

A glimpse of the cultural history of the built environment and ages of building

Aalto ARTS Summer School 2023
Pre-assignment 1 – Site analysis

Politecnico di Milano

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INTRODUCTION

Structure of our work



1 /
Our team

OUR TEAM

Politecnico di Milano team



Valentina Callegari

Digital Interaction
Design



Camilla Indelicato

Integrated
Product Design



Emma Michel

Integrated
Product Design



Samuele Sala Veni

Product Service
System Design



Jiayu Wu

Industrial Design &
Product Service
System Design

2 / *Overview*



OVERVIEW

Aalto University

Aalto University, located in Espoo, Finland, was established in 2010 through a strategic merger of three major Finnish universities: Helsinki University of Technology, Helsinki School of Economics, and University of Art and Design Helsinki.

The overall vision of the Otaniemi campus was conceived by **Alvar Aalto**. He, along with other celebrated Finnish architects such as **Reima** and **Raili Pietilä** and **Heikki** and **Kaija Sirén**, designed several buildings that remain significant landmarks on the campus today.



HISTORY

Historical development



Pre-university stage (Before 1940s)

Otaniemi, a **former manor** with a rich history, became a university campus after the founding of Helsinki University of Technology in 1849. The university relocated to Otaniemi in the 1910s for more space, and the current **Undergraduate Centre** now occupies the site of the former Otaniemi Manor.



The Alvar Aalto Era (Late 1940s - 1972)

Otaniemi Manor's lands were acquired by the State in 1949. In the 1950s and '60s, Alvar Aalto's architectural vision shaped Otaniemi into a prominent Finnish site. Aalto and other notable architects designed key structures like the main building, **Otahalli**, **Servin Mökki restaurant**, dormitories, chapel, and **Dipoli**, a renowned congress venue.



Post-Alvar Aalto Era (1972 - Present)

As Espoo grew, gaining town status in 1972 and eventually becoming Finland's second largest city, the campus followed suit. This period saw the introduction of **new architectural styles**, with a blend of historic reverence and modern aesthetics, such as the Väre building for the School of Arts, Design and Architecture, and the School of Business building.

HISTORY

The Hagalund manor

The village of Otaniemi, according to tax documents from 1540 included three houses and was part of the Hagalund manor. For centuries, the area served as a park and farmland until the 1940s.

In 1949, the Government of Finland acquired the lands of Hagalund Manor to establish The Helsinki University of Technology and the VTT Technical Research Centre of Finland on these grounds.





From the 1960s onwards, Hagalund land was also sold off as additional land in the Otaniemi catchment area. The surroundings of the manor house have subsequently been transformed by the constructions.

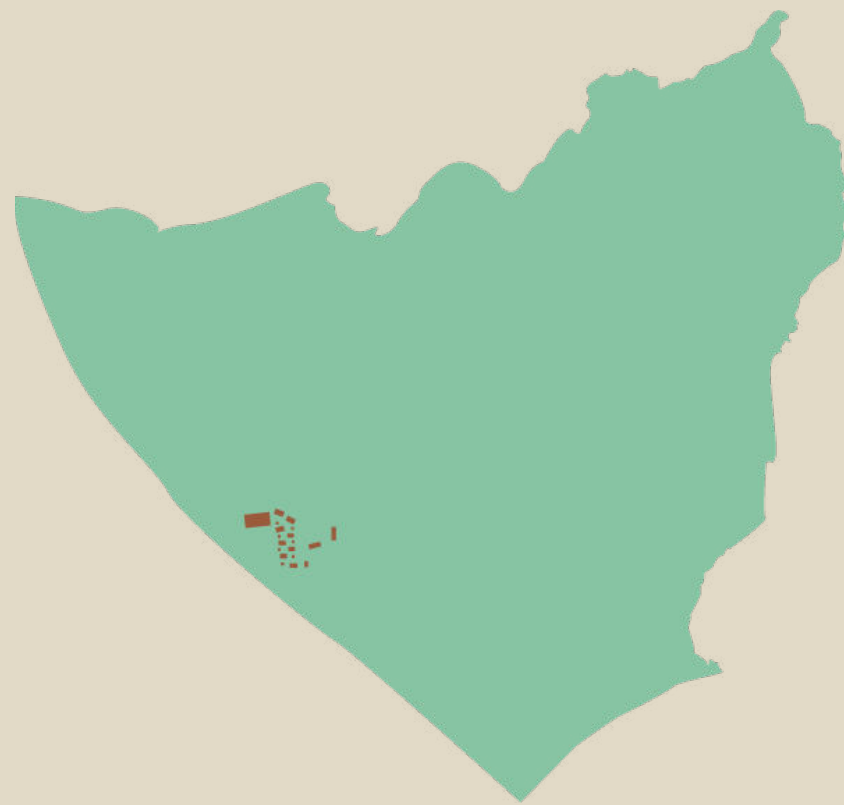
Today, some remnants of Hagalund Manor's rich history can still be found among the modern facilities of the Aalto University campus and continue to be an integral part of Otaniemi's identity.



