (image 12). Also, there are variations of the vaults; part of them are full circles and some are upside down near roof top. With these inserts, the facade is way more sculpture-like, yet it still remains relatively restrained.

Even though the modifications look quite believable in the facade composition, it should be mentioned that the large openings would probably be redundant in the upper floors due to the function of the buildings. The existing ground level openings indicate the lobby and bring light to it.

The original facade is clearly more harmonious than the altered one. The arch theme is created as a continuous zone at the hem of the building, indicating the entrances and the public spaces of the building. In this sense, the original facade’s “form follows function”. The impression in the altered facade have a post-modern feel to it due to the random positions of the arch themes in the facades of the upper floors.

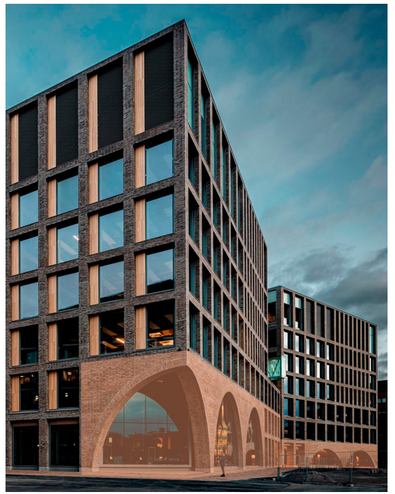


Image 11. View of the building with the first floor arches highlighted (Lahdelma & Mahlamäki architects 2021), altered by authors.

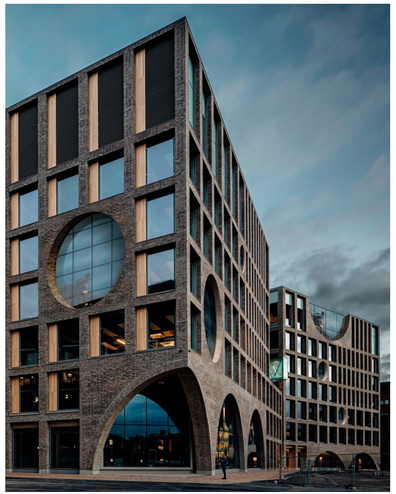


Image 12. View of the building with modified windows (Lahdelma & Mahlamäki architects 2021), altered by authors.

NATIONAL PENSIONS INSTITUTE

The main materials of the facades of National Pensions Institute are red brick, copper and black granite. Red brick is the most visible material of the building and it was specially made for the purpose. Copper is used in roofs and facades to cover the insulation in places. There is also a tower of copper in the north-west of the site. Today, copper is patinated into green but it has reminded of gold when the building was built. Some of the separate building elements are black granite as well as the walls surrounding the garden and fountains in it. (Sarkkinen 2006)

Facades have a very horizontal appearance due to the continuous windows. Also bricks that are laid in horizontal form accentuate it. Most of the windows open to north-east and south-west, whereas the facades to nort-west and south-east have more muted look with less windows. Materials and composition makes the building look steady. Facades are overall consistent and have few accents. From a distance, it is quite hard to see where the main entrances are and the building does not really encourage to approach it.

In this task, facade systems of National Pensions Institute and Urban Environment House are switched. First impression of the images is that the overall look is quite similar and realistic. However, the grid of windows is even more visible in the modified version and windows are larger. That gives a more transparent and even lighter impression even though the main material is still brick and new facades are a little higher. The verticality of the altered facade helps to make the impression lighter.

The arc in ground level of the modified facade shows the location of the entrance better than the original. Both of the facades have an anonymous look. The original facades continuous windows give a hint of the buildings age. Time will tell whether the arc theme in the Urban Environment House will be a feature that is recognized of today's (2020-) building era.

Image 13. Original facade of National Pensions Institute to the northeast (Kela 2007), altered by authors.

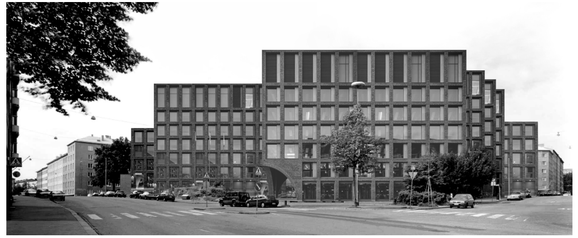


Image 14. Modified facade to the northeast (Kela 2007; Kuvatoimisto Kuvio 2021), altered by authors.

URBAN ENVIRONMENT HOUSE

The rough materiality in Urban Environment House is created with concrete, wood, brick and copper (Lahdelma & Mahlamäki architects 2021). The building is composed of a solid brick facade with a strong grid structure created by the large windows with the vertical wooden motif on the side (image 15). The colour of the brick is medium dark mud brown. Glass surfaces and the brick will for sure preserve their looks over time. The wooden parts will probably need more maintenance. The use of only a few materials makes the facade harmonious and minimalistic while the arch theme gives the otherwise rational facades an addition of lightness and fun.

The facades have been swapped between our two study cases (image 16), as we have done throughout this project. Only the organization of the facades have been altered. The materials are kept according to the original facade.

Also in this case the first impression is similar between the original facade and the altered one. The appearance is realistic and inspiring. The use of continuous windows can easily make a building look like a product of the 1950s. However, in this case the appearance is surprisingly fresh. The facade is somehow lighter, probably due to the massing and the two store high ground level supported by vertical pillars. The vertical feel in the original Urban Environment House has preserved. The use of wood that looks freshly cut might be the crucial feature that makes the altered facade look like a product of our time instead of the 1950s.

The original facade with its vertical brick pillars and arches looks like it is able to support its own weight. While in the altered facade with the continuous windows the supporting structure is hidden and the impression is a floating facade.

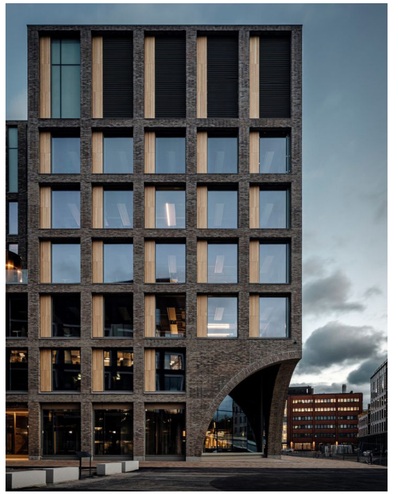


Image 15. Urban Environment House (Lahdelma & Mahlamäki architects 2021).

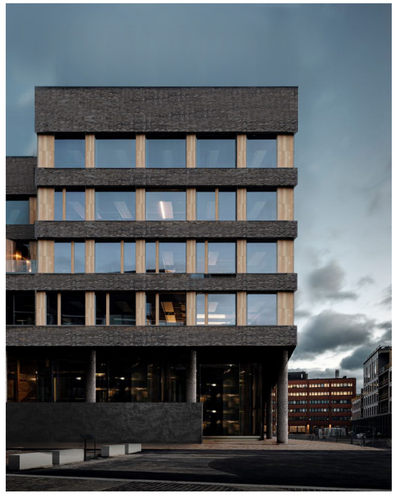


Image 16. View of the building with modified facade (Lahdelma & Mahlamäki architects 2021), altered by authors.

CONCLUSION

Contemporary nordic architecture is difficult to summarise in few words. On the other hand, this course has provided a great opportunity to analyse the characterics of these two office buildings - while built in two very different time periods, they have surprised by still being just office buildings.

Image 17. Urban Environment House (Kuvatoimisto Kuvio 2020), altered by authors.

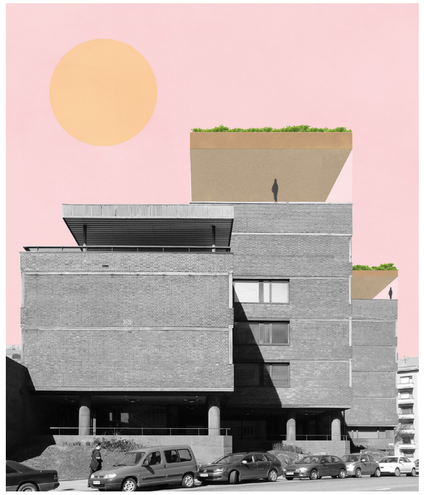


Image 18. National Pensions Institute facade (Archipicture n.d.), altered by authors.

There is a distict typology in Kalasatama: it is a densely built area with quirkily shaped city blocks. The Urban Environment House embodies this spirit well, as has been documented in the landscape & city analysis task. The district of Kalasatama has seen the tallest buildings of Finland built in recent years. As the need to densify housing is a constant theme especially in Helsinki, we envisioned the not-too-far future, when even the dense Kalasatama area seems too loosely built. Our addition takes the existing gridlines and inverts the facade system by protruding the windows themselves to the outside and seemingly sucking the wall within the frame (image 17). Even though we honoured the existing building, the addition doesn't feel quite at home at its place on top of the building. There is a distict impression of another office building built at the end of 2010s in Helsinki, this time in Pasila. You either like the facade or you dont.

One of the trends both in nordic countries as well as elsewhere is the utilisation of wood also as a structural element in larger scale buildings. As part of this final task we garnished the National Pensions Institute with popular timber-based additional public sightseeing storey on top of the existing, rather private office building (image 18). The glass and wood invoke thoughts of Helsinki Central Library Oodi, but also a hint of critique. While it is probably more socially acceptable to densify existing city structure with light wooden structures than ten years ago, there is clearly a time and place for them. This wasn't one of the times, even if there is a greenroof on top to sweeten the deal.

REFERENCES

Text references:

Aalto A. (2021). Museum of Finnish Architecture. Retrieved 6.5.2021 from https://www.mfa.fi/kokoelmat/arkkitehdit/alvar-aalto/

Alvar Aalto Foundation (2017). National Pensions Institute. Retrieved 16.3.2021 from https://www.alvaraalto.fi/en/architecture/national-pensions-institute/

Helsinki (2021). Näin Kalasatamaa rakennetaan. Retrieved 16.3.2021 from https://www.uuttahelsinkia.fi/fi/kalasatama/rakentaminen

Karttapalvelu Helsinki. Retrieved 24.3.2021 from https://kartta.hel.fi/?setlanguage=fi#

Lahdelma & Mahlamäki architects (2021). Urban Environment House. Retrieved 16.3.2021 from https://lma.fi/projects/urban-environment-house

Pape-Mustonen, T. (2017). Maalla kasvanut Alvar Aalto katsoi tiukasti eteenpäin. Maaseudun tulevaisuus. Retrieved 6.5.2021 from https://www.maaseuduntulevaisuus.fi/ihmiset-kulttuuri/maalla-kasvanut-alvar-aalto-katsoi-tiukasti-eteenp%C3%A4in-1.206001

Sarkkinen, E. (2006). Retrieved 26.4.2021 from https://www.kela.fi/documents/10180/12149/kela_50v.pdf

Standertskjöld, E. (n.d.). Rakennusperintö - 1900-luvun suomalaisen arkkitehtuurin tyylit, osa II. Retrieved 22.2.2021 from https://www.rakennustieto.fi/Downloads/RK/RK080100.pdf

Suutari, V. (2020). Aalto documentary. Retrieved 16.3.2021 from https://areena.yle.fi/1-4586720

Image references:

Image 1: Holma, M. (2017). Alvar Aalto Foundation. Retrieved 16.3.2021 from https://www.alvaraalto.fi/en/architecture/national-pensions-institute/

Image 2: Lahdelma & Mahlamäki architects. (2021) Retrieved 16.3.2021 from https://lma.fi/uploads/Projects/Urban_Environment_House/201020_tyopajankatu_8_013_LM_V2.jpg

Image 3: Szekely, P. (2014). Retrieved 16.3.2021 from https://www.flickr.com/photos/pedrosz/36206213542

Image 3: Wikipedia Commons (2014). Retrieved 26.4.2021 from https://commons.wikimedia.org/wiki/File:Kela_hdqtrs_10.JPG.

Image 4: Lahdelma & Mahlamäki architects. Retrieved 16.3.2021 from https://lma.fi/fi/projektit/kaupunkiymparistotalo.

Image 4: Lankinen, A. (2013). Aerial photo from Talvivaara mine and its surroundings in Sotkamo. Retrieved 16.3.2021 from https://upload.wikimedia.org/wikipedia/commons/2/28/Ilmakuva_2013_%289709920289%29.jpg.

Image 9: Alvar Aalto -säätiö (1955). Retrieved from https://www.alvaraalto.fi/content/uploads/2018/03/national-pensions-insititute-elevation-drawing-alvar-aalto-museum-988x659.jpg.

Image 10: Alvar Aalto Foundation (1955). Retrieved from https://www.alvaraalto.fi/content/uploads/2018/03/national-pensions-insititute-elevation-drawing-alvar-aalto-museum-988x659.jpg. Altered by authors.

Image 11: Lahdelma & Mahlamäki architects. (2021) Retrieved 5.4.2021 from https://lma.fi/projects/urban-environment-house

Image 12: Lahdelma & Mahlamäki architects. (2021). Retrieved 5.4.2021 from https://lma.fi/projects/urban-environment-house

Image 13: National Pensions Institute (2017). Elevating the Everyday. pp. 28-29. Retrieved 5.4.2021 from https://www.kela.fi/documents/12099/12170/kela_e.pdf

Image 14: Kuvatoimisto Kuvio (2020). Urban Environment House facade. Retrieved 5.4.2021 from https://aasarchitecture.com/wp-content/uploads/Urban-Environment-House-by-Lahdelma-and-Mahlamaki-architects-06.jpg

Image 15: Kuvatoimisto Kuvio (2020). Urban Environment House facade. Retrieved 5.5.2021 from https://aasarchitecture.com/2021/01/urban-environment-house-by-lahdelma-mahlamaki-architects.html/

Image 16: Kuvatoimisto Kuvio (2020). Uran Environment House facade. Retrieved 5.5.2021 from https://aasarchitecture.com/2021/01/urban-environment-house-by-lahdelma-mahlamaki-architects.html/

Image 17: Kuvatoimisto Kuvio (2020). Urban Environment House facade. Retrieved 5.5.2021 from https://aasarchitecture.com/2021/01/urban-environment-house-by-lahdelma-mahlamaki-architects.html/

Image 18: Archipicture.eu (n.d.). Retrieved 5.5.2021 from http://www.archipicture.eu/Architekten/Finnland/Aalto%20Alvar/Alvar%20Aalto%20-%20National%20Pensions%20Institute%20Helsinki%2022.html

Image 1. Aarhus City Hall in Aarhus, Denmark.

AARHUS CITY HALL

Completed in 1941, the Aarhus City Hall is a well-known example of modernist architecture in Denmark by Arne Jacobsen and Erik Møller. After surviving the second world war, it got global recognition, and is nowadays considered a classic work of Nordic architecture.

The project won a competition held in 1937. The harsh and international modernist style of the exterior architecture is combined with the more regional and organic interior features. The massing of the building is a play between a clock tower and three other masses: the entrance block, the “panopticon” block and the “inquiries” wing. The form and massing of the blocks follow each function.

The building has become a local landmark, but interestingly the most notable feature, the clock tower, was not part of the original plans. Only after the citizens asked for the addition did the architects include the iconic tower. The democratic nature of the process fits the building well, and the story became immortalized in the architecture of the building. (Archdaily 2019)

The building is rather separate from the rest of the architecture in the area, and it does not attempt to imitate or blend in with the surrounding built environment. It’s freely situated in the park and the surrounding open space makes it even more of a central point in the area.

Image 2. KTH School of Architecture in Stockholm, Sweden.

KTH SCHOOL OF ARCHITECTURE

The KTH School of Architecture is a very recent addition to the Royal Institute of Technology in Stockholm, Sweden. The building was completed in 2015 and it was designed by Tham & Videgård Arkitekter. It’s a contemporary and very different take on organic Nordic architecture.

In an abstract way the massing is similar compared to the Aarhus City Hall. They both have a vertical extension breaking up the more rhythmic and horizontal main mass, and the form is driven by function. The free-flowing and flexible plan of the KTH School of Architecture can be seen as a continuum of the modern Nordic architecture that Aarhus City Hall represents.

The building was designed into a tight urban square, and the design is utilizing the space effectively. The CorTen-clad building is balancing between standing out and blending in. The architecture is welcoming and open, with special attention put to circulation inside and outside of the building. (Archdaily 2015)

Image 3. Aarhus City Hall merged with the Barcode Project. Original image by Nurgaliyev, A. Altered by authors.

AARHUS CITY HALL

Aarhus City Hall in its original setting is a dominant building with much open space around it. We merged the building into a tight cityscape, very different from its usual surroundings. Without the surrounding space and advantage of size, its central role in the urban environment is diminished.

The Barcode Project is a redevelopment of a former dock and industrial land in central Oslo. It consists of a row of new multi-purpose high-rise buildings, that was completed in 2016. There has been intense public debate about the height and shape of the buildings.

While the Aarhus City Hall is in fact a very large building, it feels small when put next to contemporary housing blocks. It seems that the human scale is lost with the newer buildings, and therefore this experiment has also revealed something about the state of contemporary Nordic housing.

Image 4. KTH School of Architecture in a Forest. Original images by Lindman, Å and Hagerlund, T. Altered by authors.

KTH SCHOOL OF ARCHITECTURE

With the School of Architecture we did the opposite, and replaced the tight urban square with a natural one. We found that the effects of the design decisions got switched up when placed into a natural environment. The organic form language is a deliberate contrast to the blocky buildings in the actual site, but in the natural environment it seems complementary, like the building is mimicking the rounded organic forms. The same is true in reverse with the materiality. The CorTen steel is meant to blend in with the red brick façades of the neighboring buildings, but in the forest scenery the material seems out of place and contrasting.

These experiments highlight how both buildings have been consciously and carefully designed to connect to the surrounding urban fabric in a certain way, and how those design decisions would work differently in another situation.

Nordic contemporary architecture often gets its inspiration from natural environment, and it was interesting to see what would happen if the building was moved directly into its embrace.

Image 5. Site plan, Aarhus City Hall. Altered by authors.

Image 6. Site plan, Aarhus City Hall in Tampere city center. Altered by authors.

AARHUS CITY HALL

We studied the roles of the buildings in the urban environment further in site plan level. We feel that the role of Aarhus City Hall is clearly a landmark. From the site plan we analyzed the design decisions that make it such. For example the street lines, views, massing and abundant space around the building have been used to make it more dominant in the urban environment.

We tried to experiment on this and see if the role could be changed by altering the surrounding city typology. We couldn't fit it on the site of the other study case, but we tried to find similar conditions to place it in, and we came up with Tampere City center. When placed into an empty slot in the tight city fabric as part of the urban grid, the central role of the building is diminished.

Architecture has different aims and attitudes towards the surrounding built environment, which becomes apparent when the building is moved to another location. These experiments are showing how the site and urban structure affect the approach and outcome of architecture.

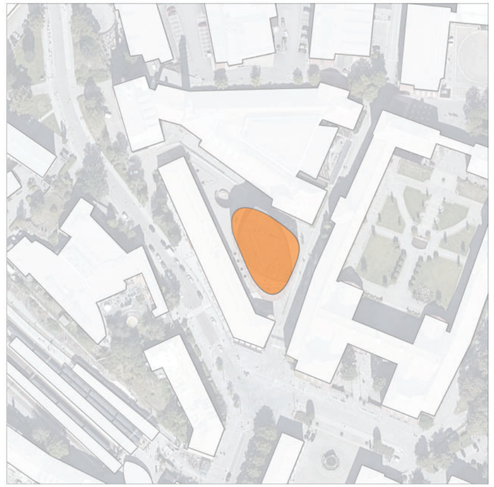


Image 7. Site plan, KTH School of Architecture. Altered by authors.

Image 8. Site plan, KTH School of Architecture in Rådhusparken, Aarhus. Altered by authors.

KTH SCHOOL OF ARCHITECTURE

The building is tightly squeezed into the site and really using all available space effectively. It's still possible to move around the building and appreciate it from all angles. The rounded form is used to soften the atmosphere on the crammed site and to have a stronger dialogue with the surrounding buildings.

Placed in the Rådhusparken on the site of Aarhus City Hall, the absence of space is changed to abundance of space. The building is in a weaker relationship to the surrounding urban structure and the contrasting form language becomes less effective, although the organic form is now in dialogue with the park.

The School of Architecture has been designed for a tighter plot and the form isn't as justified in the big park. The urban scale design methods, that were used to make Aarhus City Hall a central landmark, no longer work with the smaller mass. The building becomes a pavilion-like accessory when surrounded by so much space.

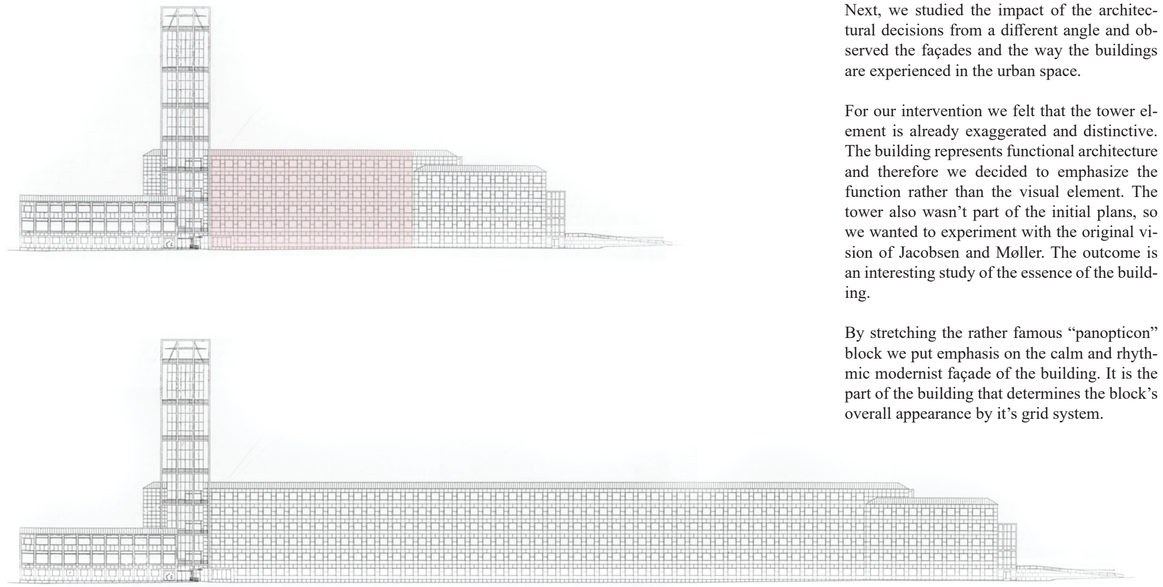


Image 9. Elevation, Aarhus City Hall. Altered by authors.

AARHUS CITY HALL

Next, we studied the impact of the architectural decisions from a different angle and observed the façades and the way the buildings are experienced in the urban space.

For our intervention we felt that the tower element is already exaggerated and distinctive. The building represents functional architecture and therefore we decided to emphasize the function rather than the visual element. The tower also wasn't part of the initial plans, so we wanted to experiment with the original vision of Jacobsen and Møller. The outcome is an interesting study of the essence of the building.

By stretching the rather famous "panopticon" block we put emphasis on the calm and rhythmic modernist façade of the building. It is the part of the building that determines the block's overall appearance by it's grid system.

Image 10. KTH School of Architecture. Lindman, Å. Altered by authors.

KTH SCHOOL OF ARCHITECTURE

With the KTH School of Architecture we focused in turn to the contrasting element and "landmarkness" in our modification. We changed the identity of the building by exaggerating the proportions to match the composition formed by the Aarhus City Hall's clock tower and panopticon block.

The high towering mass elevates the status of the building and makes it stand out. Most landmarks are high structures, and it's clearly an effective way in this example as well.

The dynamic atmosphere, created by the openings and the rounded form of the building's base mass, is however not working with the towering structure. The two conflicting motives make the composition restless and incoherent. The blocky grid-like facades of the Aarhus City Hall on the other hand are complementing the mass of the clock tower.

All the different parts of the design need to work together in order for the end result to meet its objective. Two different and disjointed themes are hard to combine in a meaningful manner.

Image 11. Aarhus City Hall. Altered by authors.

AARHUS CITY HALL

The façade of the Aarhus City Hall is emphasizing the importance of the building, especially through material use. The 6,000 square meters of imported Norwegian marble and additional copper detailing create a respectable and opulent atmosphere. (Archdaily 2019)

Switching the materials and openings to the ones from KTH School of Architecture creates a notably different appearance for the building, however the massing proves to be even more defining for the overall atmosphere. Much of the identity is preserved even after changing the cladding to the more contemporary CorTen steel and having a more dynamic window arrangement.

In some ways the transformed building feels wrong and out of place. It seems unlikely that a contemporary architect would end up with this kind of massing with the same materials and openings. Combining architectural elements from different time periods really make us think about the reasons, values and ambitions behind every decision. Perhaps such experiments can make us more mindful of the design solutions we make as architects.

Image 12. KTH School of Architecture. Original image by Lindman, Å. Altered by authors.

KTH SCHOOL OF ARCHITECTURE

Similar findings come from doing the same study the other way around. The marble cladding and a more grid-like arrangement of openings dilute the identity of the KTH School of architecture to some degree and in a way justify and explain the original design. Still the form of the building seems to be the most determining component of the whole design.

The newfound features and architectural traits are clearly not optimal for conveying the ideas behind the architecture and don't benefit the goals of the project. The cladding material isn't working with the red brick material of the adjacent buildings, and the calm and static openings are not optimal for the tight plot that is asking for a dynamic solution.

What is clear from these examples is that such exemplary pieces of contemporary Nordic architecture have been thoroughly and coherently designed. A holistic approach from concept to the finished building is needed to meet the esthetic goals, site conditions and functional expectations. Mismatched or inconsistent architecture doesn't make good urban environment.

Image 13. Aarhus City Hall addition. Altered by authors.

Image 14. KTH School of Architecture addition. Altered by authors.