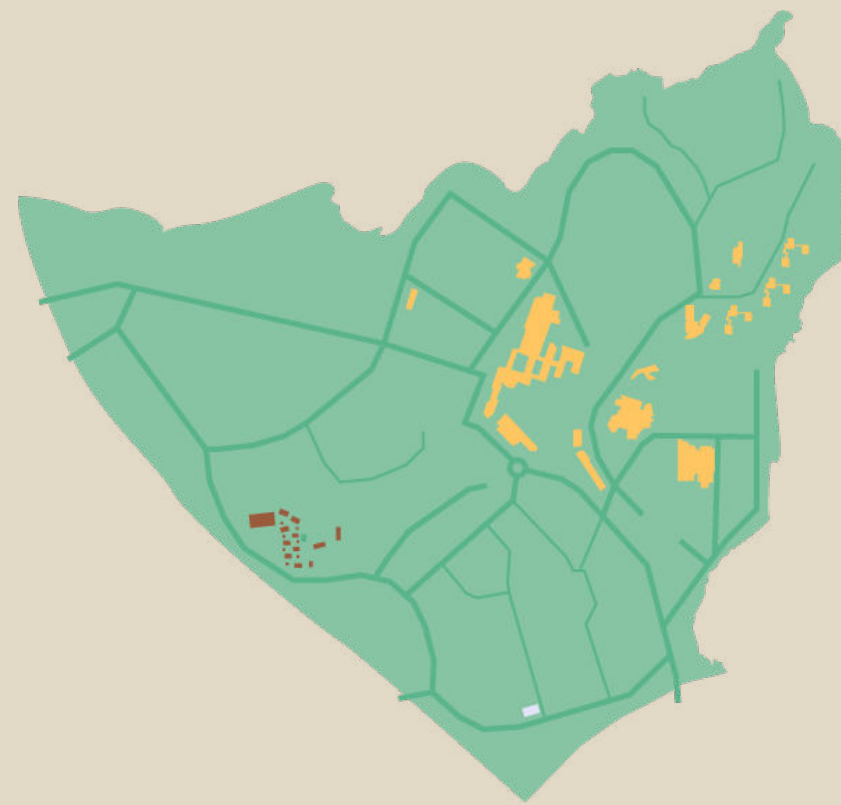
OVERVIEW

Map of the area

-  Hagalund manor
-  Aalto era buildings
-  Existing buildings
-  New buildings



Pre University era
Before 1940s



Alvar Aalto era
late 1940s - 1972



Post Alvar Aalto era
1972 - Present

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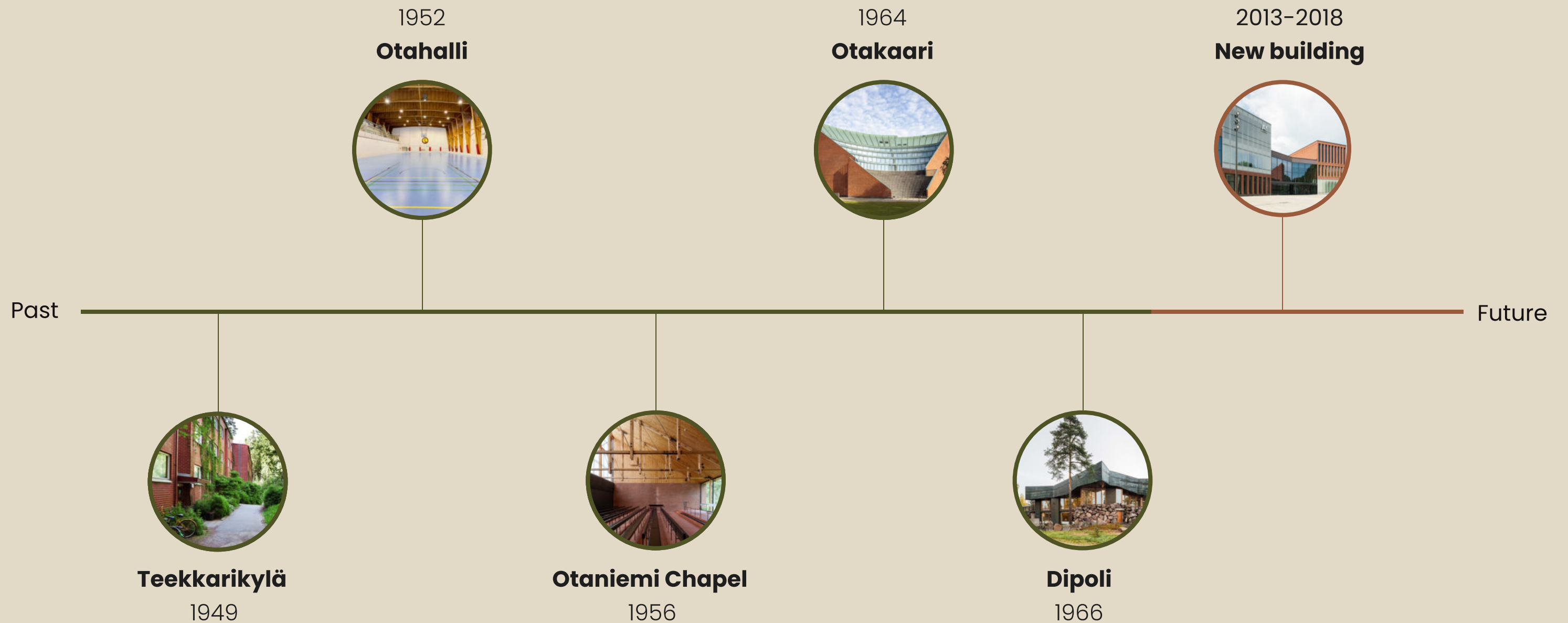
History and timeline



HISTORY OF THE BUILDINGS

Timeline

- **The Alvar Aalto Era** (Late 1940s - 1972)
- **Post-Alvar Aalto Era** (1972 - Present)



HISTORY OF THE BUILDINGS

Teekkarikylä

Architects: **Heikki Siren and Matti Melakari**Construction's year: **1949**

Function: The first Otaniemi's campus building to be built where nine student buildings. This construction project also saw the world's largest voluntary student effort. Students of technology cleaned 800,000 bricks to be used as building materials for their student dorms. The bricks were originally from the embassy buildings situated in the Soviet Union that had been bombed during the Second World War. Nowadays, Teekkarikylä student housing has been enlarged.