THE ADDITIONS

The new addition is a hybrid of a café, a restaurant and library. It serves people who work at the Aarhus City Hall, but also other people passing by the building. It creates opportunity to eat and read in front of a beautiful park scenery. The new addition also offers an alternative entrance to the existing building.

The addition extends the existing lobby hall still allowing the natural light in the lobby space. The ground level's arcade, where the entrance is situated, creates a covered area for the café's customers. Roof level's terrace creates a multifunctional space to be used by the restaurant and library's customers.

The addition's façade follows the same grid system as the existing building. Its slightly larger widows give it a more public and welcoming feeling. The materials - concrete and glass imitates the same rawness attaching it in a subtle way to the Aarhus City Hall.

The second addition is a covered exterior space for the small plaza in front of the KTH School of Architecture. The organic form language follows the architecture of the School of Architecture.

The gathering spot is further blending in the building with its surroundings. It enhances the functionality of the plaza and creates an in-between space that enables more activities and interactions.

CONCLUSION

Our comparison between two public buildings from a different time period and with a different function proved to be fruitful. Despite the different functions and ways of architectural expression, the designers have dealt with similar design challenges and created architecture with a unique and regional Nordic touch.

The buildings are products of different eras and different architectural thinking, however they're both dealing with the same theme of connecting a building to its surroundings. Even if the methods and surroundings themselves are very different, there is a similar emphasis on integrating the architecture to the urban environment in both buildings.

This comparison between less literal, and perhaps abstract, similarities was interesting, and enabled us to do creative studies and guide our attention to things we wouldn't otherwise have concentrated on.

References:

Langdon, David 2019. AD Classics: Aarhus City Hall / Arne Jacobsen and Erik Møller. Archdaily, 16.1.2019. Retrieved from https://www.archdaily.com/540719/ad-classics-aarhus-city-hall-arne-jacobsen-and-erik-moller.

Tham & Videgård Arkitekter 2015. School of Architecture at the Royal Institute of Technology. Archdaily, 9.12.2015. Retrieved from https://www.archdaily.com/778460/school-of-architecture-at-the-royal-institute-of-technology-tham-and-videgard-arkitekter.

Image references:

Image 1: Weyer, J. (2013) Retrieved from https://www.flickr.com/photos/47333265@N00/8698690769

Images 2,10,12,14: Lindman, Å. Retrieved from https://www.archdaily.com/778460/school-of-architecture-at-the-royal-institute-of-technology-tham-and-videgard-arkitekter

Image 3: Nurgaliyev, A. (2017) Retrieved from https://www.flickr.com/photos/anurgaliyev/49429693812/in/photolist-2iiW6Sd-qdw5UH-RPPXs8-DPdKyH-Td72uX-211vpBu-2i9ZphW-EoSLs5-rqTf3k-nKq7MS-2jKZ6SU-hjtB2g-fQcvoF-NFGXfu-2kMXtwA-v9Z7xK-PkqSYq-pavHM9-Kehs8d-BLkztN-W4xmzM-2kkXaLg-FCy1VW-GbJbcm-jNuCtj-RVqVcN-22GG3zb-d8vY4L-293mYkF-pWXBL6-mWLhR6-oPNTCj-eN-qLE4-gjbBJb-mFR2VL-KekRPJ-2iPcRN4-ed43kb-mWLczr-nwqe5m-vBu7ZS-ecXoGr-zhipN5-B8pERv-CyfwUu-FDYYGd-2kyzrM5-eNqWYg-BkYKsV-RebBhj

Image 4: Hagerlund, T. Retrieved from https://www.hagerlund.net/fi/tremanskarrin-suo-ja-luontopolku

Images 5,6,7,8,13: Google Maps. Retrieved from https://www.google.com/maps

Images 9,11: Flickr user Seier, Flickr user iznogut, Flickr user Vallø, Flickr user nnova, Flickr user lalo_pangue, Flickr user lafalott. Retrieved from https://www.archdaily.com/540719/ad-classics-aarhus-city-hall-arne-jacobsen-and-erik-moller

Image 1: Photo from the 1950s, Helsinki University Porthania Building by Troberg, E / MFA.

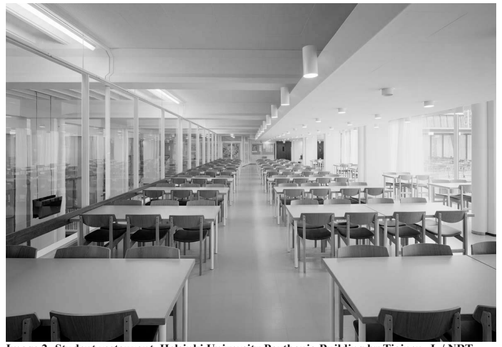


Image 2: Student restaurant, Helsinki University Porthania Building by Tiainen, J. / NRT Architects

HELSINKI UNIVERSITY PORTHANIA BUILDING

Porthania building is part of the Helsinki University campus and it is located in the center of Helsinki, quite near Esplanadi. The building was completed in 1957 and designed by Aarne Ervi who got the comission by winning an architecture competition held in 1949.

Building represents innovation and it is a forerunner of that time, because it was the first building to have prefabricated elements and prestressed concrete beams in Finland. These innovations allowed the building to become flexible in future and to have open vertical spaces, which makes the building unique for its time. Some characteristic inside of Porthania are also big lecture halls, long views, beautiful staircases.

From the outside it represents modern architecture of the 1950s quite well, with long ribbon windows and white simple façade and pavilions attached to main building.

Porthania went through restoration in 2006. The restoration was done by the NRT architects.

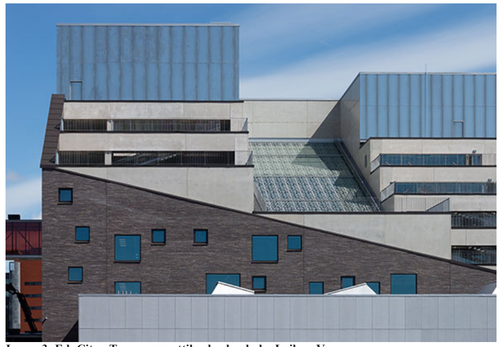


Image 3: EduCity - Turun ammattikorkeakoulu by Loikas, V.

Image 4: EduCityn suuri ja valoisa aula by Loikas, V.

EDUCITY

EduCity building, completed in 2020 and designed by Sigge Architects is the newest building in the Kupittaa campus. It is based on a competition holded in 2012 where the initial idea was to create four terraced buildings, and EduCity would have been the first one. Since then, the plan has changed a bit.

The architecture has playfulness and the geometry is interesting, with the terrassing mass and light glass bridges, that connects the building to the existing ICT-city building.

From the inside, we can tell there are wide range of spaces that allow social living, learning and working. The building was designed and built both for the polytechnic community and for the use of companies and different communities. The open and flexible spaces create and environment that inspire everyone to work and create together.

Image 5: Original backround image by King, G. Altered by authors.

CONTEXT & HISTORY ANALYSIS

Since the task was to place the building in a place out of context and history, we tried to find a place for both our research buildings where they could fit and they would be out of their context at the same time. We found out that the different characteristics of Porthania building took us to a completely different approaches regarding its placement.

The classic lines, postmodern architectural elements and simple white facades of the Porthania building in Helsinki allows it to be transported to a place as classic as a small fishing village in Norway, in this case Hamnøy. The places that haven't filled yet with contemporary style buildings and still keep a homogeneous and linear architecture can in most cases host the Porthania building.

Because its timeless architecture and minimalist style it can fit to a mountain village as well as in the city centre of Berlin. The chosen site in Norway contrasts completely with Porthania's original site in Helsinki but still adapts to it. At the same time the building is gaining much more importance in regards to its context due to the fact that a university placed at Hamnøy would be one of the main building of the site with its size.

There are many differences between Hamnøy and Helsinki which support that Porthania building would be placed there out of its context. These differences are the size of the surrounding environment and buildings there, the mountain skyline of Hamnøy and the well-defined urban plan of Helsinki. In Helsinki the amount of different uses on surrounding buildings is wider and it has its own unique history. In Helsinki, the capital of Finland, people are used to buildings like Porthania but in Hamnøy the building would stand out with its size and functionality giving it an special role in the small fishing village.

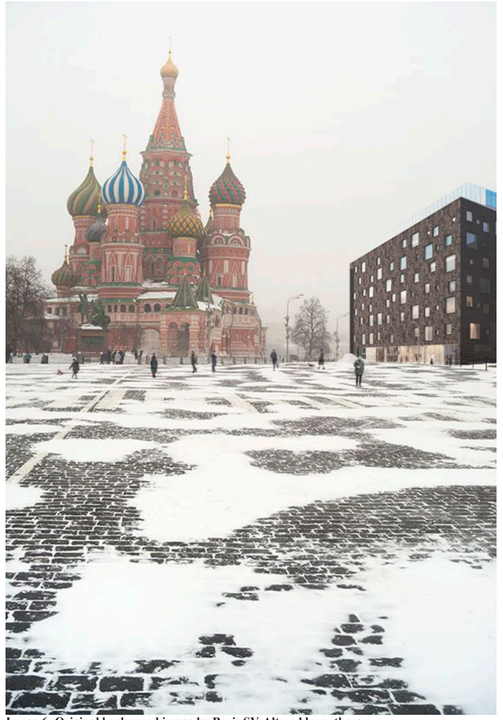


Image 6: Original backround image by Boris SV. Altered by authors.

CONTEXT & HISTORY ANALYSIS

EduCity building in Turku with its contemporary, modern and minimalist style allows it to fit in different places where the mix of styles can host this contemporary style. Since Turku is an old city and former capital of Finland, makes it a host for a lot of different building styles that have been developed throughout the decades. The mix of different architectural styles in the city make the contemporary style of EduCity fit perfectly to the city. In Kupittaa, where Educity is located in Turku, on the immediate surroundings of the building are a lot of contemporary buildings with residential and educational use. This helps the buildings connect well to their surroundings and to their context.

After analyzing the city structure of Kupittaa and Educity surroundings, we discovered that all cities that include this mixed styles and have a good development of contemporary architecture would make a good host for the building, such as cities like Moscow and Paris. Due to the fact that in Turku the building is surrounded by contemporary buildings and busy roads, it was decided that the new site would change that to see how the building works on a different context regarding its immediate surroundings, in this case in Moscow. In Turku, the building is placed nearby an old church Turun Tuomiokirkko (built in 1276). As a similarity, we decided to place EduCity in Moscow, nearby the Saint Basils Cathedral (built in 1565). The architectural style in Kupittaa is minimalistic and all used colours are very neutral. Most of the buildings on the area has been built in the last decades to have an equal architectural style which makes Educity fits to the surrounding buildings well with its brown tile facades. In Red Square Moscow Educity is taken out of its context standing next to very old, colourful and decorative building with a big open square in front of it. In Moscow the building is surrounded by a clash of different architectural pieces from different moments of history. This makes the Educity stand out of the surroundings and make it an unique piece of contemporary style building.

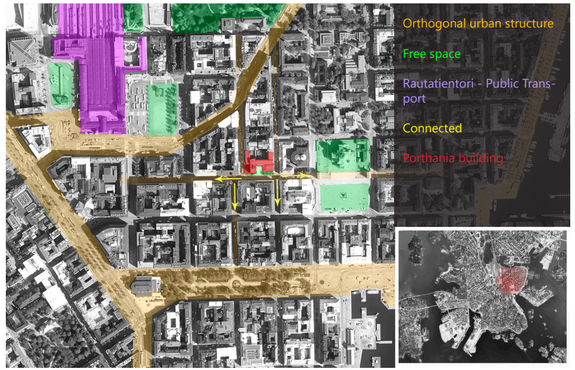


Image 7: Original from National Land Survey of Finland. Altered by authors.

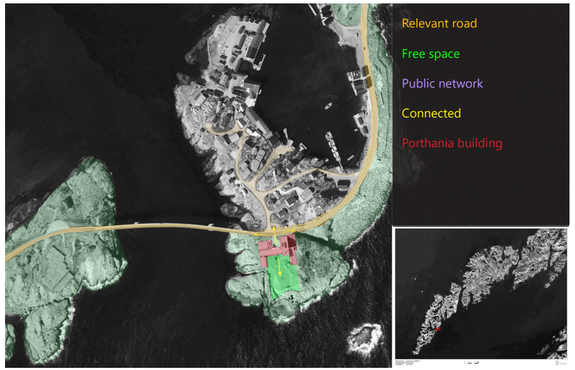


Image 8: Original from Google Maps. Altered by authors.

LANDSCAPE & CITY ANALYSIS

The Porthania building is located in the middle of an orthogonal urban city structure in Helsinki, close between main roads Pohjoisesplanadi and Aleksanterinkatu. There are some isolated parks between the buildings, but the density of Helsinki city structure doesn't allow them to be really big or form a continuinity between the parks. Porthania building itself creates its own free space and little greenery to highlight the institutionality and the main entrance to the building. The site is located really close to the national public mobility network and the Helsinki Rautatientori railway station. As Porthania is placed in the middle of Helsinki, it is well connected to other educational and administrative buildings. Porthania building is well integrated in the city structure but it doesn't highlight for his architecture in its current place by fitting to the surrounding buildings with its size, form and functionality.

In the picture up the Porthania building is placed in a more natural site with only smaller buildings and coastal landscape next to it. The proportion between natural and build space is rugged as the natural space represents the major part of all the surroundings. The new site is almost disconnected to the public network, only the motorway connects the site. The building is placed in the end of an important street of Hamnøy. In this site, the building presides the village as it is the biggest building in the place with a special functionality. This means that the relevant road near the building will have a much bigger use by becoming even more used main road to the town. The natural space around the building will gain much more importance, by turning into a main plaza with a lot of people using it. In conclusion, the building would completely change the town and its hierarchy.

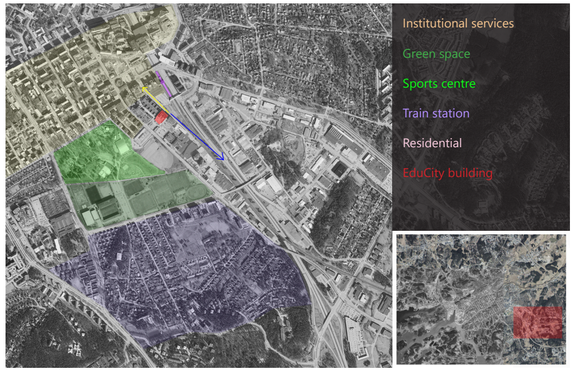


Image 9: Original from National Land Survey of Finland. Altered by authors.

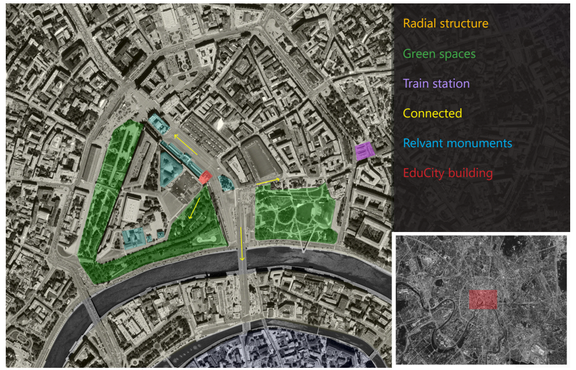
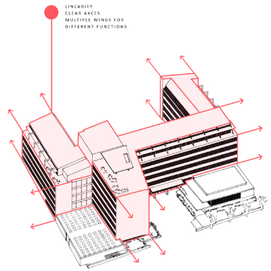


Image 10: Original from Google Maps. Altered by authors.

LANDSCAPE & CITY ANALYSIS

The Educity building located in Kupittaa area in Turku has a direct connection to a main road named Helsingin Valtatie. Helsingin Valtatie in front of it and smaller roads lead to both the residential parts of the area and institutional buildings. A big public and green space is really close to the building, as well as an educational sports center. There is not that much of density amongst the buildings and they are quite equal with their size and location. Kupittaa train station nearby the Educity building and bus stops connects the building with the public national mobility network. The Educity building is having a lot of connections and modern disrupted style places itself as a relevant building in Turku.

In the upper picture the Educity building is located in the center of the radial city structure of Moscow. In Moscow the building has a straight connection to almost every important place in Moscow. The building is surrounded by a lot of public plazas and green spaces. It is located in the center of the city and it has the bus and train station mobility network nearby. Being in the center of the most touristic places of Moscow brings a duality into the importance of the building: on one hand, the building loses importance in regards to its context as it is surrounded by relevant monuments and on the other hand, the building gains a monumental importance for the fact that it is located on one of the most historical sites in the whole world. The building doesn't change the city structure or the circulations of the city in its new place, but it is a good addition that gives more than it takes.



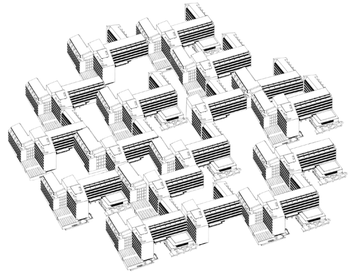


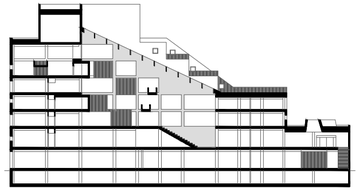
Image 11 & 12: Axonometric drawing, Helsinki University Porthania Building by MFA. Altered by authors.

TYPOLOGY & ORGANISATION ANALYSIS

The special architectural symbol in Porthania building is the combination of modern architecture, structures and building technology and how they all work together. In the light entrance hall and corridors of the building can be seen the anatomy of Porthania, which are visible concrete pillars and beams. Building has long spans while supporting structures are being minimized to create open floor plan, where only pillar rows, elevator shaft and stairs are essential (not movable). The special feature of Porthania is a dividing wall structure that was designed to be flexible. Big lecture halls, dining spaces and gym hall are all being aggregated around the entrance hall in the lower floors of the building. Other teaching spaces and offices are in the upper floors. White and simple facades, long horizontal windows, and airy feeling from outside to inside spaces are the most well-known features of Porthania.

When we wanted to exaggerate this building, it was clear that the different axes of the Porthania building with its own wings and uses had to be highlighted. Porthania building has clear and strong directions in its building mass and facades. Long wing parts of the building and horizontal window rows could be scaled into a bigger form to create interesting views, functionalities and yards between the building structure. Different wings for multiple uses could be added as long as the axes are respected. This way the horizontal lines ofthe Porthania building that predominat are maintained and carried forward.

Porthania is not completely visible in the shown axonometric drawings, since we wanted to highlight the L-shapes of the building and because the reference picture was not completely showing the whole building.



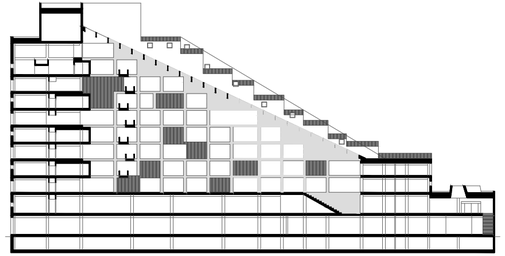


Image 13 & 14: Section by Sigge Architects. Altered by authors.

TYPOLOGY & ORGANISATION ANALYSIS

The space and concept of the Educity building reviews state that it is a digitally and socially accessible building, which promotes well-being. It is transparent and open at the same time, project-based, multidisciplinary, permeated by art, sustains the future and it focuses on developing and experimenting. The main target is that the building would be service-oriented and flexible at the same time. The building features many facilities for group work, which enables the encounters of both staff and students and a new kind of learning according to the spirit of INNOPEDA, which is a pedagogy system based on a collaborative network-based learning that supports innovations.

The architect of the project, Pekka Mäki, states the following: “The spaces can be divided and modified very freely and, thanks to careful planning, the designs of the partitions and the interior elements provide flexibility to the spaces to implement different teaching spaces according to the needs of the students.” In the section we have exaggerated the two of the most important aspects of the building. The first one, the open space created in the middle where spontaneous encounters take place is bigger and bring opportunity to different uses. The second one is the terraced building mass shape that permits the connection to the existing ICT-City building. For these reasons when exaggerating the section it was clear these two aspects had to be enlarged, creating a even bigger open and common space and highlighting the terrace shape in all its directions. The Educity building has a special feature in its design and architecture since it still keeps its main characteristics even though it would be exaggerated in horizontal and vertical way.

HELSINKI UNIVERSITY PORTHANIA BUILDING & EDUCITY
THEME 3: TYPOLOGY & ORGANISATION
SINI ANTILA, JOSE CÁNOVAS, PERE FORNER, PABLO NAVAS, SARA VOUTILAINEN
CONTEMPORARY NORDIC ARCHITECTURE 2021

Image 15 & 16: Photo from the 1950s, Helsinki University Porthania Building by Roos / MFA. Altered by authors.

SPACE & MATERIALITY ANALYSIS

The original white facade of Porthania building (top left) works well with its original surroundings in Helsinki because it is being subtle without calling attention from the surrounding city structure and building. When changing the materiality of the facade, it was decided that the new materiality should fit both into the original and the new site. Dark pine wood was chosen as the new material for known as a modern and sustainable choice. In its original placement in Helsinki, when changing the materiality (bottom on the left side), the buildings characteristics change completely. Before, the white facade followed the surroundings and made the building fit well to its surroundings. With the pine wood the building brings much more attention into it and stands out as being a big mass with wooden parts. Having a big wood university at center of Helsinki is not normal, so the change favors originality and standing out amongst its context. In Hamnøy in Norway (on the right side) the pine wood is original building facade material on the site. Therefore the new materiality of Porthania building blends into the surroundings and fits better to this more natural environment and making it now stand out because of its form and not because of the material or color. In its context, the building would maintain its importance due to its use and its size, but it would adapt much better to its surroundings.

Image 17 : Original backround image by King, G. Altered by authors.

Image 18 & 19 : Visualization by Sigge Architects. Altered by authors.

SPACE & MATERIALITY ANALYSIS

When changing the materiality for Educity's facade, we have to taken into account the form, functionality and the current materiality of the building.The building has a clear contemporary style with neutal colored brick tiles that makes it fit perfectly in both Turku and Moscow because of the clash in style of both places. For this reason, the new facade has to change in a way in which the building still fits into these two really different contexts. The texture and color of the original brown brick facades has been changed into a white polished metal. In Turku, the new texture (bottom left) makes it fit in with buildings next to it. Like this, it looses importance in regards to its color favor of the volumetry and forms, that gain all the importance. The fact that there are a lot of white polished buildings on the surroundings makes it fit perfectly. On Moscow (picture on the right) the white color helps the building adequate to its surroundings. The building has less importance surrounded by so many monuments with ornamental and colourful styles makes it good for the building to take a much more subtle texture and color and make it fitting better with the buildings surrounding it. In this way it gives space to other buildings, like San Basili, to stand out more. Not only does this new white color fit better with the other buildings, but with the city's characteristics in the time of the year when snow falls on top of the buildings and Red Square.

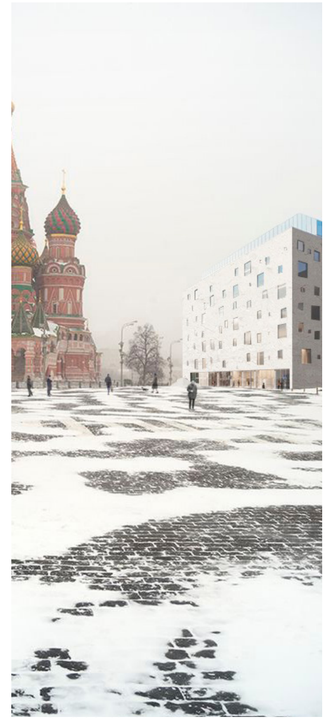


Image 20 : Original backround image by Boris SV. Altered by authors.

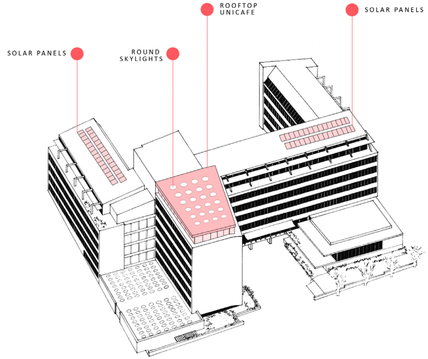


Image 21: Axonometric drawing, Helsinki University Porthania Building by MFA. Altered by authors.

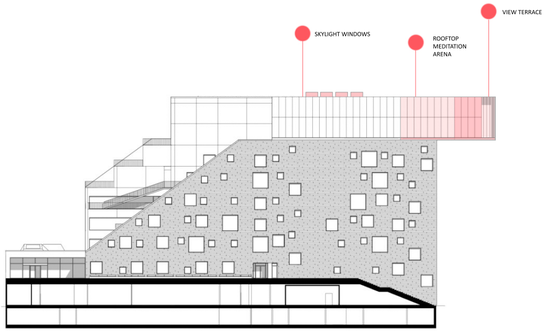


Image 22: Section and facade by Sigge Architects. Altered by authors.

SMALL ADDITION PORTHANIA

The Porthania building represents a very classical example of modern Nordic architecture from the late 50's, with clear axes that the different wings of the building follow and pavilions connected to the main building. With the addition, we wanted to keep it subtle and functional as well as fitting it to the building. With todays modern architecture, it is quite typical to expand buildings upwards, and so we have taken the form of the canopy structure located on the roof, and expanded the shape to become an additional floor on top of the building. This addition could function as a rooftop café for the students for example. To connect the addition to Porthanias style, we've added round skylights on top, since the shape is used in the auditoriums inside the building for example. Skylights bring more natural light to the addition and give it a more interesting and modern touch.

In addition to the rooftop unicafe, we wanted to enforce the sustainable aspects of the building. Nowadays, in educational buildings and public buildings in general, it's quite usual to place solar panels on the rooftop. This way the building corresponds better to the demands of sustainability which are so crucial in todays world, and obviously offer a better way to produce energy for the building and its users. The panels are more technical than aesthetic, but since they are placed on quite high rooftop, they don't affect the general look of the building or the street view.

These additions respect the building, its aspect and its function and its users. In addition, they enhance the building creating spaces that were not thought about when the building was constructed.