Good to know:

After the Second World War, Finland needed more engineers as the need for industry and technological research grew. The Helsinki University of Technology needed larger laboratory facilities, so the state purchased the Otaniemi estate and its extensive farming areas in Espoo municipality.



In 1949, The construction of Otaniemi's student housing started in an area in the middle of the forest. In 1942, the houses became a part of the Olympic village.




HISTORY OF THE BUILDINGS


Otahalli

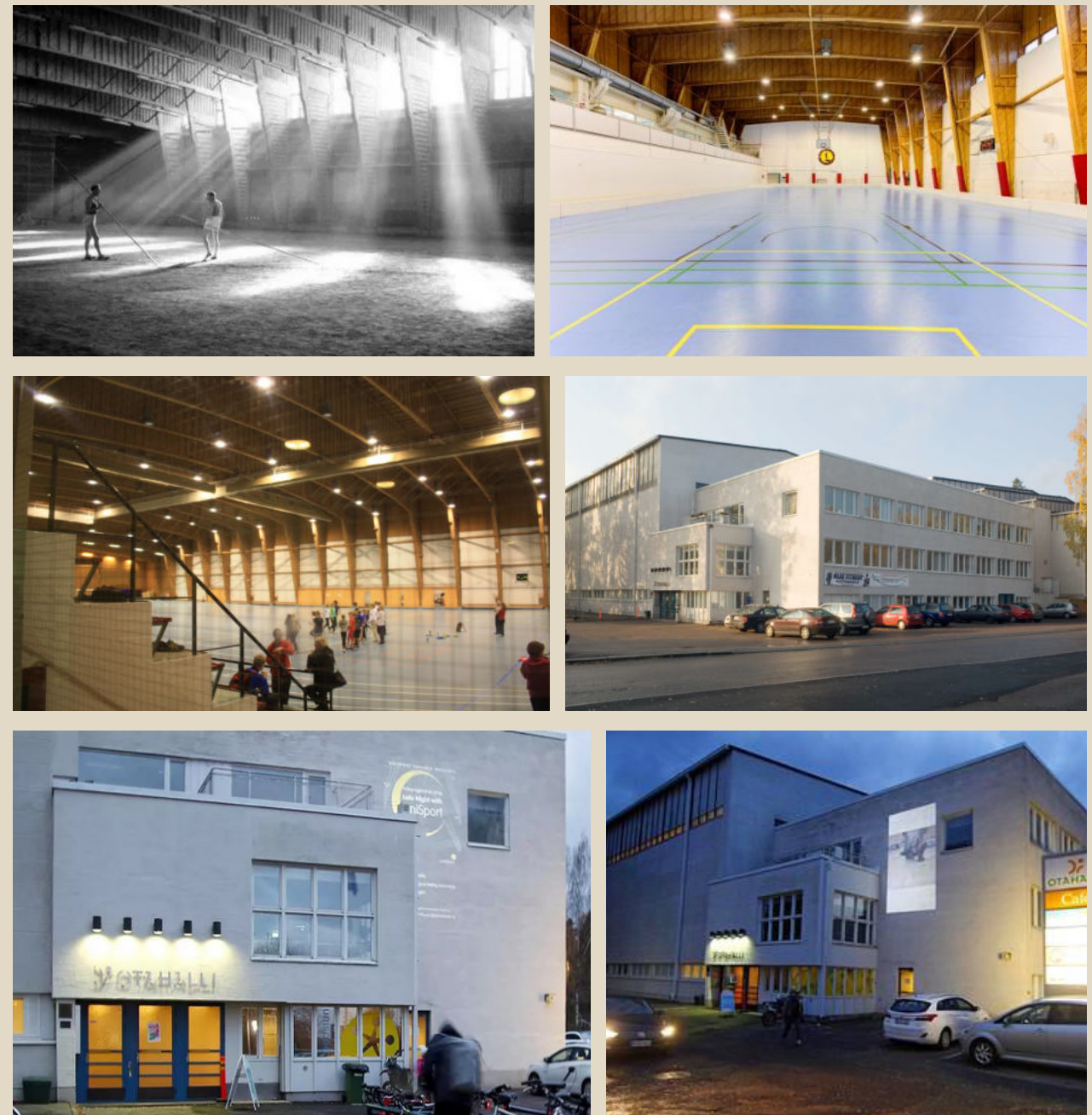
Architects: **Alvar Aalto**Construction's year: **1949-1952**

Function: Built for the Olympic Games Helsinki in 1952, the building is two volumes united by the ends with spaces for meeting room and sauna. The top of an Olympic track and spaces for athletics, 3 grass courts for tennis, skating area, two basketball courts and two jogging tracks. On the ground floor a living boxing with changing rooms. In the grandstand area for spectators, is an area designed to communicate the different areas of the stadium.

Good to know:

 Alvar Aalto began the development of the new campus in 1949, but the Olympic Games forced the architect to design and complete the construction of the Pavilion Sports and would become the center of the college sports sector.

 The Otaniemi Sports Centre was the largest hall building in the country at the time with its wooden beams span that measure 45 metres.



HISTORY OF THE BUILDINGS

Otaniemi Chapel

Architects: **Kaija and Heikki Siren**

Construction's year: **1956**

Function: The Otaniemi chapel is a small masterpiece by the architects Kaija (1920–2001) and Heikki (1918–) Siren. The Chapel stands in a forest glade on the highest point of the peninsula of the Helsinki University of Technology. It has been a world-renowned and award-winning architectural site address.

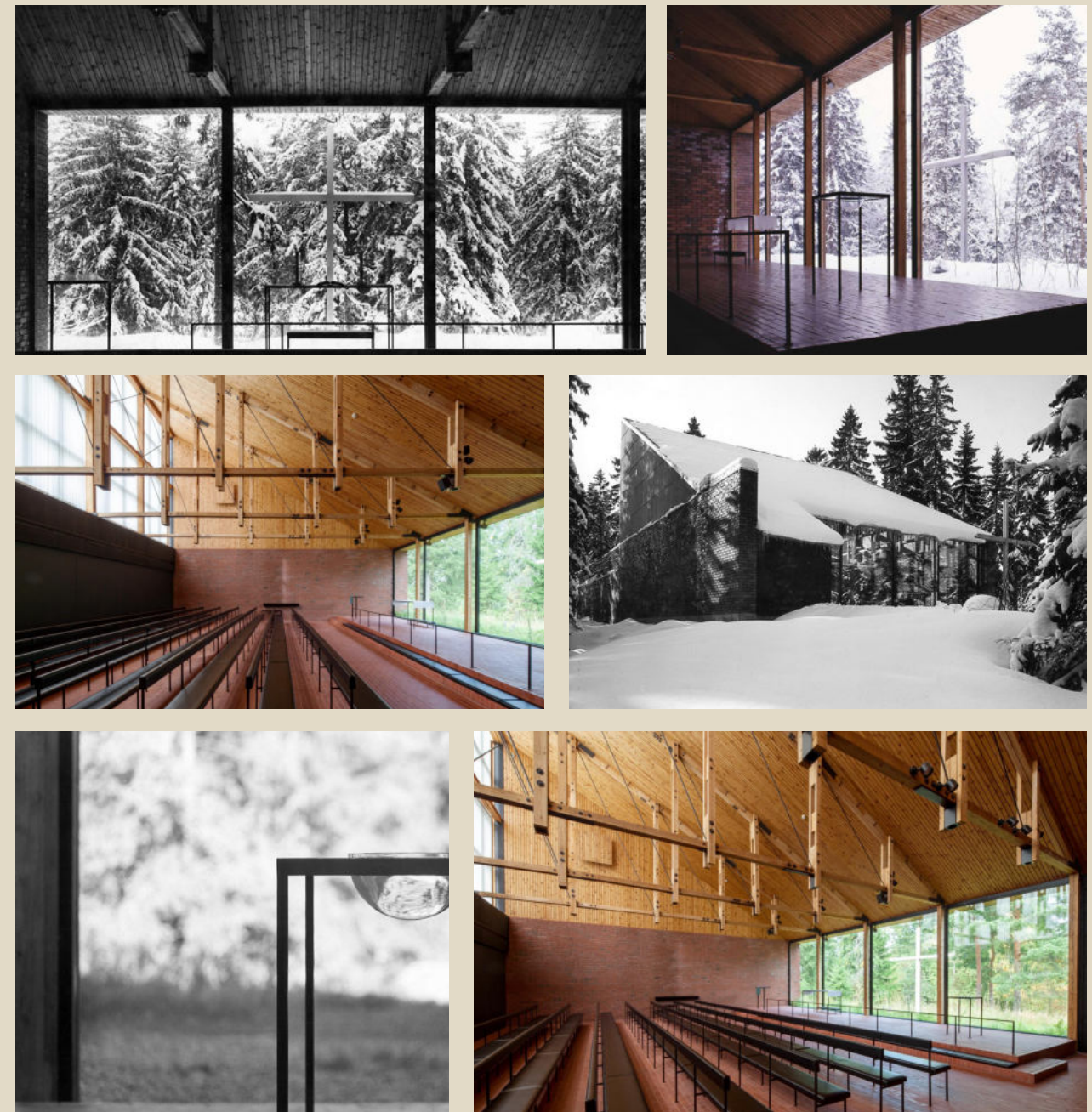
Good to know:



The simplicity and transparency of the building draws revelation of the sacred from nature and confers sense and measure on a space that provides an educational experience, spiritual and social, cultural and musical, for the entire community of families and students.



The first Christmas service was held in the chapel in 1956.



HISTORY OF THE BUILDINGS

Otakaari


Architects: **Alvar Aalto and Elissa Aalto**


Construction's year: **1964**

Renovation's years: **2015**

Function: The Undergraduate Center was originally built to serve as the main building of the university and nowadays it is still one of the landmarks. In total it offers over 10 auditoriums and smaller classrooms for meetings and workshops.

Good to know:

 The building's auditorium is reminiscent of ancient Greece. The roof of the auditorium continues towards the park in the form of an amphitheatre, and the red bricks remind the old Finnish industrial architecture.

 In 2015 the building was renovated with user diversity in mind, and it received the Esteetön Suomi (Accessible Finland) award.



HISTORY OF THE BUILDINGS

Dipoli



Architects: **Raili and Reima Pietilä**

Construction's year: **1966**

Renovation's years: **1980s, 2017**

Function: Dipoli is Aalto University's main building, known for its multifunctional spaces and as a meeting place. It has served as the student house of Helsinki University of Technology for a long time and successively as a conference centre for several decades. Nowadays the building continues to being used for the university's own events, but some of its facilities are also open to the public.

Good to know:

-  The building has only two identical windows, as the rhythm of the windows is in sync with the surrounding forest.
-  Dipoli in Espoo faced challenges due to the rocky terrain and the need for highly flexible facilities in the student house. The architecture competition held in the early 1960s didn't produce a winner as none of the entries fully met the specified requirements.