SMALL ADDITION EDUCITY

After analyzing all characteristics Educity has to offer, we decided that an small addition to the building should help the building in its functionality whilst maintaining the essence and keeping all the characteristics that make the building unique. In this sense, it was clear that little things had to be added to the outside appearance, as the building stands out quite good in its context. The section shape could be enhanced since it is a key for the correct operation of the building. The open spaces for spontaneous meetings and informal encounters had to be maintained as well.

Educity is being an educational building with multiple services and we thought it would need something different besides these services. Educational and business places are normally known as busy and noisy places that people are visiting during the week. We created an extra wing for special relaxation to the rooftop level. Meditation and yoga hall combines wellbeing and silent rooms for only one people per time. At the end of the meditation wing is a rooftop terrace that people in Educity could enjoy the fresh air and views during their visit. To bring the sunny Turku weather inside the building, we have added new skylight windows to the rooftop floor.

This additions help the building in regards to the services that it presents, maintaining the characteristics and spaces that make Educity unique and adding some new components that could help the users of the university.

References:

Helsinki University Porthania Building. (n.d.). Finnish Architecture Navigator. Retrieved in April 2021, from https://finnisharchitecture.fi/helsinki-university-porthania-building/

Porthania. (modified 2021, January 31). Wikipedia. Retrieved in April 2021, from https://fi.wikipedia.org/wiki/Porthania

EduCity - the learning environment for a new era. (n.d.). VisitTurku.Fi. Retrieved April 2021, from https://www.visitturku.fi/en/educity-learning-environment-new-era-925406

Mäkiranta, H. (n.d.). EduCity - Turun ammattikorkeakoulu. Prointerior. Retrieved April 2021, from https://www.prointerior.fi/natiivi/2519/educity-turun-ammattikorkeakoulu

EduCity. (2021, January). Ark. https://www.ark.fi/fi/2021/01/educity/

Image references:

Image 1: Troberg, E. / MFA, Photo from the 1950s, Helsinki University Porthania Building [photograph]. Retrieved from https://finnisharchitecture.fi/helsinki-university-porthania-building/#&gid=1&pid=1

Image 2: Tiainen, J. / NRT Architects, Student restaurant, Helsinki University Porthania Building [photograph]. Retrieved from https://finnisharchitecture.fi/helsinki-university-porthania-building/#&gid=1&pid=6

Image 3: Loikas, V. (2020). EduCity - Turun ammattikorkeakoulu [photograph]. Retrieved from https://www.prointerior.fi/natiivi/2519/educity-turun-ammattikorkeakoulu

Image 4: Loikas, V. (2020). EduCityn suuri ja valoisa aula [photograph]. Retrieved from https://aamuset.fi/artikkeli/5047123/Teknologiakiinteistojen+ja+Turun+ammattikorkeakoulun+suurhanke+EduCity+valmis+rakennuksen+valiseinat+paaosin+lasia

Image 5: King, G. (Shortstache™). A photograph from Hamnøy, Norway [photograph]. Retrieved from https://ar.pinterest.com/pin/381820874646998609/

Roos / MFA. Photo from the 1950s, Helsinki University Porthania Building [photograph]. Retrieved from https://finnisharchitecture.fi/helsinki-university-porthania-building/#&gid=1&pid=2

Image 6: Boris, SV (2013). Saint Basil's Cathedral in snow [Photograph]. Retrieved from https://www.flickr.com/photos/borisv/8585891776/

Sigge Arhitects. Visualization of EduCity. Retrieved from https://www.teknologiakiinteistot.fi/fi/science-park/kampus

Image 7: National Land Survey of Finland open data file service [Map of Helsinki city center]. Retrieved in April 2021 from https://asiointi.maanmittauslaitos.fi/karttapaikka/?lang=en

Image 8: Google. (n.d.). [Google Maps map of Hamnoy]. Retrieved in April 2021 from https://www.google.com/maps/@67.9461748,13.1341594,638m/data=!3m1!1e3

Image 9: National Land Survey of Finland open data file service [Map of Turku, Kupittaa]. Retrieved in April 2021 from https://asiointi.maanmittauslaitos.fi/karttapaikka/?lang=en

Image 10: Google. (n.d.). [Google Maps map of Moscow city center]. Retrieved in April 2021 from https://www.google.com/maps/@67.9461748,13.1341594,638m/data=!3m1!1e3

Image 11 & 12: MFA. Axonometric drawing, Helsinki University Porthania Building [drawing]. Retrieved from https://finnisharchitecture.fi/helsinki-university-porthania-building/#&gid=1&pid=11

Image 13 & 14: Sigge Architects. Leikkaus - section [drawing]. Retrieved from https://www.ark.fi/fi/2021/01/educity/

Image 15 & 16: Roos / MFA. Photo from the 1950s, Helsinki University Porthania Building [photograph]. Retrieved from https://finnisharchitecture.fi/helsinki-university-porthania-building/#&gid=1&pid=2

Image 17: King, G. (Shortstache™). A photograph from Hamnøy, Norway [photograph]. Retrieved from https://ar.pinterest.com/pin/381820874646998609/

Image 18 & 19: Sigge Arhitects. Visualization of EduCity. Retrieved from https://www.teknologiakiinteistot.fi/fi/science-park/kampus

Image 20: Boris, SV (2013). Saint Basil's Cathedral in snow [Photograph]. Retrieved from https://www.flickr.com/photos/borisv/8585891776/

Image 21: MFA. Axonometric drawing, Helsinki University Porthania Building [drawing]. Retrieved from https://finnisharchitecture.fi/helsinki-university-porthania-building/#&gid=1&pid=11

Image 22: Sigge Architects. Leikkaus ja julkisivu - section and facade [drawing]. Retrieved from https://www.ark.fi/fi/2021/01/educity/

On this course our group took a closer look of two buildings: House of Culture by Alvar Aalto in Hesinki and Tingbjerg Library & Culture House by COBE in Copenhagen. The buildings have been built decades apart from each other, House of Culture in 1958 and Tingbjerg Library in 2018. Despite their age difference, our group quickly came to the notion that there are surprisingly many similarities to them.

Both buildings share a political agenda behind them. The House of Culture was built mostly by different leftist organisations in Finland. Back in the day there were musicians who avoided the place for a long time because of its political background. Some people in Helsinki still remember the place by this old reputation. (Kulttuuritalo)

Tingbjerg Library & Culture House was built to revive the declined neighbourhood of Tingbjerg. There has been a lot of crime in the recent years and the area has a developed a hard, generally introverted atmosphere. As a solution to the problem this new library tries to bring people together and invites everyone to join in social activities. (COBE)

Both buildings have a recognizable geometrical form paired with one significant material in the facades. House of Culture is known for its roundness and unusual non-orthogonal brick in the facades in the auditorium side of the building. Tingbjerg Library has been treated with wood lamellas that are a dominating feature in all its facades. This kind of use of materials bring out the best of the buildings and highlight the form in a very nice manner. Both buildings are an example of this way of treating the facades that is still as popular today as it was some decades ago.

Last thing that the buildings share together is the importance of acoustics. House of Culture is known for its concert hall that has very good sound climate. In the first test concerts after the construction the acoustics of this auditorium space were stated as one of the best in Helsinki. House of Culture got very good reviews on its acoustic climate from international musicians also. (Kulttuuritalo) Acoustics have been important in Tingbjerg Library as well. Special care has been targeted to the auditorium facing to the street side. (Dezeen. 2018) Throughout the building the optimal acoustics have been reached with cladded plywood and wood lamellas that affect the sound climate in the space. (COBE)

Image 1. . House of Culture. Image by Wotjek Gurak/Flickr/archdaily.com.

Image 2. Tingbjerg Library & Culture House. Image by Rasmus Hjortshøj/COAST/archdaily.com.

HOUSE OF CULTURE

Architect: Alvar Aalto
Location: Helsinki, Finland
Building finished: 1958

House of Culture is a well known concert & conference hall in Helsinki, Finland. House of Culture is situated in the area of Alppiharju along cogested street, Sturenkatu. The construction of the building started in 1955 and was completed in 1958 (Kulttuuritalo).

The building of the House of Culture was delayed by two years due to a difficult economic situation. The building was a great project by the Communist Party of Finland and several leftist organizations, and the building was mostly financed by the party too (up to 480 million marks). It was mostly built with voluntary work with a strong spirit of the labor movement. Over 5000 voluntary workers took part in the project. (Kulttuuritalo)

Legend says that Aalto drew his first sketch of the building on a cover of a Klubi-cigarette pack. First official sketches were done in 1953. (Kulttuuritalo)

TINGBJERG LIBRARY

Architect: COBE
Location: Tingbjerg, Copenhagen
Building finished: 2018

The idea for Tingbjerg Library & Culture House was developed in a competition in 2013. The construction finished in 2018. The project was commissioned by the city of Copenhagen. (COBE)

The building is ambitious attempt to restore the crime-ridden area with a bad reputation to evoke a new sense of pride of the place of Tingbjerg. The building serves a purpose of bringing residents together across different cultural backgrounds. (COBE)

Tingbjerg Library has been built as an extension to an old school in the area. The building is located just where the old school entrance used to be. The open glass façade represents openness to display the opportunities provided by the library for the citizens. The possibilities that the new Library brings to the area are clearly visible to the surrounding neighbouhood. (COBE)

HOUSE OF CULTURE

The House of Culture is one of Alvar Aalto's most notable works in Finland. The building is known for its curved form and brick façade. House of Culture was built mostly by voluntary work and was owned by leftist organisations for a long time. After construction it became a popular place for the people of Helsinki to spend time in. (Kulttuuritalo)

The building is an example of Aalto's "brick era". At the time Aalto used a lot of brick in his works before shifting to ceramic tile & marble. This was the first time that Aalto used brick in a non-orthogonal form. (AD Classics) The building also has a copper roof and office building facades made of same material.

The building has a history with political aspects. Several leftist organisations had their offices in the House of Culture. One of the reasons to place it in Elielinaukio plaza in this task deals with politics as well. Todays political environment in Helsinki has been quite turbulent and there has been a lot of discussion about the current development in Helsinki. Many culturally important places will possibly be are under construction in the future. Elielinaukio is one of the most controversial places at the moment. (Helsingin Sanomat. 2021)

One of the biggest questions in Elielinaukio has been the amount of construction. In the visioned plans there would be as much as 40 000 m2 of built floor area. There has been discussion that the plaza is being sold to the investors too easily, which has been widely seen as a wrong way to develop Helsinki. The key argument has been that the city doesn't need massive construction projetcs rather than parks and public plazas for the citizens. (Helsingin Sanomat. 2021)

House of Culture represents an example of smaller construction in the plaza. Placing House of Culture to Elielinaukio isn't a perfect solution to the current developing problem, but it represents the scale of something different. It seems to fit in the plaza quite well. The brick façade finds color scheme counterparts around the plaza. The copper façade of the office side also has its own counterparts, because there are other public buildings with copper in their facades as well. For the same reason the copper roof also sits to the area. Playful round form adapts well to Elielinaukio, because there are buildings that have interesting forms as well, like Makkaratalo.

Image 3. House of Culture located in Elielinaukio, Helsinki. Original images by Miikka Ruohonen/Lentokuva Vallas Oy/ sttinfo.fi and screenshots from Youtube-video by TSS Drone. Transformed by authors.

TINGBJERG LIBRARY

Tingbjerg Library is a landmark for Tingbjerg area. The geometrical form is significant as it is in Aalto's House of Culture. There is a sort of political agenda behind both of the buildings, even though the agenda is more societal in Tingbjerg Library & Culture House. With its aim to build a better community, there is a targeted group that the building is made for: the people of Tingbjerg.

Tingbjerg suburb has suffered with high crime rates in the recent years. Tingbjerg has also been selected on the "ghetto list" that the Danish Government publishes every year. (Deutsche Welle) There has been gun violence and harassment of the neighbours (Tingbjerg) and the area also suffers from low education and high rates of unemployment (NREP).

There are many plans of urban developing on the way for Tingbjerg. The idea is also to develop the infrastructure and other buildings in the area. (NREP) Nowadays it is common to take the community as a strong base for the design of public buildings. Societal aspects have been an important value in in the design process of the Tingbjerg Library & Culture House. The building aims to enhance the quality of life and build a stronger community in Tingbjerg area (Tingbjerg Library & Culture House).

In this task we have chosen to place Tingbjerg Library in Market Square, Helsinki. The contrast between old and new is essential in this composition. In the square, public buildings are made of stone materials while the Library is made of wood. Wood in the facade is used in thin plywood lamellas, which seems to be a popular way to treat wood in the facades these days. There has been a lot of discussion about the use of wood in all building sector because of its low carbon footprint. There is a demand for more environmentally friendly construction. However the use of wood isn't so common in all fields of construction (e.g. housing) yet. The use of wood seems to be coming more popular in public buildings, just like Tingbjerg Library.

When we were looking for a new location to Tingbjerg Library we noticed that many culture houses are often placed close to water. We wanted to try that with the Library as well. The wood facade reflects to the surface of the water, which brings new dimensions to the buildings architecture.

There has also been discussion in Helsinki about the development of its coastline. One of the places that has evoken political discussion is Eteläsatama, which is located quite close to Market Square. (Helsingin Sanomat, 2021) One way of developing coastlines of cities is to build wood buildings near the coast, just like the new Stora Enso Headquarters in Katajanokka. Stora Enso Headquarters could find a counterpart from another wood building in the area. In this task we have used Tingbjerg Library as an example of this kind of development.

Image 4. . Tigbjerg Library located in Market Square in 1948, Helsinki. Original images by Rasmus Hjortshøj/COAST/archdaily.com and Nokelainen/YLE/wikipedia.com. Transformed by authors.

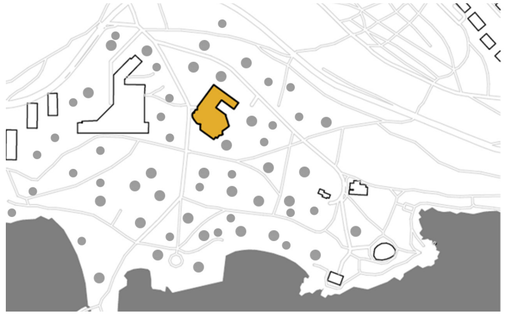


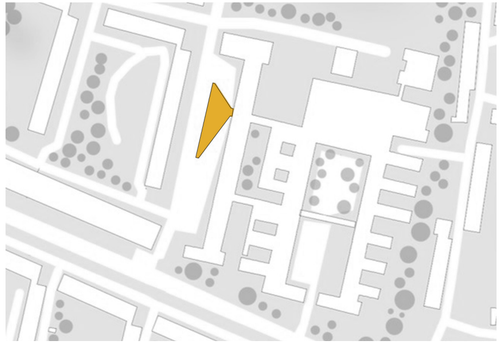
Image 5. Tigbjerg Library located in Market Square in 1948, Helsinki. Original images by Rasmus Hjortshøj/COAST/archdaily.com and Nokelainen/YLE/wikipedia.com. Transformed by authors.

LANDSCAPE & CITY

Kulttuuritalo is located in Alppila, Helsinki in a part of a dense cityscape The surrounding program of Aalto's culture house consists school, museum, residential, green and recreational programs and Linnanmäki amusement park. Height of the surrounding building vary from 4 to 6 stories. Behind Kulttuuritalo there is the hill of Linnanmäki and on the other side runs busy Sturenkatu street and the main façade is facing the street.

The House of Culture was built for the Finnish Communist Party, during their rapid rise in the 1950s. The year of completion of the building in 1958 also marked their electoral success.

As Richard Roger says: Architecture is always political and has a duty to society.(Roger. 2013. Dezeen.) Placing the building in to the Pyynikki forest-area, would bring a more of leftist land mark next to the Rosendahl Hotel. On the other hand, placement of Kuultiratalo into a highly appreciated forest areas of Pyyniiki would evoke controversy in itself. While imitating the volumetric precedence of Rosendhal hotel in a very similar way, Kuultiratalo may respond to this green open landscape in a more adapting way with its red brick façade, yard and entrance hall like almost a well-defined gathering point into the woods.



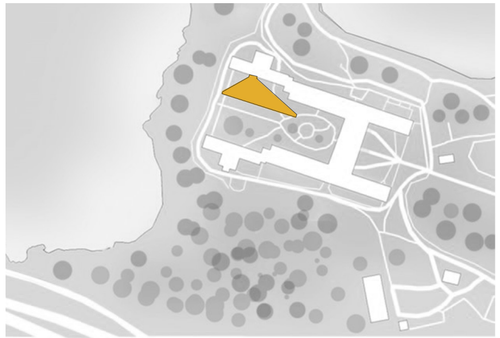


Image 6. Site plan of Lapinlahti Psychiatric Hospital HELSINKI, altered by authors.

Tinjberg library is located a bit outside of the main city of Copenhagen and built as an extension part to the existing school building. Neighborhood is a bit isolated by the natural forms of the river and the main roads. The surrounding building are from 3 to 4 stories high and mostly residential.

The Library is in close interaction with the street and is kind of extruding outside to the public. In a material sense, yellow brick baguette claddings and wooden plywood lamellas of Tingbjerg library matches with surrounding buildings of Tinjberg neighborhood where yellow brick facades form its character since 50s created by two respectful figures in Danish modernism; Steen Eiler Rasmussen and Carl Theodor Sørensen.

Architecture office also aims a mission of their intervention by serving its program as an urban catalyst and an architectural framework for social and cultural activities, thereby contributing to a positive improvement of the local community in Tinjberg. One of the reasons of this architectural attempt caused by high crime rates in recent years. This positive affect of Tinjberg library and culture house could bring new social activities to the Lapinlahti area. Lapinlahti is a green area close to Helsinki city center. There aren't many buildings, except an old hospital building located close to the coast line. There has been little use for the building in recent years and there has been a lot of conversation about building's future use.

We believe that placement of Tinjberg library as an attachment with its wedge shape section to the linear form of Lapinlahti Hospital and disrupt its well defined courtyard looking to the sea may also create a various programs and attraction for the visitors.

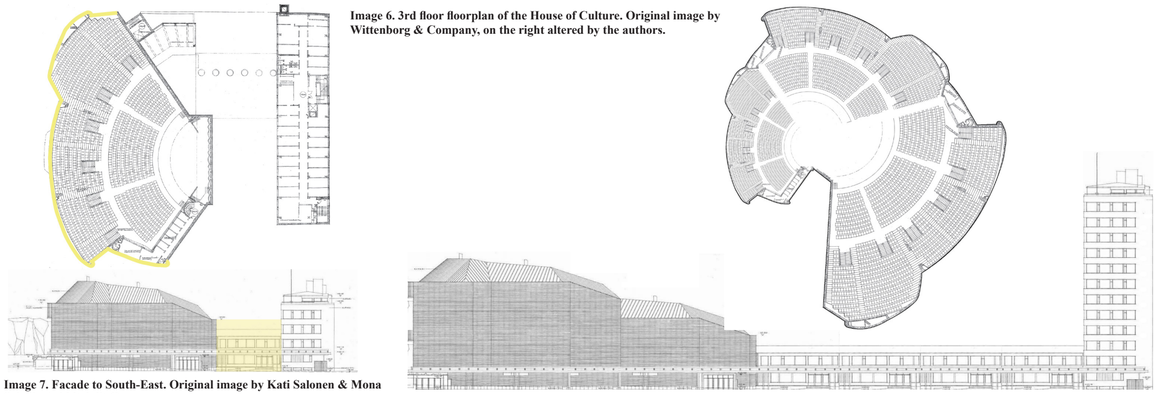


Image 6. 3rd floor floorplan of the House of Culture. Original image by Wittenborg & Company, on the right altered by the authors.

Image 7. Facade to South-East. Original image by Kati Salonen & Mona Schalin Arkkitehdit Oy.

HOUSE OF CULTURE, HELSINKI 1958

There are many different typologies to be found in most of Aalto's work, in House of Culture the most evident might be the plaza formed by the building complex. Aalto has designed a plaza to many of his buildings, for example in Säynätsalo Townhall. Aalto approached the design task as three separate projects that resulted in the tripartite mass (Alvar Aalto Foundation, n.d.). This approach made the three masses (auditorium, connecting hallway and the office block) separate enough to form a small-scale town of sorts. The space for gathering and socializing was continued from the plaza to the inside lobby too (Fiederer. 2016), and the hallways leading up to the auditorium served this purpose as well.

In House of Culture there are forms repeatedly used by Aalto and thus creating his "own typology". The fan shape is something that Aalto has used in many of his works, in House of Culture the shape was even formed in to the brick, which was specifically produced for the building (Alvar Aalto Foundation, n.d.). Another reference was the office wing of the complex, that continues the "story" of other copper façade office buildings in Helsinki and thus extends its meaning beyond a purpose of only contrasting the brick mass of the auditorium (Malmberg. n.d.).

It is clear that Aalto has studied the typologies lasting over two thousand years, and used them in his designs. The building's political background could be read in the monumental form of the auditorium wing, showing strength and dominance to the other two wings of the building. The canopy enclosing the plaza and leading to the entrance resembles the typology of an arcade, and is an overstated element in the design, another typological reference dating back to ancient Greece.

Overstating the distinctive typologies in the design by repetition and changing the scale gives the design more contemporary appearance. But, by changing the scale you lose the intimacy and the humanity of spaces. Both the fan shaped auditorium, and the plaza outside are pleasing in sense of space due to the their human scale.

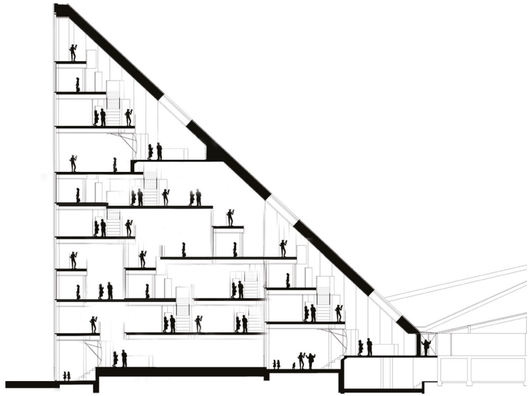


Image 8. Section of the Tingbjerg Library. Original image by COBE architects, on the right altered by the authors.

TINGBJERG LIBRARY, COPENHAGEN

As well as with House of Culture, the Tingbjerg Library has a political beginning, that can also be seen in its spatial organization. The design's attempt to fight the crime-ridden troubled area that has generally closed facades has been tackled with openness throughout the plans. The large glass-façade opens up to the neighborhood to display the lives of the residents and meet across the cultural barriers. The attempt to bring the people together is also in the shifting floorplates, niches and balconies, creating an impression of a small mountain village. (COBE. Tingbjerg. A Setting for Social Interaction.)

The open façade draws its inspiration from a typology of a typical Danish household item found in many Danish living rooms – the typesetter drawer (COBE). The design reinterprets many typologies of the area, with its slated roofs and yellow brick "baguettes" of the façade (Langer, C., n.d.). The yellow brick "baguette" of the façade creates a contemporary typological play when it changes to wooden slats when going inside of the building, something you expect the façade to be made out of too. Even though very contemporary, the wooden slat façade is something appearing internationally thus creating a distinct type of façade typology.

Looking more closely the form of the design also creates a connection with the typologies of the school's larger masses, with a funnel shape together morphed with a slated roof. By the new form, it's social openness and its very public nature, the building rises as a new landmark for the area. This strong identity of the building was as well seen in the House of Culture.

Overstating the distinctive triangular funnel shape of the building strengthens its public nature, and effectiveness as a landmark. The aspect of bringing people together, at least in meaning, is weakened as the scale and distances grow. Also the building wouldn't sit as well to its context. But, enlargening the spaces,it does resemble more of "super complex" filled with different functions, with a more international identity, not a "tingbergian".

Image 9. Photography of the entry facade of Kulttuuritalo, by Fiederer L. & altered version

SPACE & MATERIALITY ANALYSIS KULTTUURITALO

Kulttuuritalo is composed of three different areas; the auditorium, the canopy and the administrative part. As seen one the previous themes, this composition is due to the ideological and political approach of the first utility of this project.

The main volume, the auditorium, is an organic shape made of specials bricks. These bricks are not rectangular ones, but one side is rectangular and the opposite one is an arc. This special shape is the reason of this possibility to have a circular brick facade. The other distinctive point of this volume is the absence of window on these facades. That create a global massive aspect but also a shell to block any interaction between the inside and the outside. Of course, this made to create an atmosphere and prepare the spectators before a show, creating an in between area. The canopy creates an outdoor area for gathering and waiting. Still in accordance with the former political aspect, this canopy become a socialisation area.

The administration volume seems colder. With old copper panel, this area is less attractive but this approach still in accordance with the political history of this project. However, this part has a lot of openings, in total opposition of the auditorium volume.

On the collage, we decide to have a different approach of the entering process decided for this project.

We remove a part of the brick facade and replace it by some textured glass panels.
This new design engenders a new global aspect on the auditorium volume, that seems less heavy than before from this view. The choice of texture glass is a way to keep a bit of secret of what happen inside, a secret that already is a part of this area.

Structurally, there is an impact on the building. However, the inside structure could have a role on the global balance. The canopy in front of that have also a visual impact, with a hiding and showing alternance.

The idea behind this facade change is to create new stages. The first one is made by the silhouettes of the people inside. Even with a not really visible inside, the moving persons create a public show for people on the street. The second one is in the opposite way. The street become a stage for the persons who are waiting for the real show. With that solution, we bring back a kind of a public private interaction, between the building and the city, within the conservation of the original privacy wanted for this area.

Image 10. Photography of the back facade of the Tjingberg Library, by Francisca Gonzalez M. & altered version

SPACE & MATERIALITY ANALYSIS TINGBJERG LIBRARY

The Tingbjerg library and culture house has a particular identity, due to its shape and its materiality.

This wedge-shaped shell is composed of different levels that look like a village on a hill composition. This composition is visible on the main glass façade, one of the northern ones. The choice of this facade for this materiality is made to preserve the library integrity. In fact, direct light is the first enemy of a book. So, with the orientation of the facade and the inside composition (with more functions areas instead of bookshelves), this choice for a light entry is the more logical one. Two roof windows offer a support to this huge glass facade.

The rest of the facades are covered by yellow bricks baguettes. This materiality choice has been made in accordance with the context of this extension of the Tingberg school. With a respect and dialogue with the present and the past of the area, the library keeps a logical coherence with the district.

To sum up, the Tingbjerg library particularities of its shape and materialities are the things that create a coherence with the district and a strong identity, a landmark, too.

On the collage, we decide to challenge the complex facade approach, related to the weather and solar condition that could have a huge impact on some programs, as a library.

We duplicate the glass facade on the southern one, to try to bring light inside and a different atmosphere. However, as said previously, direct light could be a harmful problem for books. So, to protect the facade from this, we put some solar protections, made of the similar yellow bricks baguettes. With that, we offer a good light income without a direct light inconvenience. These solar protections are placed in accordance with the inside levels, to optimise the protection.

With this approach, the Tingbjerg library have a totally different aspect but still in the same ideas of the real one. We keep the coherence with the context, a respect of materialities, and a landmark aspect. To complete, this approach could also be seen as a complement of the counter of criminality of this district too. It creates more views and so, more implicit protection for every inhabitant.

Image 11. View on the addition to House of Culture. Original picture by Wittenborn & Company, altered by the authors.

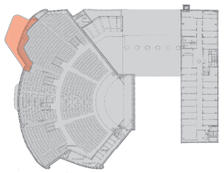


Image 12. 3rd floor floorplan of the House of Culture with addition. Original image by Wittenborg & Company, altered by the authors.

Image 13. View on small addition to Tingbjerg library. Original picture by Rasmus Hjortshøj, altered by the authors.

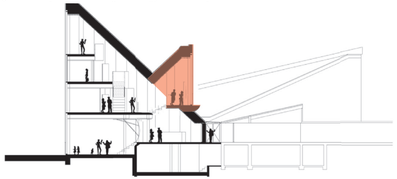


Image 14. Section of the Tingbjerg Library with the addition. Original image by COBE architects, altered by the authors.

THE HOUSE OF CULTURE, SMALL ADDITION

When we studied the Kulttuuritalo the two features caught our attention. On one hand the strong architectural language typical for Alvar Aalto and on the other the strong political history of Kulttuuritalo.

We focused particularly to the fan like asymmetrical form of the concert hall space and the undulating façade it created. The asymmetrical concert space was rare during the time the building was build and is a good example of Aalto's eagerness to try new innovations and ideas in practice.The political aspect of the building is connected to its original owner the Finnish communist party. The construction work was done largely by volunteers and it was a subject of public conversation at its time. Later when communist party went bankrupt they were forced to sell it and it's now owned by the Senate Properties. We examined the building partly against this left-wing political background and wanted to somehow detach the new addition.

We decided to merge these findings of this strong architectoral form and political contradiction. We placed the parasite-like addition to the top of the auditorium seats as an additional VIP-section. We aimed to the maximum contrast between the materials of the old and the new. This approach brought capitalistic idea of creating an economical hierarchy among the users to the building.

We created an capitalistic glass parasite extruding from the side of this Alvar Aalto's masterpiece an old rallying place of left-wing -finns who lost it due to the their own bad financial situation. This kind of extension would be sure to provoke some public debate and rising the question of the role of Kulttuuritalo in this modern day society.

TINGBJERG L. SMALL ADDITION

Additional space can be used for more private meetings or for functions that require more quiet environment. This more private space offers a contrast to the open concept. Keeping the existing building's own language while still preserving its own identity and stand out as a clear addition to original was essential.

The new part is placed on the other side of the building.Its own identity is still further emphasized with metal sheet façade material that sets it apart from the wooden facade system of the library section.

Like in Kultturitalos addition; we wanted the function to provoke some conversation about the role of the building. So we though how to contradict the idea of open for all equal public space. We ended up in private rentable space for private meetings and events. This created a striving question on how the public and private space can interact ?

References:

AD Classics. House of Culture. Alvar Aalto. Archdaily. https://www.archdaily.com/783388/ad-classics-house-of-culture-alvar-aalto Retrieved 07.05.2021

COBE. Tingbjerg. A Setting for Social Interaction. https://www.cobe.dk/place/tingbjerg-library Retrieved: 07.05.2021

Deutsche Welle. Denmark; Young women fight the governments ghetto list. https://www.dw.com/en/denmark-young-women-fight-the-governments-ghetto-list/a-51833223 Retrieved: 24.4.2021

Dezeen. 2018. COBE's wedge-shaped library references its modernist surroundings. https://www.dezeen.com/2018/11/12/cobes-wedge-shaped-library-modernist-surroundings-copenhagen/ Retrieved: 07.05.2021

Helsingin Sanomat. 2021. Arkkitehtien mukaan Helsinki on tuhoamassa useita paraatipaikkojaan samaan aikaan - Poikkeuksellisen kuumana käyvän keskustelun osapuolet astuivat väittelyyn. https://www.hs.fi/kaupunki/art-2000007871457.html Retrieved: 07.05.2021

Kulttuuritalo. Kultsan historia. https://www.kulttuuritalo.fi/tietoa-talosta/talon-historia/ Retrieved: 18.3.2021

NREP. Tingbjerg. New life to a low-income area. https://nrep.com/project/tingbjerg/ Retrieved: 24.4.2021

Tingbjerg Library & Culture House. Archdaily. https://www.archdaily.com/905530/tingbjerg-library-and-culture-house-cobe Retrieved: 07.05.2021

Tingbjerg. Wikipedia. https://en.wikipedia.org/wiki/Tingbjerg Retrieved: 24.4.2021

Alvar Aalto Foundation. (n.d.). House of Culture. Retrieved from: https://www.alvaraalto.fi/en/architecture/house-of-culture/. Accessed 21 Apr 2021.

COBE. (n.d.). Tingbjerg Library. Retrieved from: https://www.cobe.dk/place/tingbjerg-library. Accessed 22 Apr 2021.

Fiederer, L. (2016, March 14). AD Classics: House of Culture / Alvar Aalto. Retrieved from: https://www.archdaily.com/783388/ad-classics-house-of-culture-alvar-aalto. Accessed 21 Apr 2021.

Langer, C. (n.d.). Tingbjerg Library and Culture House. Retrieved from: https://dac.dk/en/knowledgebase/architecture/tingbjerg-library-and-culture-house/. Accessed: 22 Apr 2021

Malmberg, J. (n.d.) Kulttuuritalo – Alvar Aalto. Retrieced from: https://docomomo.fi/kohteet/kulttuuritalo/. Accessed 21 Apr 2021.

Fiederer, Luke 2016. AD Classics: House of Culture / Alvar Aalto. Retrieved 24.3.2021 from https://www.archdaily.com/783388/ad-classics-house-of-culture-alvar-aalto

Stephen, October 2014. Site No. 55: The House of Culture in Helsinki (1952-58). Retrieved 8.4.2021 from http://alvaraaltosarchitecture.blogspot.com/2014/10/the-house-of-culture.html

Greatbuildings.com, 2013, House of Culture. Retrieved 8.4.2021 from http://www.greatbuildings.com/buildings/House_of_Culture.html

Francisca Gonzalez, Maria 2018. Tingbjerg Library and Culture House / Cobe. Retrieved 24.3.2021 from https://www.archdaily.com/905530/tingbjerg-library-and-culture-house-cobe

Schmidt, Juliane, 2019. Instrument of change: Library and culture house in Tingbjerg. Retrieved 8.4.2021 from https://www.detail-online.com/article/instrument-of-change-library-in-tingbjerg-33647/

Van Es, Karl, November 2018. COBE Completes Tingbjerg Library and Culture House in Copenhagen. Retrieved 8.4.2021 from https://www.avontuura.com/tingbjerg-library-and-culture-house-by-cobe/

Image references:

Image 1. AD Classics. House of Culture. Alvar Aalto. Archdaily. https://www.archdaily.com/783388/ad-classics-house-of-culture-alvar-aalto/56de-34f5e58ece683d000083-ad-classics-house-of-culture-alvar-aalto-image Retrieved: 24.4.2021

Image 2. Tingbjerg Library & Culture House. Archdaily. https://www.archdaily.com/905530/tingbjerg-library-and-culture-house-cobe Retrieved: 24.4.2021

Image 3. STT Info. 2020. https://www.sttinfo.fi/tiedote/elielinaukion-ja-asema-aukion-arkkitehtuurikilpailu-kaynnistyy-mukana-viisi-kansainvalista-suunnitteluryhmaa?publisherId=60577852&releaseId=69894538 Retrieved: 17.03.2021. Transformed by authors

TSS Drone. Alvar Aalto - Helsingin Kulttuuritalo/Helsinki Hall of Culture. 31.12.2018. Screenshots from video. https://www.youtube.com/watch?v=jaKSuzo3bRk Retrieved: 18.03.2021. Transformed by authors

Image 4. Tingbjerg Library & Culture House. Archdaily. https://www.archdaily.com/905530/tingbjerg-library-and-culture-house-cobe/5be47acd08a5e549e3000048d-tingbjerg-library-and-culture-house-cobe-photo Retrieved: 18.03.2021. Transformed by authors

Market Square, Helsinki. Wikipedia. https://en.wikipedia.org/wiki/Market_Square,_Helsinki Retrieved: 17.3.2021. Transformed by authors

Image 6: Wittenborn & Company. 3rd floor floorplan. Retrieved from: https://www.archdaily.com/783388/ad-classics-house-of-culture-alvar-aalto/56de3512e58ece683d000084-ad-classics-house-of-culture-alvar-aalto-image

Image 7: Kati Salonen & Mona Schalin Arkkitehdit Oy: Facade to South-East. Retrieved from: https://www.seinaatti.fi/app/uploads/2019/04/2008_Schalin_Hki_Kulttuuritalo_RHS.pdf

Image 8. COBE – architects. Section. Retrieved from: https://www.archdaily.com/905530/tingbjerg-library-and-culture-house-cobe/5be47c5108a5e549e3000497-tingbjerg-library-and-culture-house-cobe-section

Image 9. AD Classics: House of Culture / Alvar Aalto, retrieved 14.4.2021 from https://www.archdaily.com/783388/ad-classics-house-of-culture-alvar-aalto & altered version

Image 10. Tingbjerg Library and Culture House / Cobe, retrieved 14.4.2021 from https://www.archdaily.com/905530/tingbjerg-library-and-culture-house-cobe/5be47acd08a5e549e300048d-tingbjerg-library-and-culture-house-cobe-photo & altered version

Image 11. Fiederer, Luke 2016. AD Classics: House of Culture / Alvar Aalto. ArchDaily, 23.4.2021. Retrieved from https://www.archdaily.com/783388/ad-classics-house-of-culture-alvar-aalto

Image 12. Salonen, K. 2008. Kulttuuritalo rakennushistorian selvitys. Helsinki, Finland. Kati Salonen ja Mona Schalin Arkkitehdit Oy.

Image 13&14. Gonzalez, Maria Francisca 2018. Tingbjerg Library and Culture House / Cobe. ArchDaily, 23.4.2021. Retrieved from https://www.archdaily.com/905530/tingbjerg-library-and-culture-house-cobe

HOUSE OF CULTURE, HELSINKI & TINGBJERG LIBRARY, COPENHAGEN
CONCLUSION
ALPER AL, ANNI MARTTINEN, HEIKKI MOILANEN, JEFFREY NIVELLE, JUHO KUOVI
CONTEMPORARY NORDIC ARCHITECTURE 2021

Image 1: Nordic Pavilion by Åke E: son Lindman

Image 2. Reindeer Pavilion by Rasmus Hjortshøj

Nordic Pavilion for the Venice Biennale (1958 - 1962) by Sverre Fehn has become an iconic building, a quintessence of what we nowadays call Nordic architecture. Even after 59 years it draws attention of the visitors and remains a landmark of architectural thought.

It was designed to represent Sweden, Finland, and Norway. is a project that deals with Nordic identity. In his work, Fehn "makes an analogy between building and storytelling and between materials and language" (Neveu, 2008, p.1).

Four years before, the architect had designed the Norwegian Pavilion for the 1958 Brussels World Exhibition that was subsequently demolished but already used the same language (Archeyes, 2016). The Venice Nordic Pavilion can still be visited today in the Giardini.

To analyse the peculiarities of Nordic architecture in depth we have chosen the Wild Reindeer Centre Pavilion (2011) by Snohetta as the second case study for our paper. These projects undoubtedly have particular similarities in terms of design approach.

The Norwegian Wild Reindeer Centre Pavilion is located at Hjerkinn, overlooking the mountain Snøhetta. The building is open to the public and serves as an observation pavilion for the Wild Reindeer Foundation educational programmes. A 1.5 km hiking trail leads visitors to this spectacular site overlooking the Dovrefjell mountains (Snohetta, 2011).

The Pavilion has been awarded multiple architectural prizes and wildly recognized by the architectural community (ArchDaily, 2011).

NORDIC PAVILION & WILD REINDEER CENTRE PAVILION
INTRODUCTION
HANNAH SHEVCHENKO, MARGARITA VODNEVA
CONTEMPORARY NORDIC ARCHITECTURE 2021

Image 3. Original image : unknown author

Image 4. Original image : Piazza San Marco by Sergey Gruzdev

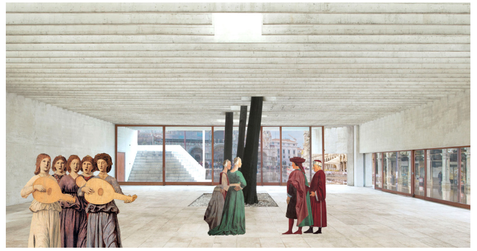


Image 5. Original image : Nordic Pavilion by Åke E: son Lindman

In the framework of "History and context" research we were aiming at learning, what are the relationships between the past and the future in architecture. Fantasizing about establishing a link, sort of a bridge, connecting two historical periods, we transfer Nordic Pavilion from its original calm, green and, in a sense, Scandinavian ambience to the heart of Venice, in the centre of Piazza San Marco.

Creating such a contrast we gain a unique chance to observe the dialog, in which two époques start speaking to each other. The objects, that may seem to be antagonistic and even hostile to each other, nevertheless begin to interact on the level of the city landscape. At this point, such distinguish features as scale, proportions, architectural décor, spatial aspects and many other peculiarities of each architectural object can be noticed.

Being an alien, that came from a different period and being a perfect specimen of architectural traditions of modernism, Nordic Pavilion fits seamlessly in urban reality of Renaissance. The language it speaks resonates in historic buildings and allows them to sound together as an amazing multi-voiced ensemble of urban architecture.

The revision of the interiors reveals the spatial aspects of the project. By means of changing the environment we transform minimalistic modernists interior into a time portal, a contemporary camera obscura, through which the world of Renaissance can be witnessed.

Disregarding the contrast in architectural styles, the modern hall fits organically in the tissue of the renaissance city. There are corresponding elements, that bare the same architectural functions, but are implemented with different architectural interpretation. For instance, the role of elaborately decorated open galleries, going through the ground floor of the palaces around the piazza is played by the sliding glazed doors, placed along the three out of four sides of Nordic Pavilion. By that the same effect of the transparency of the building is reached. The massive eaves allow the visitors to walk in a desirable shade of them. However, in contrast to the galleries, there are not any visible bearing columns, so that the roof is soaring over the building.

It is fascinating to explore the interaction of plain concrete walls and detailed marble facades, decorated with bas-reliefs and mascarons. The walls of the pavilion would be more likely decorated with frescos and its floor with mosaics, if it belonged to the Renaissance. Yet they are clean and plain, which makes them a perfect frame to observe the renaissance urban landscape.

Image 6. Original image by Keti Jakobsen. Altered by authors.

Image 7. Original image by Keti Jakobsen. Altered by authors.

The design of the the Wild Reindeer Centre Pavilion was guided by the nature surrounding it. Form following the context (Snøhetta, 2011).

The hard shell protects the user while the curvy interior provides a welcoming and intimate atmosphere. The view of the user is focused on the landscape providing an opportunity for contemplation. Materials are chosen to withstand the harsh environment and have high durability (Divisare, 2012).

The building seems to blend gently with the surrounding nature. For purpose of testing pavilion´s versatility we chose to create an exact opposite context. The collage illustration presents the buildings new identity within a city environment. And not just any city but one of the most crowded capitals – New York. Here the pavilion is surrounded with multiple screens bursting with colors and text. The calm landscape is now replaced, and our building is clearly out of place. The interior however still provides a clear attraction point. The structure would clearly become the new place to take a picture with friends. It still provides a certain level of calmness due to the shape of the wood, however the previously intimate space is now exposed.

Looking from the perspective of the viewer. Previously whoever was inside would experience a breathtaking natural landscape. You are the sole observer at that moment and your thoughts can flow peacefully, gaze reaching the horizon.

The new context would make many feel uncomfortable. The user is now exposed, unprotected, it is almost like a confrontation between the user and the crowd outside. The atmosphere has shifted from calm to threatening. There is however a possibility. If nobody could see inside, the user once again would be the sole observer of the surroundings, then the new context would give a different kind of contemplation – people watching.

If we replace the glazing inside the pavilion with the screens, mimicking the ones outdoors, but broadcasting nature instead of advertisement, the pavilion becomes a shelter from the hustle and bustle of the big city, taking the visitors into the world of wilderness.

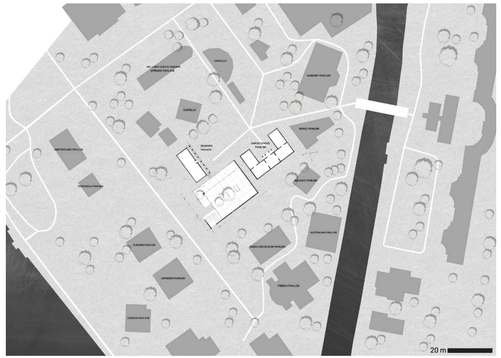


Image 8. Original image by Sverre Fehn. Altered by authors.

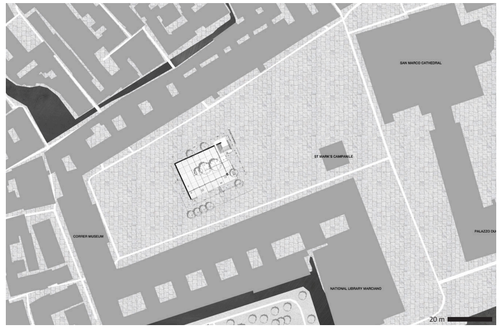


Image 9. Original image by Sverre Fehn. Altered by authors.

The Nordic Pavilion is more than an assemblage of parts. It is the "synthesis of the heterogeneous" (Paul Ricoeur) implemented through the spatial ideas and interaction between walls, ground, roof, landscape – all framed by its relationship to the topography of the site.

Fehn was given a site in the public gardens between the pavilions for the United States and Denmark on the secondary axis of Viale Trento (Archeyes, 2016). The gardens present an unusual sort of urbanism: each of the pavilions is for display only. All of the buildings remain unused for most of the year, the entire site is within a large park, and there are no full-time residents.

The pavilion burrows into the slope of the southeast corner. The opposite walls, on the north and west side, were intended to be open, allowing the circulation to continue through the building and exhibits. The grid, which might otherwise appear monotonous in its rigidity, is interrupted by a series of openings through which the trees erupt from the ground to punctuate vertically through the lamellas roof.

Seen in elevation, the rhythm of the roof matches the pattern of the triglyphs on the façade of the neighboring pavilion for the United States (Neveu, 2008). So that the building communicates with the surroundings using its own unique language. The project is well situated and it seems that it could not be placed anywhere else and work in the same way.

Nonetheless, the pavilion fits organically into a new context of a monumental Piazza San Marco.

Due to the minimalistic shape Nordic pavilion does not interrupt the outlines of the Renaissance piazza. Instead of that, it turns into a focal point. The centre of the square, which is normally occupied with a column or monument is now filled with the rectangular pavilion, that starts to serve as an urban sculpture.

The trees, that surround the pavilion in the original park are now replaced with the columns of the pedestrian galleries on the ground floor and instead of randomly erupting international pavilions, floating freely in the space of the garden, we can see a rigid perimeter, becoming a perfect frame for the modernist masterpiece.

Image 10. Original image by Sverre Fehn.

Image 11. Original image by Snøhetta. Altered by authors.

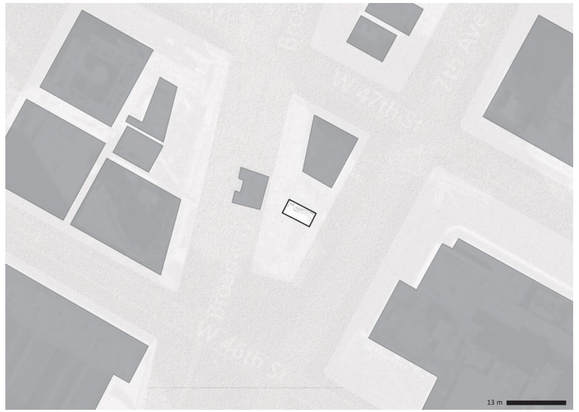


Image 12. Original image by Snøhetta. Altered by authors.

The landscape surrounding the Wild Reindeer Centre Pavilion is wild and unpredictable. The hard shell of the building is meant to protect the soft interior. We can notice faint paths leading up to the pavilion, marking hiking routes.

There is little regularity and order in the site plan, from above the structure presents itself as a monument of human existence in the wilderness of the mountain terrain. The context in this case does not limit or frame the building, it allows it to become what it wants to be.

The new context changes the perception of the building. It now gives us a more concrete sense of scale. Skyscrapers surrounding the plot make the pavilion seem smaller.

Masterplan structures provide guiding axis to where the pavilion is placed. In comparison with the original location, the building is now in a more familiar context than before, following the rigidity of manmade creations.

Surprisingly, the pavilion does not seem to be lost in the city scape as speaks the same language as surrounding structures. It rather changes its context, starting to act as a focal point.

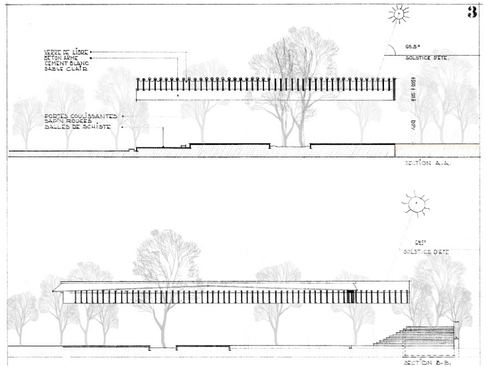


Image 13. Original image by Sverre Fehn. Altered by authors.

Image 14. Original image : Nordic Pavilion by Åke E: son Lindman

Nordic Pavilion is a plain rectangular hall of 400 sq.m, open entirely on two sides. The most remarkable element of its composition is undoubtedly a transparent, soaring roof, whose structure consisting of two overlapping layers of concrete beams, one on top of another, form a 2-meter high brise soleil.

The beams are suspended between the uppermost beams. These plastic units bring an oriental, specifically Venetian tone to the strict scandinavian articulation of the pavilion.

But what if we imagine that the building can overcome the force of gravity? We dare to eliminate the walls and two massive bearing beams so that remaining the trees inside unsupported space as the only vertical elements. As the matter of fact, the levitating roof is in a way a quintessence of the ideas that Fehn maintained in his design.

During his travels in Italy, Fehn was moved by the quality of light. In his memoirs he explained: “In the north you are moving in the fog, you are moving in a world which has no shadows, in a way where the shadows do not define anything. If you make a piece of architecture in the south of France or in Italy, the shadow is there immediately, you can make a little curve in the wall and you’ll see it at once. But the sign would be invisible in the North. It is another light in which you walk. And that also makes architecture more mysterious, more romantic, more undefined” (Norberg-Schulz and Postiglione, 1997, p.249).

It appears, that through his travels, he recognized the distinct nature of Nordic light. The Nordic Pavilion project then becomes a way of finding that Nordic quality of light in a different context.

Fehn explained that the goal of his project was to “construct a roof to protect the paintings and sculptures from direct sunlight, and to provide an atmosphere of the shadow-less world of Scandinavia, where the work of art had been created” (Neveu, 1999, p.21).

Fehn carefully carves out a shadowless light using local means and materials. Like a skillful interpreter he is re-telling a Nordic story in a foreign language.

In our collages we release the roof structure so that it could exist independently, not being restrained from its main function – to provide a shelter with a unique atmosphere and a specific quality of light for a comfortable unhurried observation within.

Image 15. Original image : Nordic Pavilion by Åke E: son Lindman. Altered by authors.

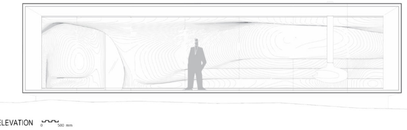


Image 16. Original image by Snøhetta.

Image 17. Original image by K.Jakobsen. Altered by authors.

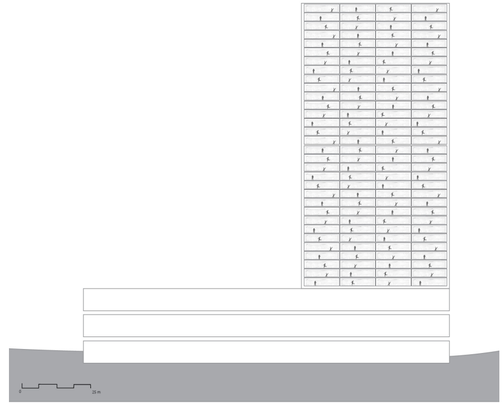


Image 18. Original image by Snøhetta. Altered by authors.

The Wild Reindeer Centre Pavilion has been designed in a way to provide a place for contemplation and observation (Divisare, 2012). It creates a momentary break between the wilderness of the exterior and calmness and safety of the interior. It creates a landmark by default, due to its singularity within the landscape.

The elevation provides the scale of the building, its north façade is about 13 meters long and the buildings can accommodate approximately 10 - 15 people at once. However, rather interesting experience can be achieved if the observer is there alone. The figure in the elevation is placed for scale, but it can also provide the desired atmosphere of the building.

Changing entirely the typology of the building and using its design as a unit. The building is multiplied in order to create a different but very familiar structure - multistorey residential block.The pavilion loses it sense of uniqueness; it is no longer one of a kind. It becomes one of multiple, the familiar features of the wavy interior are dissolved in the multitude.

The suggested alteration also changes the geometrical perception, going from horizontal to vertical. This rather extreme transformation gives some insight into how the perception of a certain design can be drastically changed if copied and multiplied.

It also reminds us about the issues related to a massive tourism intervention taking place over the world nowadays. Once out of control, it threatens to engulf the natural landscape, turning it into something completely different and hostile.

Image 19. Original image : Nordic Pavilion by Åke E: son Lindman . Altered by authors.

Image 20. Original image : Nordic Pavilion by Åke E: son Lindman. Altered by authors.

What has Fehn done to make the pavilion in Venice specifically Nordic?

It is known that Fehn won the competition to design the pavilion in Venice after completion of the Norwegian Pavilion in Brussels (Archeyes, 2016; ArchDaily, 2021). In many ways the project in Venice echoes some of the same issues raised by its Brussels counterpart. The architectural composition of both pavilions is defined by the articulated roof plane, both pavilions have as less perimeter walls as possible, both blur the distinctions between interior and exterior. However, the projects clearly differ from each other as being supposed to match the context and convey the different messages. That is why Fehn chose different materials for each of them. Whilst the Brussels pavilion is entirely wooden, his Venetian opponent is made of concrete. But why?

As we already noticed, the roof structure of the Nordic Pavilion in Venice with its elaborated intersections of beams brings the oriental motives and Venetian tones to the pavilion. The material Fehn used for it reveals his real skill in choosing of means of implementation of his artistic idea. To preserve the light's intensity, the entire building was cast in a mixture of white cement, white sand, and crushed white limestone of Venice (ArchDaily, 2021). Thus, the materials are not only native to the area, corresponding with the decoration of the palaces and light colours of the architectural details. They work along with the roof plate creating that unique nordic shadeless light. The light making the pavilion truly Nordic.

That brings us to the conclusion, that rather than simply mimicking the Norwegian Pavilion in Brussels or a vernacular wooden hut from Norway, Fehn has made an imaginative translation of Nordic architecture into a foreign context.

Since we have got to the point, where Fehn's desire to get rid of the vertical elements is clear, we may witness hot it results in creating a spacious and airy interior and giving that interior the certain qualities of lite. At this point, the choice of concrete as the main material for the building becomes quite obvious.

In the collages we tried to imagine what the pavilion would look like if Fehn could use contemporary CLT beams instead of the concrete elements. We can assume, that beam cross-sections would remain the same if we substituted concrete with CLT. Unlike natural wood, where the length of a beam is strictly limited by 6 meters, CLT would allow to leave the initial idea of not using supporting columns intact.

Image 21. Original image by K.Jakobsen. Altered by authors.

The essence of the Wild Reindeer Centre Pavilion is to create a place of observation and contemplation (Divisare, 2012). In this manipulation the view is removed entirely, and the glazing is replaced with a wooden surface. The experience becomes entirely internal, cut off from the outside landscape.

Interestingly, the observer from outside cannot see the interior either. The pavilion becomes a space for isolation rather than observation. It creates a certain mystery around its content. The solid mass becomes a sculptural tribute to seclusion and isolation.

Image 22Original image by K.Jakobsen. Altered by authors.

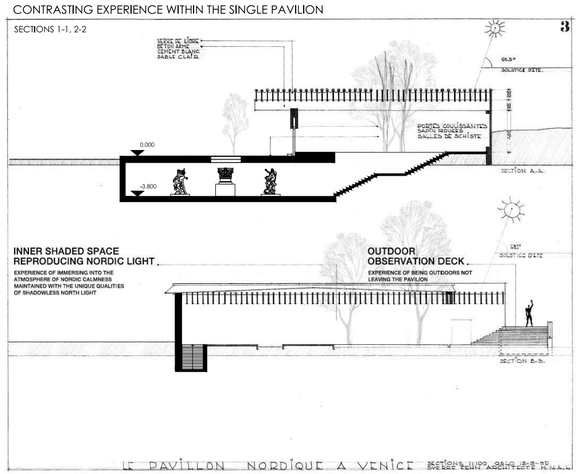


Image 23. Original image by Sverre Fehn. Altered by authors.

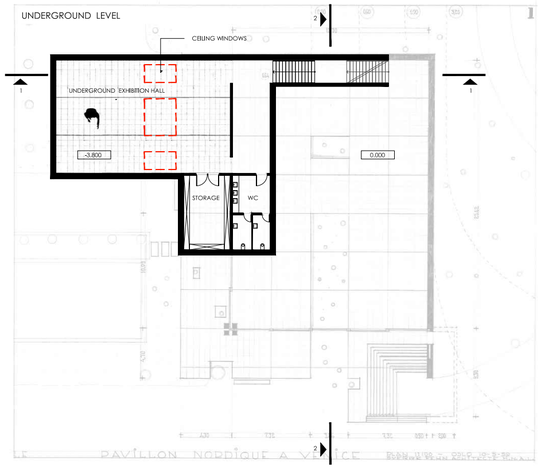


Image 24. Original image by Sverre Fehn. Altered by authors.

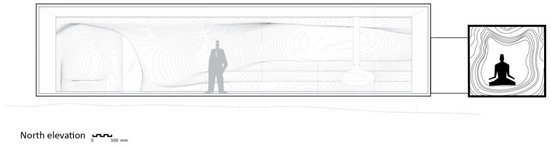
Nordic Pavilion by the means of its versatile spatial ideas creates a range of experiences for visitors. The fascinating journey starts outdoors, when spectators can witness the exquisite architectural composition from outside. They can either stay on the ground level of terraces or get up to the observation desk and interact with the building from outside.

The next step is an emersion into the world of Nordic light within the shaded hall of the pavilion. Spectators stay inside yet being connected with the surroundings through the wide openings.

In our opinion it would be quite logical to complement the building with one more possibility for producing scenarios. We suggest adding an underground level matching the grid of the pavilion.

This underground exhibition hall, lit only with the narrow ceiling windows is contrasting with the ideas of existing spaces – open outdoor deck and enclosed shaded interior.

Moreover, some underground space can be used for accommodating utilities, such as toilets and exhibits storage meeting the modern standard of public spaces.



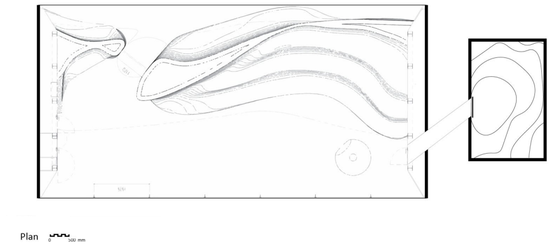


Image 25. Original image by Snøhetta. Altered by authors.

Image 26. Original image of Chapel of Silence by K2S Architects by Antonin Halas

The new extension echoes the interior of the Wild Reindeer Centre Pavilion but yet, it creates a rather different experience for the user. The scale suggests a solitude experience, the wavy interior provides a protective environment, however there are no openings. The contemplation therefore becomes completely internal. This is a space to reflect on the experiences from the outside nature. It provides no distractions for the mind and allows to submerge yourself in the memories of the landscape. The idea draws its inspiration from the Chapel of Silence in Helsinki with its wooden soft shell and lack of openings. It is meant to concentrate the experience of the Reindeer pavilion and provide an additional space for contemplation.

OVERALL CONCLUSION

The question this paper was driven by is: what makes Nordic architecture so distinctively unique? In order to find a clue, we compared two buildings that are similar in function, but different in purpose and character, being separated by more than half a century of architectural history.

Both pavilions define an interior space with a minimum of enclosed walls, both blur the distinction between interior and exterior, allowing one to flow freely into the other, and both rely on the site for clues to organize projects so that their spatial organization is in a close alignment with the environment. If we turn to the interior, we will find another undeniable similarity. The goal of both projects is certainly to create a comfortable environment for visitors. It is worth noticing that the projects use different approaches to achieve this goal. In the case of the Nordic Pavilion, Fern creates an exhibition space that allows on the one hand to protect the exhibits from the scorching sun, and on the other to immerse the viewer in the atmosphere of the northern shadowless light. In the Wild Reindeer Centre Pavilion project, the architects focus was on creating the contrasting comfort of the interior space and the wilderness behind the huge frameless windows. The minimalistic interior allows the audience to focus on their inner emotions by creating a protected and warm gathering place, while still preserving visitor's access to spectacular views.

These similarities in design approaches bring us to the point that Nordic architecture is not a set of certain elements or a particular style, but something much more complex. This is a unique system of architectural thinking, characterised by such aspects as: unity with nature - buildings are derived from the existing area, becoming an inseparable whole with the environment; spatiality - the architectural articulation of buildings is always subordinated to the general spatial idea, where elements of the architectural composition work like an orchestra, enhancing the visual and emotional perception of the audience; atmosphere - the focus is on the viewer and their feelings, architectural composition serving as a method for creating spatial patterns is never an end in itself.

Thus, we come to the conclusion that Nordic architecture can be defined by a certain attitude to space, materials and, most importantly, the highest degree of humanity.

REFERENCES

ArchDaily. (2021). AD Classics: Nordic Pavilion in Venice / Sverre Fehn, Retrieved 22.3.2021 from <https://www.archdaily.com/784536/ad-classics-nordic-pavilion-in-venice-sverre-fehn

ArchDaily. (2011). Tverrfjellhytta / Snøhetta. Retrieved 17.3.2021 from <https://www.archdaily.com/180932/tverrfjellhytta-snohetta?ad_medium=gallery>

Archeyes. (18.03.2016). The Nordic Pavilion in Venice (1962) and Brussels (1958) / Sverre Fehn. Retrieved 21.3.2021 from https://archeyes.com/norwegian-pavilion-in-brussels-world-exhibition-sverre-fehn/

Divisare. (2012). Snøhetta. Tverrfjellhytta. Norwegian Wild Reindeer Centre Pavilion. Retrieved 17.3.2021 from <https://divisare.com/projects/188484-snohetta-tverrfjellhytta-norwegian-wild-reindeer-centre-pavilion>

Neveu, M. J. (05.03.2008). On Stories: Architecture and Identity. Architecture Norway. Retrieved 13.3.2021 from https://www.architecturenorway.no/questions/identity/neveu-on-fehn/

Neveu, M. J. (01.1999). Sverre Fehn. Architecture+Urbanism, p. 21. Tokio, Japan: Shinkenchiku-sha Co., Ltd

Norberg-Schulz C., Postiglione G.(Ed.).(2017). Sverre Fehn: Works, Projects, Writings, (1949-1996). p.249. New York, NY: Monacelli Press

Snohetta. (2011). Tverrfjellhytta, Norwegian Wild Reindeer Pavilion. Retrieved 17.3.2021 from <https://snohetta.com/project/2-tverrfjellhytta-norwegian-wild-reindeer-pavilion

Image references:

Image 1,5,8,9,10,13,14,15,19,20,23,24: Archeyes. Retrieved 20.03.2021 from https://archeyes.com/norwegian-pavilion-in-brussels-world-exhibition-sverre-fehn/

Image 2: Behance. Retrieved 28.4.2021 from https://www.behance.net/gallery/51864287/T-V-E-R-R-F-J-E-L-L-H-Y-T-T-A

Image 3: PhotoSite. Retrieved 13.3.2021 from https://photosigh.ru/5205678/

Image 4: Google Maps. Retrieved 24.3.2021 from https://www.google.com

Image 6,7,16,17,21,22: Snøhetta. Retrieved 16.3.2021 from https://snohetta.com/project/2-tverrfjellhytta-norwegian-wild-reindeer-pavilion#:~:text=The%20Norwegian%20Wild%20Reindeer%20Centre,Wild%20Reindeer%20Foundation%20educational%20programmes.

Image 11,12,18,25: Archdaily. Retrieved 22.3.2021 from https://www.archdaily.com/180932/tverrfjellhytta-snohetta?ad_medium=gallery

Image 26: Kirkkojakaupunki. Retrieved 19.4.2021 from https://www.kirkkojakaupunki.fi/-/kampin-kappeli-aukeaa-kuunvaihteessa#df3065f2

NORDIC PAVILION & WILD REINDEER CENTRE PAVILION
CONCLUSION
HANNAH SHEVCHENKO, MARGARITA VODNEVA
CONTEMPORARY NORDIC ARCHITECTURE 2021

Image 1: Royal Sas Hotel and Arne Jacobsen

ROYAL SAS HOTEL

Built:1960
Architect: Arne Jacobsen
Location: Copenhagen city centre, Denmark
Function: Hotel and downtown air terminal
Rooms: 260
Hight: 69,6 meters

Royal SAS Hotel is a hotel and downtown air terminal located in the centre of Copenhagen. As 22 floors high, it was the first skyscraper in Copenhagen. The architecture of Royal SAS Hotel was highly impacted by the Lever House in New York designed by Gordon Bunshaft and Nathalie de Bloi. (Hordum, 2017)

Royal SAS Hotel is an example of the total work of art, which means that all the project parts are considered as whole. Jacobsen designed the building but also the interior, the furniture and even the cutlery. This trend was visible along with other Nordic Architects like Alvar Aalto. Unfortunately, the interior spaces have been discarded and altered. The interior has been preserved only in one of the hotel rooms, but some of the furniture Jacobsen designed have become national icons. (Reuben, 2017)

Jacobsen, who used to work as a landscaper, thought about the modern garden and the effect of nature in his design. This can be seen in the interior of the building that had green furniture and simple materials. (Hordum, 2017)

Image 1. Unknown. Retrieved 21.3.2021. https://www.scandinavian-design.com/a-special-tribute-to-arne-jacobsen-and-the-60th-anniversary-of-the-sas-royal-hotel/

VICTORIA TOWER

Built: 2011
Architect: Wingårdh Arkitektkontor
Location: Kista, northwest of central Stockholm, Sweden
Function: Hotel, restaurants, offices, conference spaces, sky bar
Gross floor area: 23 000 m2
Rooms: 299
Height: 114 meters

Victoria Tower is a hotel that consists of hotel rooms, a conference centre, restaurants, and offices. It is located in Stockholm in the Kista district. It stands along the road from the centre to the city airport and in the edge of the Kista IT office park. The 117-meter-high tower acts as a landmark and manifestation of the areas high-tech profile. Its 34 floors make it one of the highest buildings in Stockholm (Archdaily, 2012).

The tower has a unique parallelogram shape, that is topped with a slightly bigger cube. This parallelogram shape is also used in John Hancock Tower in Boston from 1976, designed by Henry Cobb, from where the architects found inspiration. The façade of the building is fully covered in glass panels (Archello).

Image 2. Åke E:son Lindman. Retrieved 21.3.2021. https://www.archdaily.com/227856/victoria-tower-wingardh-arkitektkontor-ab

Image 2. Victoria Tower

Image 3. Royal SAS Hotel enjoys a holiday in downtown Miami.

ROYAL SAS HOTEL

Royal SAS Hotel rises as a prime disciple of modernism. The local adjustment of the movement called functionalism do not efface the cosmopolitan look. The sleek tower depicts a universal solution. The elegant charm of the edifice does not depend on the very location it sits in. Modernism goes anywhere.

Miami is the somewhat unlikely home to Nordic design. Yet a tall glass-wrapped building portrays a wide-spread type. Naturally, some light articulation to the site is needed, but generally, the main idea remains the same. Post-and-beam construction combined with the floor slabs forms the skeleton over which the coat is free of choice. Playing in the home and away courts differ thinly. Royal SAS Hotel lands comfortably to the continuum of the American skyscraper tradition.

Certainly, Royal SAS Hotel is an iconic Copenhagen beacon. However, it is rather the time spent together between the city and the building that bonds the two than the original articulation as such. The building is designed to its surroundings by the conditions of the time, but the architectural language is conceived by speaking universally.

Image 3. Original image by Åke E:son Lindman. Transformed by the authors. Retrieved 21.3.2021. https://www.dezeen.com/2012/10/18/people-want-stockholm-to-be-a-low-city-josefin-larsson-on-victoria-tower/

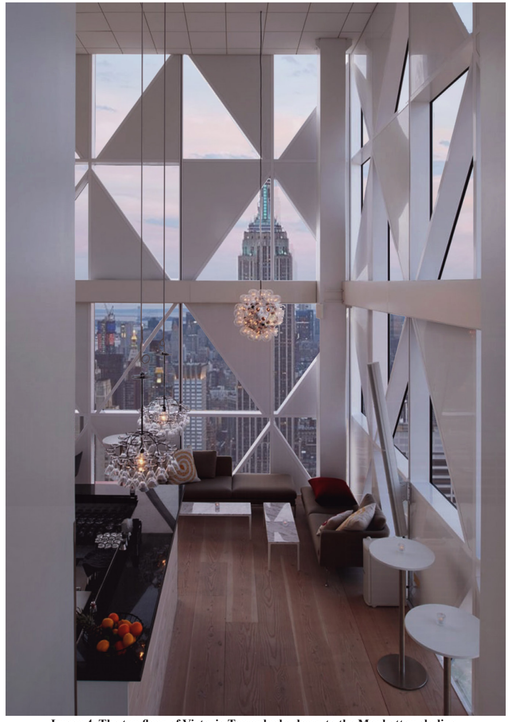


Image 4. The top floor of Victoria Tower looks down to the Manhattan skyline.

VICTORIA TOWER

Victoria is a newer take on Nordic hotel architecture. The basic mass is similar to SAS Royal hotel, but still, the look of the building is different. Both projects use glass as their main façade material but in different ways. Victoria Tower used a randomised pattern, which is quite different from the SAS façade. This randomization can be seen in many modern Nordic projects. What makes it, even more, a presentation of its time, is that computer-aided design was used to create the façade pattern. The thing that Jacobsen could only dream of. What also sets them is apart is their height. Victoria is a presentation of the even more high buildings that have started to emerge in Nordic countries as well.

Victoria Tower has caused some controversy among the people of Stockholm, as the citizens would like to keep the capital region as it has been, dominantly low- to mid-rise. The public outcry on tall buildings poses a question, how to build an appropriate tower? A tower that fulfils the demands of the stakeholders and serves the usages and fits the surroundings. Further, whether the tower is the desired solution.

In the relocation, Victoria Tower has steered clear from the ontological questions about its character and seeks refuge in New York City. Victoria Tower renders an idea of universality as a tower that wears the same dress suavely from Abu Dhabi to London, and from Paris to New Amsterdam. For a century Manhattan has been the epitomic playground for the high-rise and lays a natural place for migration. Victoria Tower is not place-bound. It composes rather an abstraction of a landmark figure than an in-situ articulated composition. This allows convenient resettling, for instance in its spiritual retreat NYC.

Whereas SAS Hotel has posed as a tour-de-force of Arne Jacobsen forming a total piece of work, Victoria Tower composes an assemble of its time, the early 21st century. The interior is an image of contemporary Scandinavian decor. The commensurate flat-pack solution is available for anyone anywhere across the globe. If the local IKEA branch does not serve on Sunday, Amazon will deliver the objects in the room worldwide in a flash.

Image 4. Original image author unknown. Transformed by the authors. Retrieved 21.3.2021. https://www.trip.com/hotels/copenhagen-hotel-detail-2197629/radisson-collection-royal-hotel-copenhagen/

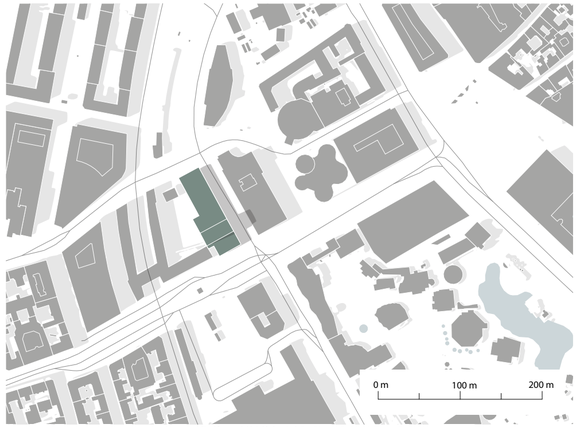


Image 5. Royal SAS hotel in its original location

Image 6. Royal SAS hotel in its new location in New York City

ROYAL SAS HOTEL

Royal SAS Hotel is situated in the centre of Copenhagen in a quite densely build area. Wide roads in between buildings make the distances between buildings large. Its height makes it a landmark of the area and all the surrounding buildings are noticeably smaller in height, even though their footprint in the area is alike Royal SAS Hotels. The multiple open areas, for example, the park in the east and the railroad in the north, allow the building to be visible from far.

SAS Royal Hotel continues its American excursion in New York City. The Royal Hotel takes over the plot of its original inspiration, the Lever House. The Midtown location sits a few blocks down from the southeast corner of Central Park and has a diagonal look to the Seagram Building.

Doubling the suave step back of Mies, the Royal Hotel leaves an empty yard on both ends of the lot. The tower rises facing Park Ave and the plinth stretches along East 54th Street.

Image 5. By authors

Image 6. By authors

Image 7. Victoria Tower in its original location

Image 8. Victoria Tower in its new location in New York

VICTORIA TOWER

Victoria Tower is located in North Stockholm in the Kista district, and Victoria acts as a landmark to the IT-office park (Archdaily, 2012). Victoria Towers is situated on the border of this large area. The footprint of the Victoria Tower is significantly smaller than other buildings in the area, so it must be higher to achieve its landmark status and it is the highest building in the area. The large highway, the parking lots next to it and the surrounding buildings lower masses make it even more visible and strengthen its role as a landmark of the area.

The new location in New York is close to major landmarks such as the World Trade Center and the 9/11 Memorial. These large and tall buildings around the Victoria Tower significantly reduce its monumental impact and what can be noticed is that the Victoria Tower has its status highly because of its height. In this plot, the building is in a more densely build area which also affects how far it is visible from and what the reflective façade reflects. In this plot, it probably reflects the surrounding buildings instead of the sky.

Image 7. Wingårdh Arkitektkontor. Site plan. Edited by authors. Retrieved 14.5.2021 https://www.archdaily.com/227856/victoria-tower-wingardh-arkitekt-kontor-ab

Image 8. By authors

Image 9. Royal SAS Hotel

Image 9. Edited typology of Royal SAS hotel. Edited by authors.

ROYAL SAS HOTEL

The massing of the SAS Royal Hotel consists of two parts. The broad platform of 4 floors and on top of it lay the rectangular-shaped 22 stories high tower. The hotel tower has a very distinctive, yet very simple shape that dominates the city's skyline.

During the planning phase, Jacobsen received a critique that the building façade resembles a punch card. The public was also worried the hotel would ruin the city's skyline because of the high difference to the existing city structure. The higher mass was justified because it would protect the hotel rooms from the noise of the streets. What if the monumentality and the dominant height of the building are removed and replaced with a much lower and square-shaped mass? Without the tower, the urban structure around the hotel seems empty. The transformation from high-rise to low and cubic mass has a negative effect on the function and the dignity of the hotel. The building resembles a normal and undistinguished office building.

Image 9. Unknown. Retrieved 21.3.2021. https://en.wikiarquitectura.com/building/radisson-sas-royal-hotel/ Victoria Tower

Image 10. Victoria Tower.

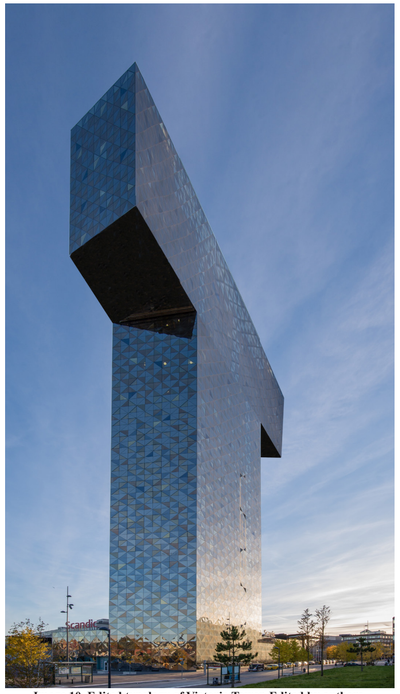


Image 10. Edited typology of Victoria Tower. Edited by authors.

VICTORIA TOWER

The massing of Victoria Tower is quite simple. Victoria tower stands on a quite low and wider pedestal, where the slender tower rises. This massing is simple and similarities in massing between our projects can be seen, even though the platform in Victoria Tower is distinctly smaller and its impact on the overall form is minor. The upper floors are in a parallelepiped form. The parallelepiped form of the tower is topped by a rectangular cubic so that the upper floors project out. (Archdaily, 2012)

This rectangular shape gives the building its unique shape and the heavier and bigger mass stands on the narrow tower. This is the part we wanted to emphasize, because it is the form that makes Victoria Tower unique, and it is the shape that the architects wanted to highlight. By highlighting this part, even more, Victoria Tower becomes more and more distinctive, and the rectangular part converts into an even more significant part of the building. The rectangular shape looks like it is defying gravity and the change of the shape in the tower is even more visible. However, this bigger mass overshadows the lower floors drastically, which has an impact on the indoor spaces. The new mass also slightly resembles the letter T. These points make the present small rectangle more justifiable.

Image 10. Arild Vågen, 2015. Retrieved from https://commons.wikimedia.org/wiki/File:Victoria_tower_October_2015_01.jpg edited by authors

ROYAL SAS HOTEL

Jacobsen uses green aluminium and green and green-grey tainted glass in the façade of the Royal SAS Hotel. These panels, as well in the Victoria Tower, reflect light and the look of the façade differs when the surrounding atmosphere changes. (Hordum, 2017)

The Royal SAS hotels façade pattern is more regular and the use of the golden rectangle can be seen in the placement of the windows. On the other hand, the quite regular façade is an example of the industrialisation of building construction that emerged in that time. (Danish Design Review)

In the earlier themes, we have located the SAS building in New York where it fits right in. This time, we were inspired by Elenberg Fraser's residential skyscraper in Melbourne (Light House).

By turning the systematic façade into a three-dimensional kaleidoscope and adding vibrant colours we wanted to bring the tower into life. The colourful angular facade panels are twisted around the building which creates intriguing movement to the façade, but the horizontal floor lines are still visible in the mass. The panels also reflect the Sun as the original SAS Hotel panels do, but this time the angularity makes the building more interesting, and the Sun rays are reflected differently.

As a result, the building still looks out of place and time. The original facade, grey and greenish panels were carefully chosen by Jacobsen to match the Nordic climate and Sunlight. The overall look and the colour palette of the surroundings of SAS Hotel are very down to earth and balanced and consequently, it is not essential to add bright colours to the façade.

Image 11. Unknown. Retrieved 14.5.2021. https://www.e-architect.com/copenhagen/sas-hotel-copenhagen

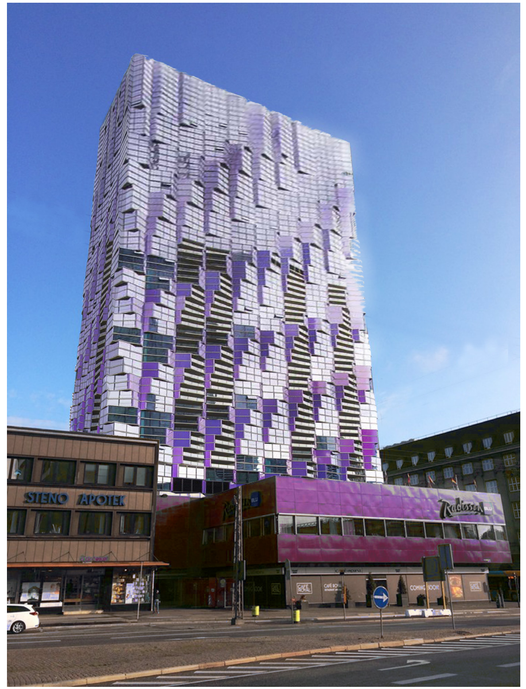


Image 11. Edited facade of Royal SAS hotel

Image 12. Edited facade of Victoria Tower

VICTORIA TOWER

Victoria Tower façade is made using irregular metal coloured glass panels and random placement gives the façade its character. The façade is fully wrapped on these glass panels. The eight different types of panels are placed in a way that regular pattern in the façade cannot be noticed. (Archdaily, 2012) This is achieved by using computer-aided design and special software was developed to help to create this randomized pattern (Archello).

The reflectivity of the panels allows that the changes in the season, weather and daylight make the façade look different. Also, the viewers perspective affects the look of the façade. (Archello)

Behind some glass panels, thin metal oxide panels are used to give the façade its solar shading and insulating qualities, which also makes irregular patterns in the inside of the building as well in the outside (Archdaily, 2012). These metal panels will not let light out and this makes some more random patterns in the façade during evening and night.

By changing the materiality, we wanted to focus on removing the most distinctive theme of Victoria Tower, the irregular triangular façade. This allowed us to see how much the material and opening affects the look of the building. By replacing the façade with typical glazing, the Victoria Tower looks more like a commercial building than a hotel. Despite the change, the building retains its placelessness and lack of scale.

Image 12. Åke E:son Lindman. Edited by authors. Retrieved 21.3.2021. https://www.archdaily.com/227856/victoria-tower-wingardh-arkitektkontor-ab

ROYAL SAS HOTEL

One of Jacobsen's main ideas was the presence of nature and designing the whole building. Unfortunately, these both principles have faded over time in Jacobsen's design. We wanted to bring some of that back to Royal SAS hotel. By bringing a green roof to the design, we bring some of the lost feels on nature back to Jacobsen's design. We also expand the wholesome design to include the roof of the building. The green roof and garden open the design for all and allows people to enjoy the nature on the roof of the building, but also improves the view from the hotel rooms. The green roof also makes the idea of nature present in the facade of the building. The light pavilion-like structures do not compete with Jacobsen's design and create interest and shelter for people visiting there.

Image 13. Arne Jacobsen. Facade. Edited by authors. Retrieved from https://en.wikiarquitectura.com/building/radisson-sas-royal-hotel/

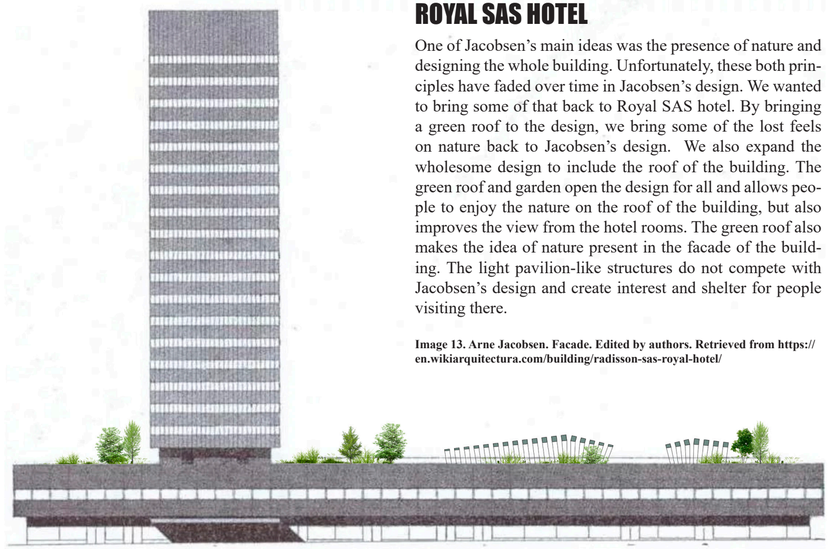


Image 13. Edited roof of Royal SAS hotel

VICTORIA TOWER

The façade of Victoria Tower is made of a fully reflective material that prevents interior functions from being visible outside the building. The material is also the same on the ground floor, which creates a unified architectural look but does not attract people into the building. We wanted to open the hotel's more public functions such as the restaurant to the outside. We decided to expand the restaurant with an open glass terrace that creates activity on the ground floor. The greenery on the terrace emphasizes the entrance of the building and the terrace brings the indoor functions more visible.

Image 14. Wingårdh Arkitektkontor. Site plan. Edited by authors. Retrieved 14.5.2021 from https://www.archdaily.com/227856/victoria-tower-wingardh-arkitektkontor-ab

References:

Archdaily. 2012. Victoria Tower / Wingårdh Arkitektkontor. Retrieved 15.4.2021 from https://www.archdaily.com/227856/victoria-tower-wingardh-arkitektkontor-ab

Archello. (n.d). Victoria Retrieved 15.4.2021 from https://archello.com/project/victoria-tower

Danish Design Review. (n.d). All in the detail... geometry and proportion in buildings by Arne Jacobsen. Retrieved 7.4.2021 from http://danishdesignreview.com/architecture/tag/SAS+Roy al+Hotel

Jeff Reuben. 2017. The Complete Artwork of Arne Jacobsen's SAS Royal Hotel in Copenhagen. Retrieved 15.4.2021 from https://www.scandinaviastandard.com/the-complete-artwork-of-arne-jacobsens-sas-royal-hotel-in-copenhagen/

Tania Hordum. 2017. ARNE JACOBSEN AND THE SAS ROYAL HOTEL IN COPENHAGEN. Retrieved 15.4.2021 from https://www.laboutiquedanoise.com/en/blog/arne-jacobsen-and-the-sas-royal-hotel-in-copenhagen-b69.html

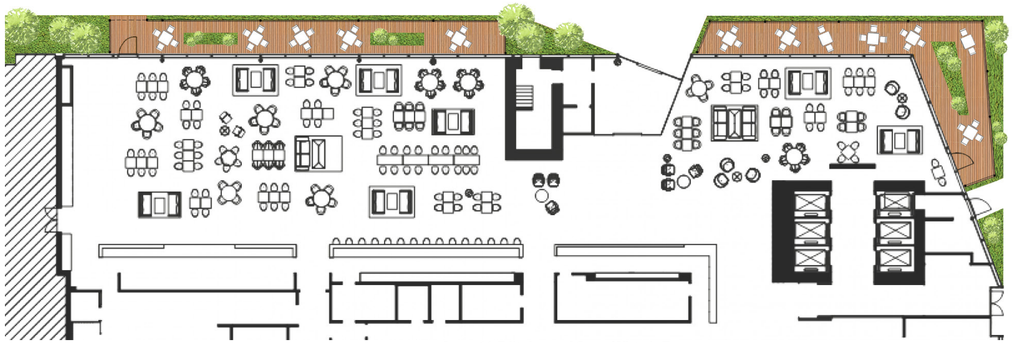


Image 14. Edited ground floor of Victoria Tower

Image 1

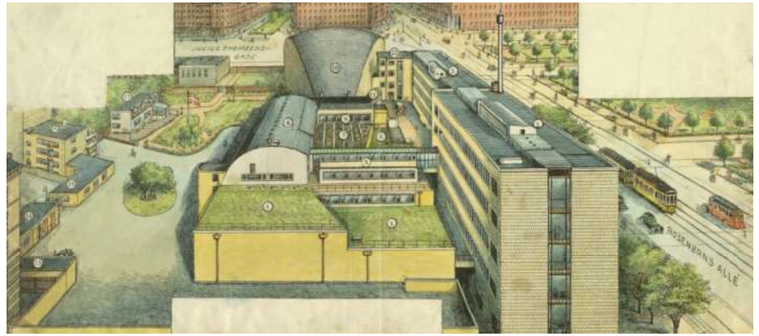


Image 2

RADIOHUSET

Radiohuset is a building complex in Copenhagen designed by Vilhelm Lauritzen. It was built in 1945 and later expanded in 1958 and 1972. Radiohuset was originally the headquarters of the national Danish broadcasting corporation DR until 2006. Since August 2008 the building has hosted the Royal Danish academy of music.

Radiohuset is a large complex which represents the importance of radio as a main media source in its time. It's functionalist style and has a simple, clean look. The facades have long rows of symmetrical windows. The main building material is concrete which enables creating wide unbroken internal spaces, such as the concert hall.

Image 3

KILDEN PERFORMING ARTS CENTRE

Kilden is a theather and concert hall in Kristiansand, Norway. It's designed by Finnish ALA Architects and Norwegian SMS Arkitekter. The building was completed in 2012.

Kilden has a gross area of 16 000 square meters and a volume of 128 000 cubic meters. The concert hall is designed to accommondate 1200 people. The theather has a capacity of 700 people.

Kilden has a monumental abstract form. It's a strong element in its environment – it seeks to stand out. The front façade has a wave-like design and is made of local oak. The curved wood is combined with a glass wall. The other facades are simple and black which emphasizes the power of the front facade. According to the designers the abstract form separates reality from fantasy.

Image 4

Image 5

RADIOHUSET

In this exercise the Radiohuset has been placed into countryside. The place differs a lot from its original place since it is located and designed in the middle of a city: the plot has strict borders up into which the building has been constructed and thus got the mass and size. In a city site, all the facades and masses conversate with the surrounding buildings and the context. Now that the building is placed into a very different site from the original one, the massing and facades seem a lot more questionable. Unlike in a city centre, the new location rouses questions like why is it constructed, why is it here and why the massing and facades are the way they are. In its original location those questions seem more justified by the context.

The surroundings and a context of a building reveal a lot about its functions and raise ideas of the purpose of the building. In a city context it seems clear that the building is a public one and maybe even a concert hall, whereas in a middle of a forest it gets a feeling of a purification plant, factory or an old sanatorium or a hotel.

We choose the countryside exactly for the great difference and contrast. We wanted to see how the lack of the surrounding context change the building.

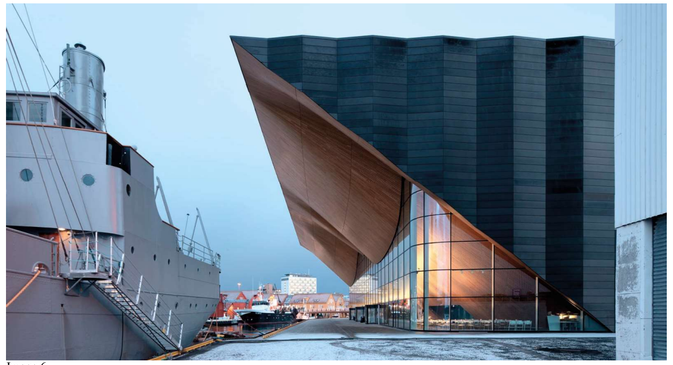


Image 6

Image 7

KILDEN PERFORMING ARTS CENTRE

The Kilden performing art centre is located at the bank of a harbour. It has much space around it due to its location by the water and thus it can be fully appreciated from a distance.

Here the reason for the new location is again the contrast. We placed the art centre in the middle of an Italian plaza. As many plazas of Italia, this one's also quite small and follows the design guidelines of Camillo Sitte. Now that the building is placed in the middle of carefully massed, similarly sized buildings, it seems to fall onto the pavement and the pedestrians. In the harbour the building's façade create almost a protecting atmosphere to its surroundings whereas in the plaza it feels like it's attacking or confrontational.

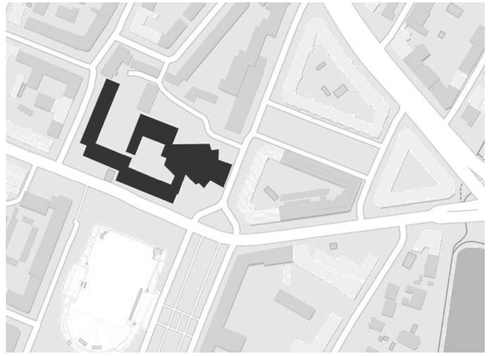


Image 8

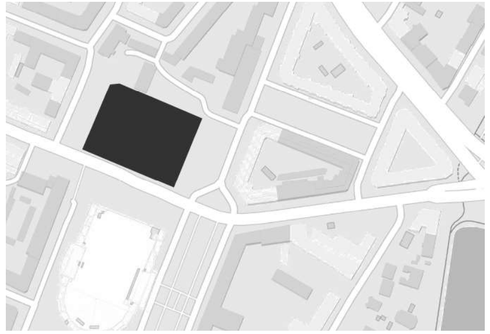


Image 9

RADIOHUSET

Radiohuset is located in the center of Copenhagen. The plots in the area are built densely and the buildings follow the borders of the plots, forming an inner courtyard in the middle. Radiohuset follows these same compliances. The part of Radiohuset, where the concert hall is located, is an exception with its freer geometry, which stands out in the site plan. Also, the scale of that part of the building is in contrast with its surroundings. Redbrick is the most common building material in the area, which was not used in Radiohuset. The facades of these brick houses are very symmetrical. That was partly implemented in Radiohuset as well, but it changes at some point and the geometry becomes more organic. These features make Radiohuset stand out from the other buildings in the area. Next to Radiohuset is an indoor arena, which looks a little strange in that context.

We found it interesting to swap the locations between our two study cases. This way we could see and compare the size of the two buildings. Kilden is placed onto the original site of Radiohuset. We can see that Kilden is actually really large building. In our opinion Kilden fits to the site because the space seems suitable and because there's Forum Copenhagen (operates as a convention center, concert hall and indoor arena) just across the street. The Forum's is the same scale as Kilden. On the other hand Kilden seems way too big for this area, if you compare it to the other buildings and their masses.

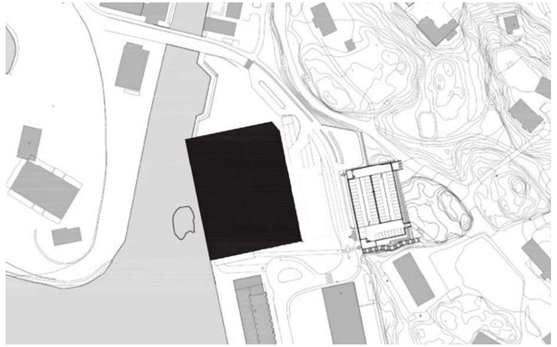


Image 10

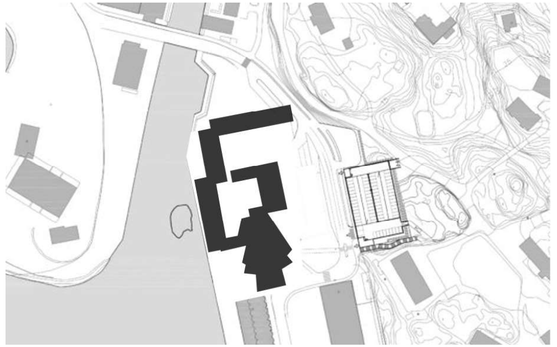
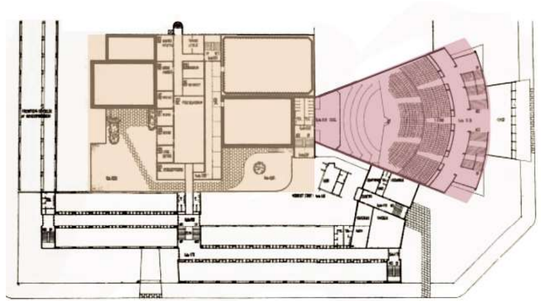


Image 11

KILDEN PERFORMING ARTS CENTRE

Kilden is placed in the harbour site of Kristiansand. The harbour area isn't very dense, neither is it an empty landscape. The building mass of the area consist of big harbour halls, active ones and those that have been adapted to fit new usages like museums and restaurants. Therefore, a big mass like Kilden's doesn't pop out or on the other hand shrink between the bigger masses. For the location of the bank of the harbour, the Kilden has wide open space of water in front of it. It's the natural direction for the opening design of the main façade. The Arch20 internet site explains the organic surface to represent the nature of Norway and to create contrast between the sharp edges, the wavy shapes of the façade and the calm waters of port basin. According to the same source, they had wanted the material of the water-front facades to be local and thus selected oak clad produced nearby.

Radiohuset is placed onto the site of Kilden. In our opinion Radiohuset somehow fits in to the Kilden's site. Maybe it's due to the massing of the bulding: it is similar to the ones on the site. Also the space for the Radiohuset building seems to be suitable.



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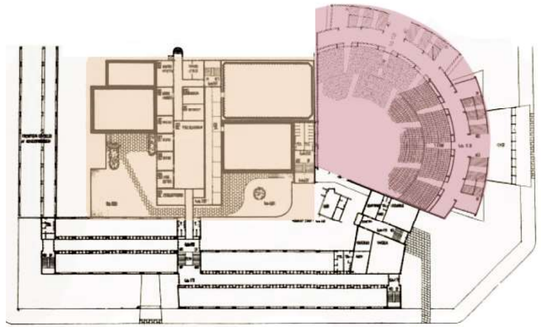


Image 13

RADIOHUSET

Radiohuset is by many sources a beloved building in the heart of Copenhagen. It is a functionalist masterpiece with a great variety of inspirational spaces that have yielded into various adaptions and needs of different hosts and usages. The biggest adaptation it has underwent was when the Danish Radio moved out and was replaced by the Royal Danish Academy of Music. The following is a quote from one of the sources describing the Radiohuset:

"Buildings with rich, diverse, and delightful environments, like Radiohuset, inspire affection. They are loveable and appreciated by their users and public audiences alike. They are the buildings that will be cared for, that will continue to find extended lifetimes through successful transformations. Architectural quality is a way to create social values while managing resources wisely."

In the original plan of Radiohuset the concert hall stands out from the other mass as an independent part. It separates from the middle and opens in a symmetrical form. The shape of the building is a traditional fan-shaped style which is widely used in concert hall designs.

In the modified version the fan-shape is exaggerated and connects to the other building masses. It creates a larger audience – probably too large for Radiohuset's needs. The concert hall is more connected to the building complex, not as much an independent part. The scale changes significantly and makes the concert hall look more like a main building than a separate part with a special function.

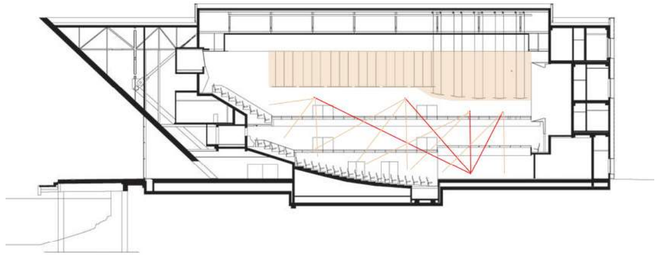


Image 14

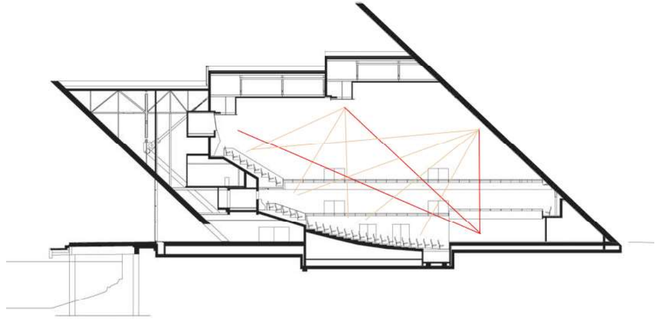


Image 15

KILDEN PERFORMING ARTS CENTRE

Kilden performing arts center is very much liked by visitors and performers, making it one of the top international performing centers. The architecture is seen as memorable and the acoustics of both concert halls is magnificent. The core of the architecture is the optimal functionality of the concert halls regardless of one another. The facilities of the arts center allow a large variety of artforms to be showcased in the same environment.

"We are therefore able to produce large productions in-house, such as musicals, opera and ballets, where our own symphony orchestra contributes from the orchestral pit. There are no other theatres in Norway that are able to programme these types of productions with live music."

In the original design of the concert hall the monumental shape of the façade is not in a major role in the acoustics. It's used to lift the audience but not to influence the sound transmission. The acoustics of the concert hall are dependent on acoustic panels hanging from the roof. Accurately calculated layout of the panels in relation to the shape of the hall ensures an excellent sound experience.

In the exaggerated design the shape of the front side of the building has been multiplied to the other side as well. The oblique wall creates a natural sound distribution to the concert hall without relying on acoustic panels. The modification transforms the entire appearance of the building.

Image 16

Image 17

RADIOHUSET

The main space of Radiohuset seems to be the concert hall that stands out from the mass. The materials that have been used in the interior is mainly wood so it creates a visual connection from space to space. Also the lamps and furniture were designed specifically for the building which creates a connection between different spaces. The interior is made from dark mahogany and the outside from marble so the interior and exterior seem quite different.

Here the dominant features of the interior have been modified as seen in the pictures. The wooden walls and the ceiling are now a much lighter tone and vice versa the stalls and the upper circles are a bit darker in tone. These relatively small changes affect the space surprisingly.

In the original space all the materials, shapes and small details direct the attention to the stage and to the orchestra. If there's something that stands out except for the stage are the acoustics structures on the walls.

In the modified version the attention isn't right away directed to the stage where it should. Now the organ jumps out from the mass and steals the attention. The acoustic structures blend into the walls and so does the stage.

Image 18a

Image 18b

Image 18c

Image 18d

KILDEN PERFORMING ARTS CENTRE

The main space for Kilden might just be the foyer because its unique and recognizable roof. This roof connects the outside and inside together. Outside and inside are almost literally connected because the same local oak roof continues to the outside, there's only a class facade in between them. Some of the concert hall's interior include wood so it is a combining element. But there's also spaces and corridors that don't seem to have anything in common with the foyer.

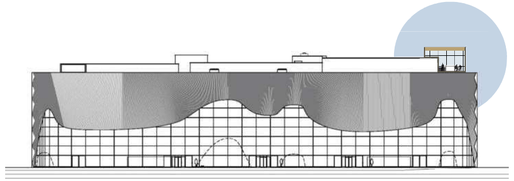
Kildens main element is the boldly shaped oak roof, which defines the whole building and gives it its athmosphere.

One of the main factors of why the roof doesn't feel atacking, is the use of colors and the organic surface of the roof. The roof is the main point of attention, but the other surfaces and materials balance out the bold roof.

In the lower pictures the color of the roof is white. The roof gives the space a colder vibe and the attention doesn't lay on the main characteristic of the space (attention is now on the supporting structure of the window, the outside view, and the furniture). One still pays attention to the roof, but it is not the defining element of the space.

Regardless of where the attention now goes, when there is such a bold element in a space, as the roof is in Kilden, it is justified to make it the main point of attention. The colors and materials play a big role in that.

SOUTH ELEVATION



WEST ELEVATION

Image 19

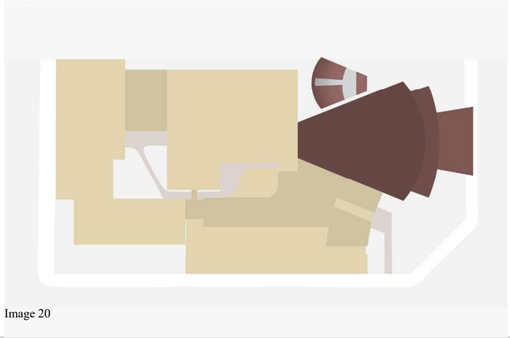


Image 20

KILDEN PERFORMING ARTS CENTRE

To Kilden we added a small, delicate, rooftop café. We didn't want to add to the mass anything too conspicuous because of the nature of the building. Situated on the very top, the café would just be visible from afar to people to notice the café, but not too visible to disturb the shape and massing of the Kilden. As seen from the elevations, there are some masses on top, but from street level they are not at all visible.

The rooftop café would add up to the great views the Kilden has over the sea. The café would be even more directed to the south and the sea to get the full benefits of the location. Furthermore it would add to the services and usage of the building during, in between and after the concerts and performances.

RADIOHUSET

We extended Radiohuset by designing a small amphitheater, which would be an open space for everyone to use close to the concert hall. The mass of the amphitheater comes from the concert hall of Radiohuset, but turned so that it is is very much in contrast with the original hall.

The concert hall is very closed to the street, but a very prominent part of the building and the street view. The amphitheater is more open and inviting to passers-by, but it is located behind the concert hall. Its location gives it a little privacy, which is also needed for the use of the amphitheater. The mass also ties the concert hall to the buildings behind it very naturally.

References:

I.B. Hoffman, C.A. Storch, T.J. Foulkes: Halls for music performance - Another two decades of experience 1982-2002 (2003), p. 22-23, Acoustical Society of America, available: https://www.researchgate.net/publication/276290519_Radiohuset_Studio_1_Copenhagen_Denmark

Julie Linden: Kilden Performing Arts Centre: Performing innovation - from the source, Scan Magazine, available: https://scanmagazine.co.uk/kilden-performing-arts-centre/

P.A. Sattrup, J. Ammundsen, F. Agger: The music of change: Transforming Radiohuset into the Royal Danish Academy of Music (2008) Rotterdam, Netherlands, available: https://adk.elsevierpure.com/ws/files/32965981/Dococomo_Music_of_Change.pdf

A. Malkawi, M. Nygaard, A. Beim, E. Stenberg: Sustainability in Scandinavia, Architectural Design and Planning (2018) Axel Menges, Stuttgart, London, available: https://www.diva-portal.org/smash/get/diva2:1373603/FULLTEXT01.pdf

Vilhelm Lauritzen Architects: Radiohuset, available: https://www.vla.dk/en/project/radiohouse/

ArchDaily-site: Kilden by ALA Architects, available: https://www.archdaily.com/225522/kilden-ala-architects

ALA-arkkitehdit: Kilden Performing Arts Centre, available: http://ala.fi/fi/work/kilden-performing-arts-centre/

Navi.finnisharchitecture.fi: Kilden Performing Arts Centre, available: https://finnisharchitecture.fi/kilden-performing-arts-centre/

Archello-site: Kilden Performing Arts Centre, available: https://archello.com/project/kilden-performing-arts-centre

Danish Design Review: Musikkonservatorium, Copenhagen (2015), available: http://danishdesignreview.com/blog/tag/Radiohuset

Arch2o-site: Kilden Performing Arts Centre, available: https://www.arch2o.com/kilden-performing-arts-centre-ala-architects/

Image references:

Image 1: Danskradio: Postcard image (1953), available: http://danskradio.dk/radiohuset.html

Image 2: Wikimedia: Radiohuset (1940), available: https://upload.wikimedia.org/wikipedia/commons/6/6a/Radiohuset_1940.png

Image 3: Amy Frearson (2012), available: https://www.dezeen.com/2012/03/30/kilden-performing-arts-centreby-ala-architects/

Image 4 = Image 1

Image 5: Original Image: Felix Mittermeier (2017), available: https://pixabay.com/photos/black-and-white-rural-hut-landscape-2405469/ Modification: A. Yrjänä (2021)

Image 6: Tuomas Uusheimo, ALA Architects, available: http://ala.fi/work/kilden-performing-arts-centre/

Image 7: Original Image: Stephanie Lukins (2019), available: https://www.qschina.cn/en/student-info/studying-abroad/4-reasons-why-italian-city-hit-international-students Modification: A. Sippola (2021)

Images 8-11: Original images: Google Maps (2021), available: https://www.google.fi/maps/ Modification: J. Virtanen (2021)

Images 12-13: Original image available: https://ing.dk/sites/ing/files/illustration/2018/01/radiohuset.jpg Modification: T. Finel (2021)

Images 14-15: Original image available: https://miesarch.com/uploads/images/works/2807-17966.jpg Modification T. Finel (2021)

Images 16-17: Vilhelm Lauritzen Architects, available: https://ing.dk/sites/ing/files/ Modification: A. Yrjänä (2021)

Images 18 a-d: Original Images: Tuomas Uusiheimo, ALA Architects, available: http://ala.fi/work/kilden-performing-arts-centre/ Modification: A. Sippola (2021)

Image 19: Original images: ALA Architects, available: http://ala.fi/work/kilden-performing-arts-centre/ Modification: A. Yrjänä (2021)

Image 20: Original image = image 12, Modification: A. Sippola (2021)

Image 1. Muuratsalo house, photo by Nico Saieh

Alvar Aalto
Muurame, Jyväskylä Finland
Ateljee and summerhouse

MUURATSALO EXPERIMENTAL HOUSE, 1952-54

The Muuratsalo experimental house is located on the Western shore of the Muuratsalo island in the lake Päijänne. The 53650 m^2 site contains the actual summer house and ateljé, woodshed and a smoke sauna. It was designed together by Elissa and Alvar Aalto. (Alvar Aalto Foundation 2021)

The site is a rocky pine forest plot. It is in its natural shape creating a contrast to the playfull inside and a clear-lined modern outer facade. The buildings are located on the plot in the shape of the Big Dipper.

The connection to nature is presented by how the buildings are located in the site and the forest is kept untouched. Otherwise the house form is closed and even the atrium yard is covered with brick. The shape of the main building is inspired by the antique atriums and the roof shape takes into account the direction of the sunlight. The closed courtyard opens to south and west with a fireplace in the middle. (Alvar Aalto Foundation, 2021)

The courtyard facade is the most obvious part of the experiments Aalto tested. The brick façade is divided into 50 panels in which they tested how the different materials and techniques age through time.

Brick was a typical material of the time but the way Aalto used it in this house makes it unique and experimental. The outer facade is more traditional white-painted plastered brick wall forming a more typical image of the time.

The main intentional experimental parts of the project were to partly build without foundations (was implemented on the quest wing), free-form brick construction (was not carried out), free-form column structures (was implemented in the woodshed) and solar heating (was not carried out.)

The smoke sauna was built on a stone in the shore and was built of the trees felled on the site. The sauna has a saperate steamroom and a changing room by the lake shore. (Alvar Aalto Foundation, 2021)

Alvar Aalto Website. Retrieved from 3.11.2021, https://www.alvaraalto.fi/en/architecture/muuratsalo-experimental-house/#

Image 2. Villa Riviera, photo by R2k Architecte

Olavi Koponen
Kyläniemi, Taipalsaari Finland
Summerhouse

VILLA RIVIERA, 2011

The villa is located next to a beach by Lake Saimaa. The site contains one building, the 175 m^2 villa. It represents traditional carpentry but incorporates modern technology.

The building sits on a flat area between pine trees, as close to the lake as possible. Pine trees enable great views to the lake and although there is a large number of trees the site doesn't feel too dense.

Villa Riviera represents the main themes of Olavi Koponen's works traditional carpentry and wood architecture which does not follow the mainstream. Koponen is known for implementing the connection of a human and the nature in his designs. (Taike 2021) The design and massing of the villa is modern, experimental and ecological. It consist of a large canopy/roof structure, which covers various types of spaces beneath it.

Materials used on the façade are Siberian larch, which is a very lively material. Over time it turns grey, and this way gives the building an evolving character. Wood architecture is now much more popular than in the 20th century, partly due to the environmentally friendly solutions it promotes. Material choices and the bright spaces reflect the trends of today. Large glass walls and windows are combined with wooden structures which are very desired for in this day and age.

Puu Info. Retrieved from 3.11.2021, https://puuinfo.fi/arkkitehtuuri/summer-houses-and-saunas/holiday-house-villa-riviera/?lang=en

MUURATSALO EXPERIMENTAL HOUSE LOCATED IN SAVANNAH LANDSCAPE.

The Muuratsalo experimental house was originally located in a pine forest, and we decided to relocate it to a Savannah with a slightly different natural environment to observe the differences in surroundings between the plane landscape with a freestanding trees and the rocky cliffs with the lake site in the original.

The main idea of the contrast between the white walls and the surroundings didn't change all that much, but the views from the inner yards could be quite different. Because the Muuratsalo composition is based on a typical Finnish inner yard with a view of the lake, the impression of privacy may change considerably. The plane terrain in Savannah does not give the right orientation to position the structure, therefore you won't get the same feeling.

The materials of the building, especially the red brick, seem to blend rather well with the environment, partly due to the quite similar, untouched and natural state of the surroundings and its reddish tones.

Image 3. Muuratsalo experimental house in Savannah.

Image 4. Villa Riviera in Riviera.

VILLA RIVIERA LOCATED IN MENTON, FRENCH RIVIERA, FRANCE.

To keep the logic of the name of the building we decided to place it where it should be according to the project's name, we chose to play with the word Riviera and place the villa on the southern coast of France. We assume that the project's author makes allusions to classic villas while yet taking an experimental approach.

By placing the Villa Riviera on the French Riviera, which is located in France, we can see how the environment affects the structure. The cliff's reverse position in relation to the urban plan gives the building a specific role. The experimental wooden house has a natural appearance because wooden structures blend in with any natural surroundings, but it also has a more tropical appearance, which contrasts with the defined urban area with colorful red roofed buildings terraced on the cliffs and the unusual appearance of that building placed on the southern coast. Its location in a public transit region mandates that it plays a specific role within it. Residential function is no longer the case for that place but it still could exist at some point.

MUURATSALO EXPERIMENTAL HOUSE, ORIGINAL SITE & PLACED IN AALTO UNIVERSITY ENVIRONMENT

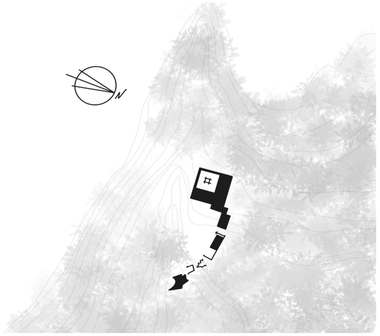


Image 5. Muuratsalo in original site.

Image 6. Muuratsalo in new location.

Muuratsalo Experimental House is located on an island, in opened landscape and is surrounded by the forest mainly, and also by rocks and water. Its windows are mainly oriented to Lake Päijänne viewpoints, while its back facades are oriented to the North side and have more closed structure. House's additional premises create a semicircle that is also explained with the North side orientation, the wind rose and lake views.

The surrounding landscape measuring 53650 m^2 plays a critical role in the experience of the House architecture. Boulders and stones which are covered with moss, bilberry and lingonberry bushes add a beautiful contrast to the brick and white colors of the house. Fifty different types of bricks which are arranged in various patterns and mix of white-painted brick and red ones match perfectly the surrounding as it creates a feeling of ancient ruins that rise from the landscape on the hill.

We chose the Aalto University environment for Muuratsalo Experimental House. Aalto University and Muuratsalo share a strong modernist footprint, thus the designs of the buildings complement one other, although the Experimental House must definitely adapt its purpose within the campus context. It features an irregular plan that allows it to readily transform into a pavilion or a small library, with some smaller pavilions serving as saunas or exhibition rooms.

Muuratsalo has a slightly irregular plan because to its location in a natulal setting, yet it could be a match for the Aalto University campus since, despite being regular at times, it maintains irregularity.

The Experimental house was able to be built here because of the materials, shapes, and natural orientation.

Alvar Aalto Website. Retrieved from 13.11.2021, https://www.alvaraalto.fi/en/location/muuratsalo-experimental-house/#

VILLA RIVIERA, ORIGINAL SITE & PLACED IN KALEVA, TAMPERE.

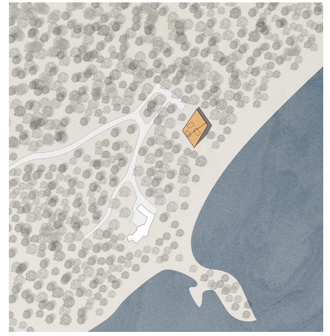


Image 7. Villa Riviera in original site.

Image 8. Villa Riviera in Kaleva.

The villa is located on the edge of a forest and a beach. Pine trees are surrounding the whole building. The landscape opens up quickly when moving towards the lake.

The villa's form takes the surrounding nature into account, which can be seen in the structures and organization of spaces. The tall columns act as a continuation of the pine trees and this way is connected to the landscape visually. One pine tree even penetrates the canopy and the deck inside the villa and brings the environment literally inside.

Siberian larch matches well the forest environment. As it ages, it slowly turns grey, and this way creates a harmonious pair with the bark of the pine trees.

We decided to examine Villa Riviera in the environment of Tampere, Kaleva. We placed the villa on the Kaleva church site. We wanted to experience the villa in a more open view that also takes into consideration the denser urban environment.

The irregular footprint of Villa Riviera is originally formed because of the nature in its site. When placing the summerhouse on an open plot in the hearth of Kaleva the irregular shape of the footprint is not understandable because of the site. The shape seems unattached from the surroundings. Also, when placing the villa in a regular built environment the irregularity of the building is no quite strong enough to fit in. We came to conclusion that either the scale or the placement fits the new environment as well as the original site.

Kaleva church has also an irregular footprint but itself the building has a strong monumental form compared to the Villa Riviera. Kaleva church doesn't really open to any direction. But the villa opens to every direction. In a way the Villa Riviera again seems like a pavilion in the urban environment.

Something we discussed was that why the Villa Riviera might seem like a pavilion when placed to another location is that it has a very strong identity and bandage to the original site.

MUURATSALO EXPERIMENTAL HOUSE

“The key element of the building, both architecturally and functionally, is the atrium courtyard. The walls are divided into approximately fifty fields of brick or tile, forming a diverse assemblage. The open fireplace at the centre of the courtyard is the heart of the entire house. The spatial and visual sequence extends from the living room through the courtyard and far over the lake.” (Docomo, 2021)

The most important part of the house it is the connection between the inside and outside and the inner yard which is the center of the whole composition, from which we can reach the house and the nature and it serves as a connection point. So, that is an obvious thing that it became so ‘special’ in a sense of decoration. The whole house is built considering the inner yard we highlighted that it is the core of the Aalto’s project. The core of our experiments are the consideration of different typologies and see how the form influences the typology if we change the inner yard.

Changing the height of the building changed its typology and made it look like an apartment complex. The walls made the division between the nature and the inner yard so it became useless and they cause the lack of the natural light that way. The expansion of the inner yard caused another change it became the public space with the wide inner yard for public purposes but at the same time it demands more glazing and a floor height.The multiplication caused that Muuratsalo became a townhouse or residential housing. As a result, we could see how the changes of the shape change typology and function.

Image 9. Ground floor plan.

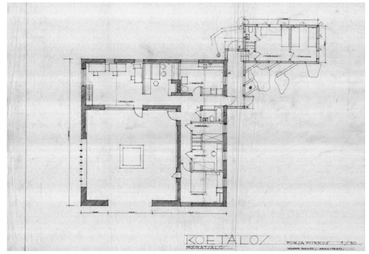


Image 10. Muuratsalo inner yard.

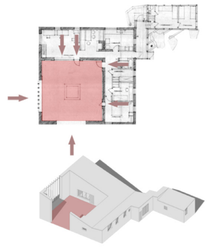


Image 11. Muuratsalo overstated features.

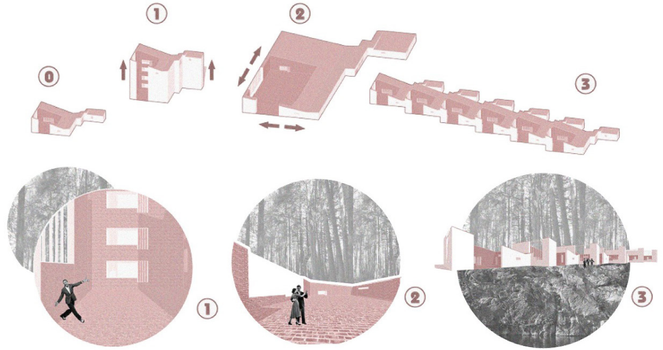


Image 12. Simplfied diragram of typology.

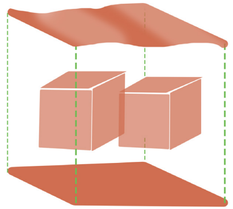


Image 13. Overstated typology.

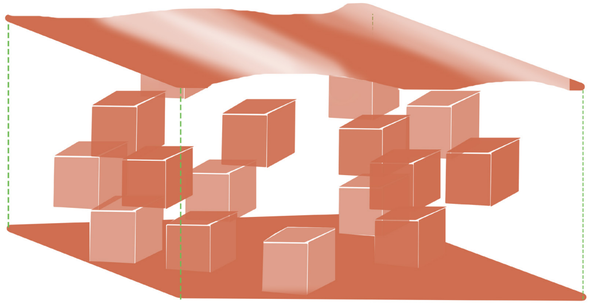


Image 14. Habitat 67, Montreal, Moshe Safdie, 1967.

VILLA RIVIERA

The most distinctive characteristic in the villa is the “flying” canopy and the contrast it creates with the spaces placed underneath it. The canopy has a freeish form and the rooms inside have a rather strict, boxed shape.

In these sections we can see the wavy shape of the roof and the slight slope of the site. This gives boundaries for the actual spaces between them and allows freedom for the organisation of the interiors. The large roof provides the possibility to form multiple shapes and masses under it.

The building is divided into two masses under the canopy, with a comfortable pathway going through it towards the beach. The pathway is quite naturally formed between the functions – living room opens up to the pathway/patio and on the other side there’s a sauna and the spaces supporting it. The patio has a feeling of being under the branches of a large tree. This is again made possible with the canopy structure.

We formed a simplified diagram of the Villa Riviera typology. The model shows the basic idea of having a base and a flying roof in where between you have the interior boxes. The empty space formed under the roof and around the boxes binds the building as a whole. In the diagram we presented the canopy as a more natural form to emphasize the difference between the strict boxes and the wavy shaped roof.

As the overstated features we came up with an idea where the typology is multiplied to every direction. In this haphazard composition we grew the volume of the complex to match a block of flats or a small residential area. We noticed similarity in our diagram as in some foreign housing concepts where the residential building is formed from stacked modules. The interesting find is how in our diagram the large roof defines the empty space as equally important part of the building as the boxes forming the interior.

Image 15. Interior view to inner yard.

Image 16. Modified interior view to inner yard.

Image 17. Muuratsalo inner yard materials transformations.

MUURATSALO INNER YARD MATERIALS TRANSFORMATIONS

The experimental house was built over the course of two years utilizing brick and wood in what could be considered a passive construction method. The majority of the brick used were rejects and were salvaged from another one of Aalto's projects that was happening nearby, Säynätsalo Town Hall (1949-52). In addition, the brick was initially manufactured locally in Finland.

As a result, we see the inner yard as the most significant part of the building, but we also recognize that the inner area of the building is connected to the outside, and that connection is the most important aspect of the building.

So, we chose a photo with a view from the inside of the inner yard and decided to see how the colour of the yard would appear and influence the ambience from one point of view. The link between the inner and outer parts is clearly seen in the original shot. The substance helps to maintain the atmosphere by extending the inside space to the outside.

We changed the colour of the wall in the edited shot to show how the environment has changed and the separation between inner and outer space appears. Through the windows and door, the outside space appears to be more like a painting.

Image 18 & 19. Original materials & with modified materials.

VILLA RIVIERA INTERIOR MATERIALS TRANSFORMATIONS

The main space in Villa Riviera is in between the boxed masses, where the living room and kitchen is located. This is a very open space as it rises all the way up to the canopy and is surrounded by glass walls on three sides. The living room opens up to the patio and terraces which go through and around the building. Thin timber structure helps creating the transparent atmosphere and adds to the feeling of being surrounded by nature. This space is visually connected to the whole building, almost every room also has views to this living room area. Transition between indoor and outdoor space is smooth and indefinite as the space promotes a seamless movement from and into it.

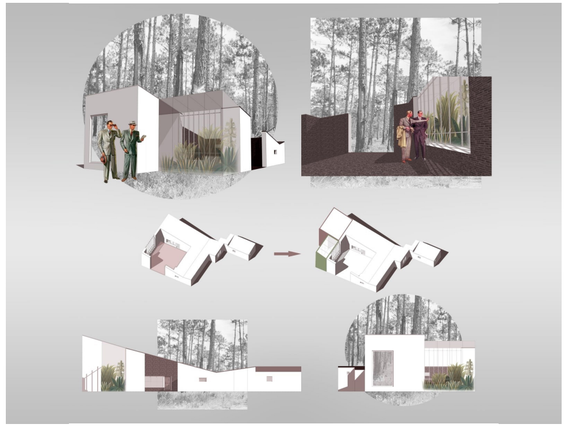


Image 20. Greenhouse & workshop.

MUURATSALO SMALL ADDITION

We discovered that the yard is the most important component of the experimental house, and that the entire structure of the building is based on the relationships between the building's inner and outer parts throughout the yard, as well as the direct link between the inside and the outside. We offered to put the greenhouse in the spot where the opening is. As a result, the transparent element will complete the composition of the inner yard while also preserving the link to nature throughout the vegetation within. A spot for crafting or workshop space with access to the greenhouse was also installed to support the extension made by the extra volume. As a result, the fundamental idea and structure of the building were reinforced by the addition of volumes to the inner yard.

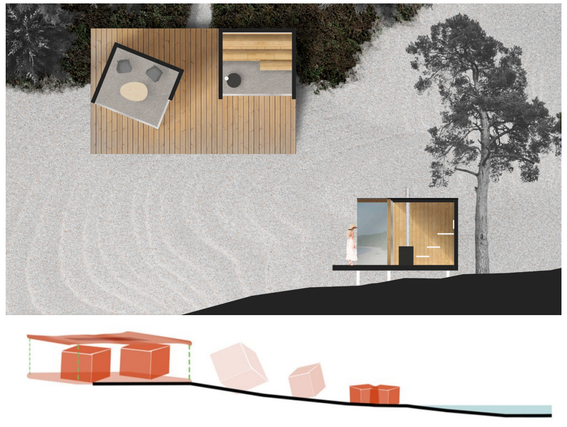


Image 21. Sauna & guestroom / lounge.

VILLA RIVIERA SMALL ADDITION

Sauna and the nature are an important part of Finnish culture and architecture. Connection to the nature is a crucial part of contemporary Nordic architecture too. The surrounding environment has heavily affected the design of Villa Riviera.

We decided to create an additional sauna and lounge terrace near the beach in front of the building. This place emphasizes the ritual of going to the sauna and this way almost works as a retreat in the middle of the beautiful Finnish nature. Typology and materiality of the addition refer to the original building. The lightness of the Villa is also present here in the form of organization of spaces.

References:

Taike, 2021. Arts Promotion Centre Finland. Retrieved from 3.11.2021, https://www.taike.fi/fi/uutinen/-/news/1335062

Alvar Aalto Foundation, 2021. Retrieved from 3.11.2021, https://www.alvaraalto.fi/kohde/muuratsalon-koetalo

Docomo, 2021. Retrieved from 23.22.2021 https://en.docomomo.fi/projects/muuratsalo-experimental-house/

Image references:

Image 1. Muuratsalo
Retrieved from 16.11.2021. https://www.archdaily.com/214209 and https://www.google.com/maps

Image 2. Villa Riviera
R2K Architecte. Retrieved from 16.11.2021 from http://www.r2k-architecte.com/projets/villa-riviera

Image 3. Muuratsalo in savannah
Transformed by authors. Original images retrieved from 3.11.2021, by Nico Saieh. from https://www.archdaily.com/214209 and http:https://th-thumbnailer.cdn-si-edu.com

Image 4. Villa Riviera in Riviera
Transformed by authors. Original images retrieved 3.11.2021 by Boris Stroujko. Retrieved from 3.11.2021 from https://www.travelawaits.com/2550951/why-menton-is-the-best-kept-secret-in-france/ and R2K Architecte and from http://www.r2k-architecte.com/projets/villa-riviera/

Image 5. Muuratsalo Experimental house in original location Marina Suvorova

Image 6. Muuratsalo Experimental house in new location by Elena Sitrakova

Image 7. Villa Riviera in original site
By Juuso Lahtinen

Image 8. Villa Riviera in Tampere, Kaleva
By Juuso Lahtinen

Image 9. Ground floor plan. Retrieved from 23.11.2021 from https://shop.alvaraalto.fi/en/tuote/architectural-drawings-of-the-muuratsalo-experimental-house/

Image 10. Muuratsalo inner yard by Elena Sitrakova

Image 11. Muuratsalo overstated features by Elena Sitrakova

Image 12 & 13. Villa Riviera typology diagram By Enni Munukka

Image 14 Habitat 67, Montreal / Moshe Safdie / 1967, Retrieved from 23.11.2021 from archdaily.com/404803 photo by Wladyslaw

Image 15. Interior view to inner yard. Retrieved from 27.11.2021 from http://jurajvronka.blogspot.com/2018/11/reserse.html

Image 16. Modified interior view to inner yard. Transformed by authors.

Image 17. Muuratsalo inner yard materials transformations. Transformed by authors. Original images retrieved from 27.11.2021 from https://www.archdaily.com/214209/ad-classics-muuratsalo-experimental-house-alvar-aalto

Image 18. Original materials. Retrieved from 26.11.2021 from https://kotijakeittio.fi/artikkeli/vapaaajan-koti-saimaalla-nimettiin-villa-riv-ieraksi-6.165.123446.745f754512

Image 19. Modified materials. Transformed by authors.

Image 20. Greenhouse & workshop by Elena Sitrakova

Image 21. Sauna & guestroom / lounge by Juuso Lahtinen & Enni Munukka

TAPIOLA CHURCH

Architect: Aarno Ruusuvuori
Location: Espoo, Finland
Building finished: 1965
Floor area: 1500 m²

Tapiola Church was built in 1965, renovated in 1992. It is originally located in an urban area that is easily accessible.

When it was opened in 1965, the Tapiola Church was somewhat controversial, and locals greeted it with a mix of approval and disdain. Since then, it became one of the most recognizable landmarks in Espoo, the locals very much loved it, especially its congregation.

The exterior is modern, with swoops and layers of grey concrete, but inside, the main attraction is the glass back wall which fills the church with natural light. Since the church was built after WWII and Finland had war reparations to the Soviet Union, this situation helped the country become industrialized. This caused migration to the cities, and new neighborhoods, facilities, and squares were required. Tapiola Church is one of those facilities that defines a square and it is also a part of the Tapiola Garden City.

It was built with the capacity of 600 seats, with the assumption that the city's population would be increased in the future. Additionally, the building material is concrete, as similar to the sorrounding buildings, since it is quick to construct and cheap. (finnisharchitecture.fi/tapiola-church/)

Image 1: Tapiola Church, photo by Larry Speck

Image 2: Tapiola Church, photo by Daniel Annenkov

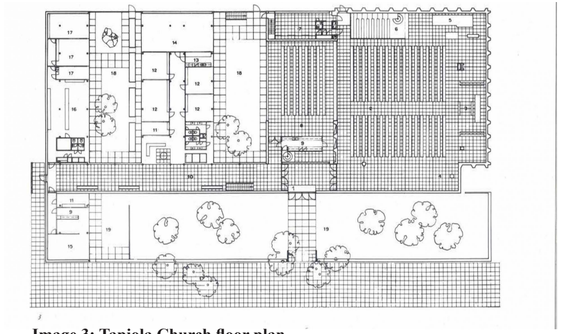


Image 3: Tapiola Church floor plan

Image 4: Knarvik Church, photo by Hundven Clements Photography

Image 5: Urnes Stave Church, Norway, photo by Riksantikvaren

COMMUNITY CHURCH KNARVIK

Architect: Reiulf Ramstad Arkitekter
Location: Knarvik, Norway
Building finished: 2014
Floor area: 2250 m²

The Community Church in Knarvik is located on the west coast of Norway, north of Bergen. It was built on a privileged site overlooking the cultural landscape and local town center. The building is carefully adapted to an existing hillside between the built and natural environment, providing the church with an inspiring context of the surrounding heath landscape. (ArchDaily published on December 08, 2014)

This building is an outstanding example of how an object can be placed into harmonious dialogue with its surroundings. The architect has created a bold, distinguished design with a strong connection to the Nordic context and its impressive landscape. (Arterritory.com 18/12/2014)

The church signals its function with a sacral dignity and recognizable form in which the church spire, sanctuary, and chapel are emphasized with ascending roof planes. (Arterritory.com 18/12/2014)

Stave Churches

Medieval Norwegian Wooden Churches appeared during the Middle Ages in Norway between the first half of the 12th century and the 14th century. Their architecture and construction techniques make Stave churches unique buildings that are fundamental to Norway's wooden architecture tradition. (Claudia R. Clare Casassas. 2019)

What makes the stave churches unique is the fact that during the time that they were constructed in most parts of Europe, stone and masonry were the preferred material.

However, Norway developed a new constructional technique using timber and wood. (Kata Szilágyi – Anette Sand-Eriksen. 2021). As illustrated in the facade and the materials, the Knarvik community church was inspired by the traditional stave churches. The building is a modern interpretation of Norwegian heritage not just through its material (pine wood), but also through its recognizable form.

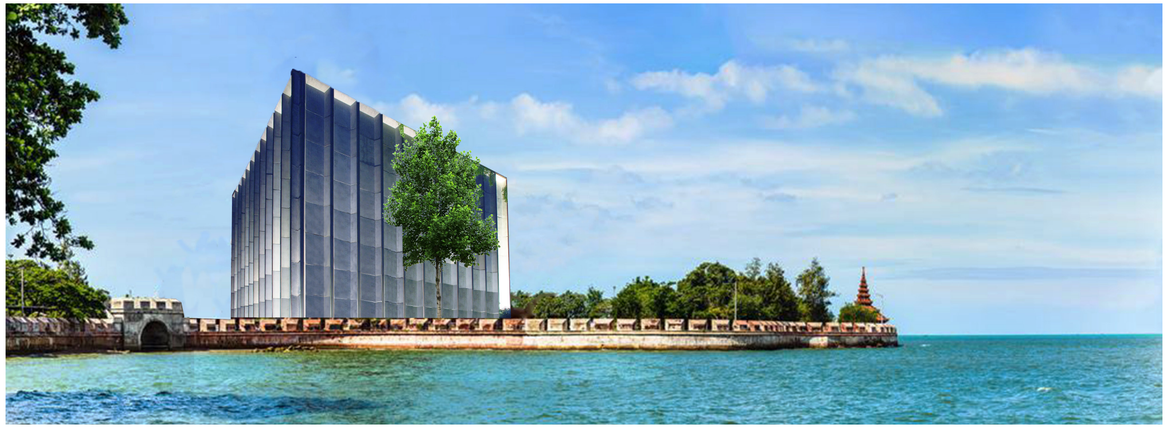


Image 6: Tapiola Church on Sanctuary of Truth's context, transformed by authors

We chose a site in a tropical climate like Thailand because we thought it would be completely in a contrast with the existing context. This is not an urban area, it is in a different climate, with an increased relation with sea.

The church is originally located in an urban area, and the building's borders create a defined circulation path around the building. Even its voids are designed according to the urban context's interactions. When we replace it into this kind of scenery, its relation with the surrounding has totally disappeared.

Tapiola Church's introverted character is in contrast with the new site, which more naturally demands openness to achieve view and connection to the sea.

Image 7: Sanctuary of Truth, original photo by Kharchenko Vladimir

Image 8: Knarvik Church, photo by Hundven Clements Photography

Image 9: Knarvik Church on The Chapel of Rest's context, transformed by authors

The Knarvik Church is located in the village of Knarvik, in Alver Municipality in Vestland county, Norway. Its construction started in 2012 and lasted for two years. It was built in a hillside spot surrounded by both natural and built environments. Its location makes this church a landmark where its recognizable form stands out from the surrounding environment.

In 2014, the Community Church in Knarvik was nominated for the European Union Prize for Contemporary Architecture - The Mies van der Rohe Award. Because it is a powerful example of how a building could have a close interaction with its surrounding environment. (Arterritory.com 18/12/2014)

The church's distinctive and innovative character and central location make it an inviting and inclusive landmark for all people who wish to cultivate their faith throughout the week. The church aspires to provide a platform for the safe upbringing of children and youth, become a local venue for gatherings and faith, and facilitate art, music, and cultural development. The church has an architectural expression, spatial solutions, and materiality that unite religion, culture, and the site-specific context into a whole. (ArchDaily published on December 08, 2014)

As the wooden facade is inspired by traditional Nordic architecture, we realized that relocating this building in a Nordic environment will not give us much information. Therefore, we decided to relocate the building on a site of an existing contemporary church in Austria in a different urban environment.

Knarvik Church, through its strong form, works as an organizer in its original landscape. It catches the attention through its contrast with the surrounding natural environment. Also, it has an inviting nature because it is located at a higher level than its surrounding. However, after choosing a new location in an urban environment, surrounded by a cemetery, its form is no longer inviting but distracting. Also, it does not stand out because of the flat landscape of that region.

Also, its facade, which has a strong connection with the natural environment, suddenly loses its meaning and beauty in a new location.

After considering these facts, we realized that this building was designed specifically for its original natural and rural environment, where its wooden facade has a connection to Norwegian history and the natural environment of the village.

Tapiola Church is located in Espoo, close to the city center, and its design responds to public and residential buildings in the area and defines pathways and streets. With the material choices, it is easy to observe the “industrial” aspect of the city through the church. It was designed within the masterplan of Tapiola Garden City. Although it is located in an urban area, it still has a strong connection to nature.

Knarvik Church is located in the north of Bergen, a coastal rural area in western Norway. It is built on a site overlooking the cultural landscape and local town center. The building is carefully adapted to an existing hillside between the built and natural environment, providing the church with an inspiring context of the surrounding heath landscape. Since it is located in a rural area, the form is inspired by the local tradition of Norwegian stave churches. Also, the facade is designed by strips of pine wood which blends with its natural and rural context.

Both churches are built in a similar climate. When we analyzed the site plans, it is easy to observe that they share similar quality which is the balance of nature and urban environment. However, when they switch locations, the bond they built with their own site appears. Tapiola Church, when relocated into Knarvik Church’s site, does not define the urban fabric. Besides, the Knarvik Church has a level difference which provides a stand-alone situation for the building. Also, its landscape is natural in contrast to Tapiola’s artificial landscape elements.

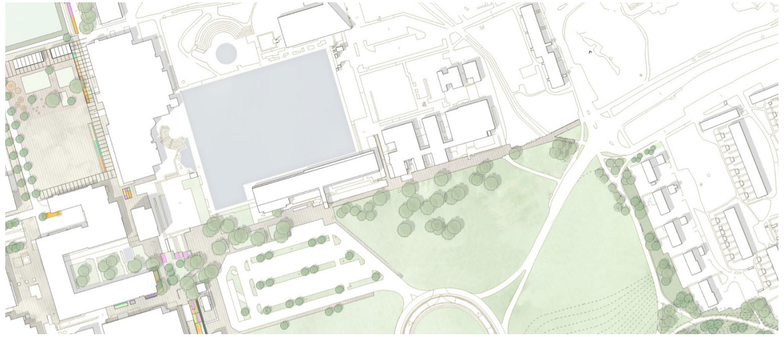


Image 10: Tapiola Church’s site plan

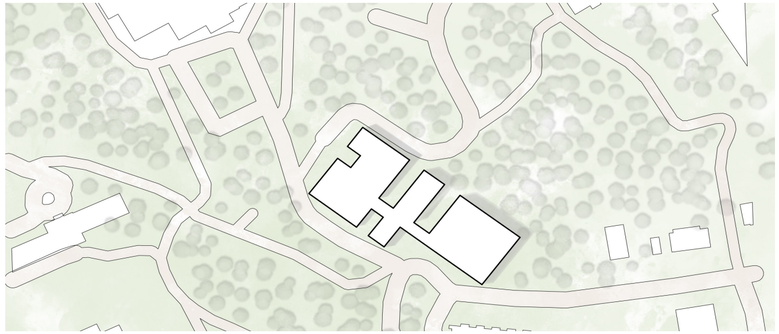


Image 11: Tapiola church on Community Church Knarvik’s site

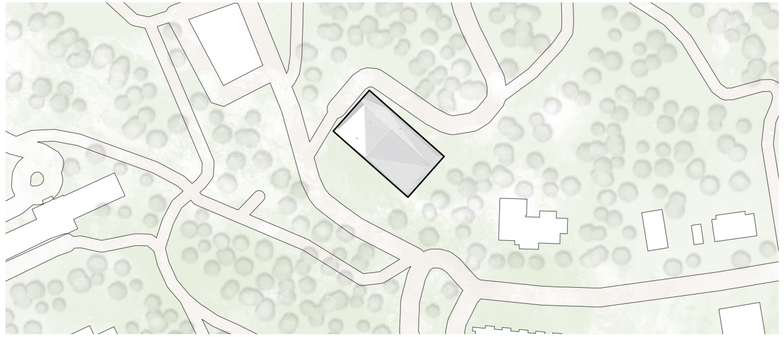


Image 12: Community Church Kravnik’s site plan

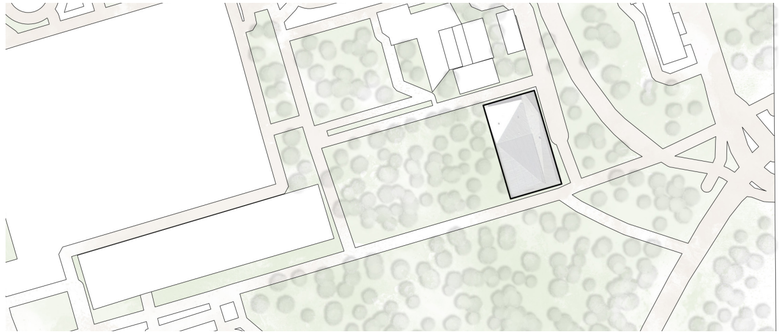


Image 13: Community Church Kravnik on Tapiola church’s site

Knarvik church is located on a rural area of the Knarvik. Although there are other built structures in the vicinity, the Knarvik church is placed in an open landscape.

Since there are few tall trees and high buildings in this neighborhood, the church represents itself through its angular timber structure. Although, its shape stands out of the flat natural surrounding landscape; it surprisingly works in perfect harmony with the environment.

Since both of the churches are located in the Nordic region and are inspired by the Nordic context, we wanted to see how they respond to the other surrounding environment.

As Knarvik church was designed for an open rural environment, we relocated the structure to the existing site of Tapiola church. It loses its characteristic in a dense urban environment. Its angular shape does not stand out anymore. It becomes invisible when it becomes surrounded by high-rise buildings and dense, tall trees.

We realized this building is designed specifically for the hillside by analyzing the changes. Knarvik Church is located at the highest level of the landscape, and it becomes a landmark both through its form and location. Additionally, its floor plan is in a basic rectangular shape that contrasts with the complex topography. However, Tapiola Church is located on a flat topography. Therefore, when we switch the location of Knarvik Church with the site of Tapiola church, the church loses its distinctive characteristics.

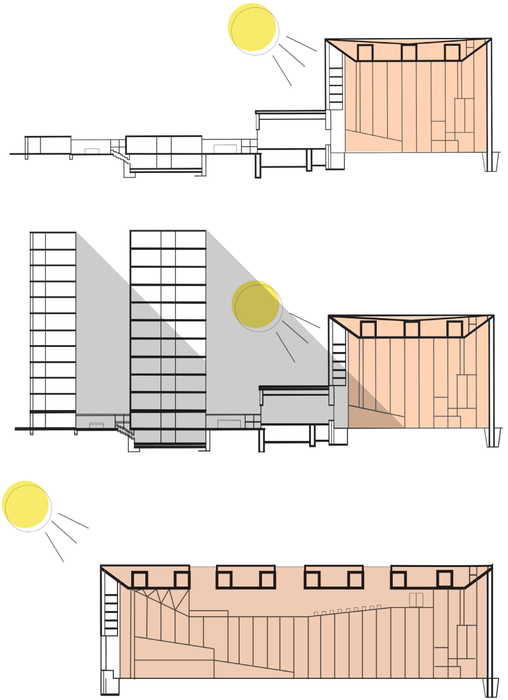


Image 14: Manipulating the section of Tapiola Church, transformed by authors

The structure's material and form choices, including the relationship with the surrounding, give the impression of a regular building in the city, not a sacred structure.

Church blends into the environment with the surrounding tall trees. The building does not stand out in the skyline. Concrete material creates the impression of a closed box, yet the windows on the façade reduce the amount of this impression.

The parish hall is lower in the hierarchy and has a rectangular shape. The club and office facilities are in the south-north and west from the next descending level in the hierarchy. Two courtyard areas follow a rectangular pattern between the club and office spaces.

The first section shows the original situation of the church. In the second image, the height difference not only blocks the amount of sunlight in the building, it also decreases the sense of courtyard. These high structures overshadow the effect of –sacracy- on the church hall.

In the third image, the Church Hall expands, the windows on the façade become less functional, as a result of breaking the sense of close box, and roof openings are needed to provide proper daylight for the interior space. Since, the main volume just expands, it can contain the other minor functions around the main volume within the roof of the hall, which can change the circulation.

Image 15: Tapiola Church, photo by Daniel Annenkov

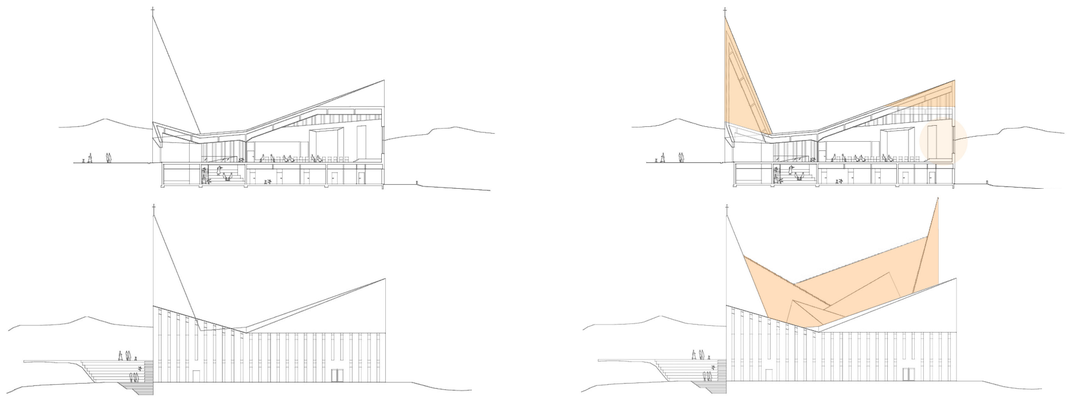


Image 16: Manipulating the section of Community Church Kravnik, transformed by authors

Knarvik Community Church is carefully adapted to an existing hillside between the built and natural environment, providing the church with the inspiring context of the surrounding heath landscape. Its distinctive and innovative character and central location make it a landmark in the community, inviting and inclusive for all people.

The building volume is split into two stories on a rectangular plan, separating the sacred spaces above from the cultural and administrative functions below. The internal "church square" connects the two levels with an atrium stair into a continuous space and may be joined or separated from the sanctuary with sliding glass walls to accommodate more than 500 people.

"The church's architecture, the spatial solutions, and the choice of materials combine religion, culture, and local history," explains Reiulf Ramstad. (Wood Magazine, 2015)

The church signals its function with a recognizable form, where the church spire, sanctuary, and chapel are emphasized by ascending roof planes.

On the outside, the most symbolic parts of the church – the steeple or belfry, the sanctuary, and the chapel – manifest themselves by means of folds that shoot upward, breaking the horizontality of the roof and giving the complex an appearance that is easily recognizable in the context.

"The roof of the church comprises three flat triangles that emanate from the spire. These triangles are all gently angled upwards, towards the sky – as if opening the church up to heaven."

As illustrated in the first section, the interior ceiling does not follow the roofs' angles; by exaggerating the internal angles, the focus from the circular opening and the baptismal pool and pulpit stand is taken away. Also, by exaggerating the exterior view via adding more sloped roofs, the main concept of the building, "Inspired by the local tradition of Norwegian stave churches," is not clear anymore; the modern interpretation of traditional churches suddenly becomes a messy form.

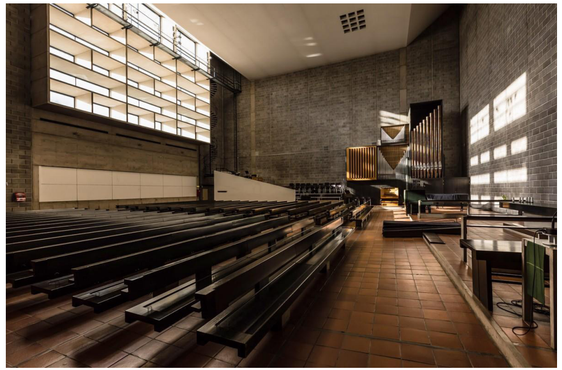


Image 17: Tapiola Church, photo by Daniel Annenkov

Image 18: Changing the material of Tapiola church, transformed by authors

Unlike the exterior concrete façade, in the interior, brick is the primary material. However, every surface in the main hall has different materials. Yet, the light is the thing that penetrates through the materials and defines a unity inside the volume.

Relationship with the outside is not observable from inside of the church hall; windows are located above standard human height. So, the windows have only the function of lighting the interior and creating a sacred atmosphere, instead of creating a visual connection with the sorrounding environment.

In this step, we wanted to use similar characteristics to Knarvik Church. Therefore, the walls' material are changed to wood. Consequently, the sense that the church creates is changed from industrial to warm athmosphere.

Because of the material the church hall is dark, and the light filter through the interior is defined on that dark surface. However, the church now has a brighter material, wood, and the light does not define the space. The sunlight does not have the same holy presence in the hall.

Even though the new sense of the interior gained by wood is clear, the new material exaggerate the disunity with the furnisment and floor. Therefore, in this scenerio where the interior material is changed, it would only be logical to create a harmony between surfaces through material choice.

Wood is the key material in this project, illustrated in all interior and exterior surfaces with the cladding of pre-weathered light-colored pine heartwood.

The sanctuary with sliding glass walls is the main area in Knarvik Community Church. Sanctuary has two visual connections, one through a glass sliding door with the church entrance/church square, and the other one is the visual connection to the surrounding natural environment via the narrow glass windows splayed in the plan to maximize admittance and reduce glare. At night, the warm glow of the interior reveals the activities of its religious and cultural events.

One of the main characteristics of this church is the harmonious use of materials on different surfaces. We decided to break this harmony by changing the ceiling's material to bright concrete and the walls' material to brick which is heavier and darker.

By changing the materials, the spatial characteristic of the sanctuary has changed.

Image 19: The original picture by Karl Heinz Putz Photograph

Image 20: Changing the material of Community Church Knarvik, transformed by authors

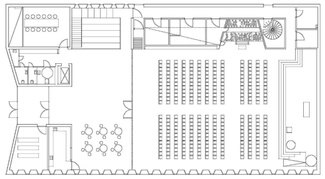


Image 21: Knarvik Church, ground floor plan

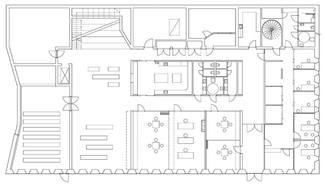


Image 22: Knarvik Church, basement floor plan

Image 23: New addition proposal, image produced by authors

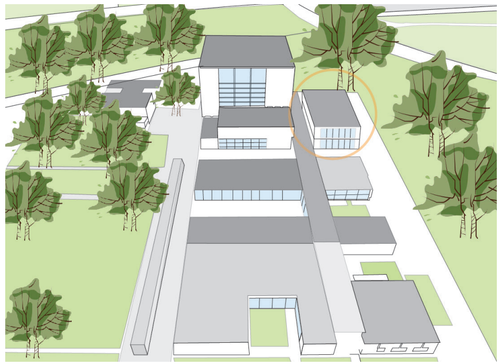


Image 24: New addition proposal, image produced by authors

As we discussed the study cases through the course, the main focus of our discussion was just as much about
the materiality and the exterior form as about the interior special solutions. Both study cases are religious buildings, and they are surrounded by vast natural environment and public spaces, but the overall impression is different.

Although the Knarvik community church is surrounded by a built environment, its surrounding is quite different from Tapiola. In the Knarvik church, it is the building that works as an organizer for its neighborhood, Knarvik is the landmark that invites people to join the introverted community. However, all the analyses are much focused on its materiality and exaggerated form.

We decided to add an external expansion to Knarvik church to see how its spatial interaction with the environment will change. Since one of the considerations in the design of the Knarvik community church was to create a place where people from different age groups could interact with each other, we decided to add a kindergarten to the hillside.
After adding our expansion, we realized even if the new building follows the same language and spatial form of the Knarvik Church, its existence would change the spatial characteristic of the Knarvik Community Church. The Knarvik Church by itself sits as an individual form on the hilltop. Therefore, the addition creates a negative impact on the landmark quality of the church. Also, this additional form blocks the open view from the church towards the village, as well as the view from the neighborhood to the church. Consequently, its unique distinctive character vanishes.

The Tapiola church is located in a dense urban environment, yet with its surrounding trees, it also has the sense of being with close interaction with its surrounding environment, Like the Knarvik community church.

However, unlike Knarvik Church, the Tapiola Church looks like a regular building complex, rather than a sacred structure. Concrete is the main material of this building which illustrates that the structure belongs to the modern era. Because of the rectangular form of the buildings and their arrangement on the site plan, nothing stands out from regularity.

For the extension, we decided not to break the existing pattern of the site plan, building arrangements, and the hallway that connects the structures. The extension is similar in scale to the other units of the church, and it is located in the available area in the site plan.

The Tapiola Church is located in a highly approachable area. Therefore, the extension unit can be used as a coffee shop, library, or both, for people in the area to use anytime.

References:

Ramstad, R. (2014, December 8). Community Church Knarvik. Retrieved 7.12.2021 from https://www.archdaily.com/574811/community-church-knarvik-reiulf-ramstad-arkitekter ISSN 0719-8884

ArchDaily. (2012, March 10). The Chapel of Rest in Graz" Retrieved 7.12.2021 from https://www.archdaily.com/233292/the-chapel-of-rest-in-graz-hofrichter-ritter-architects ISSN 0719-8884

Clare Casassas, C. (2019). The Norwegian stavkirke.

Mairs, J. (2014, 1 December). Reiulf Ramstad completes wooden church with a grand spire beside a Norwegian fjord. Retrieved 7.12.2021 from https://www.dezeen.com/2014/12/01/reiulf-ramstad-arkitekter-community-church-knarvik-norway-timber-spire/

Tapiola Church. Retrieved 7.12.2021 from https://finnisharchitecture.fi/tapiola-church/

Forés, J. J. F. (2019). (2019)Aarno Ruusuvuori. Constructivismo. In Actas del Úndécimo Congreso Nacional de Historia de la Construcción: Soria, (pp. 369-382). Instituto Juan de Herrera.

Bredhe, E. (2015). Pine warms futuristic landmark. Retrieved 7.12.2021 from https://www.swedishwood.com/publications/wood-magazine/2015-1/pine_warms_futuristic_landmark/

McManus, D. (2020, August 28). Knarvik Church. Retrieved 7.12.2021 from https://www.e-architect.com/norway/knarvik-church

Szilágyi, K., & Sand-Eriksen, A. (2021). Medieval Norwegian Wooden (Stave) Churches: Built Heritage and Places of Memory. Hungarian Archaeolog, 10(1), 30-40.

Image references:

Image 1: larryspeck.com, Retrieved 7.1.2021 from https://larryspeck.com/photography/tapiola-church/

Image 2: behance.com, Retrieved 7.1.2021 from https://www.behance.net/gallery/82766331/Tapiola-Church-1965-Aarno-Ruusuvuoren

Image 3: Tapiola Church. Retrieved 15.12.2021 from https://finnisharchitecture.fi/tapiola-church/

Image 4: archdaily.com, Retrieved 7.1.2021 from https://www.archdaily.com/574811/community-church-knarvik-reiulf-ramstad-arkitekter?ad_medium=gallery

Image 5: riksantikvaren.no, Retrieved 7.1.2021 from https://www.riksantikvaren.no/en/world-heritage/urnes-stave-church/

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TAPIOLA CHURCH & COMMUNITY CHURCH KNARVIK
CONCLUSION
EZGI SAMANCI, MARYAM HEIBATI, SILA KARTAL
CONTEMPORARY NORDIC ARCHITECTURE 2021

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