HISTORY OF THE BUILDINGS


New Building


Architects: **Verstas Architects**

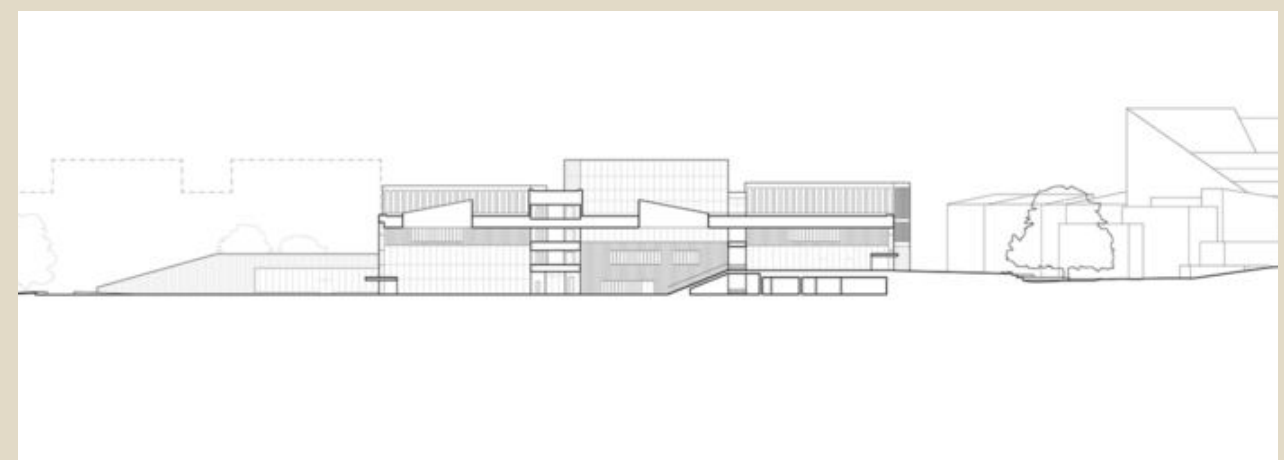
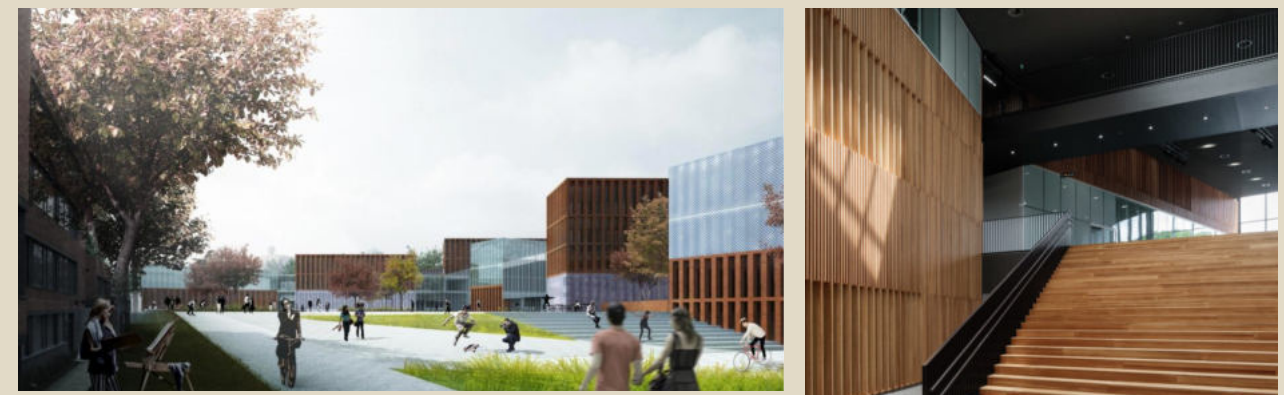
Construction's year: **2013–2018**

Function: Verstas Architects is designing a new building for Aalto University. It will enclose the campus area with a public square forming a heart, together with the former main building and library. The edifice, segmented in terms of scale to resemble a village, openly conjoins the operations of the university with their environment communicating the message of Aalto University's values.

Good to know:

 Adaptable and flexible learning spaces are arranged around sky-lit atriums. Workshops are on the ground floor, meeting areas and project spaces above. Clad in sturdy red brick and light printed glass, the building complements Alvar Aalto's original Otaniemi campus.

 The central square will become the focal point of the campus, surrounded by the new Aalto University building, metro station and the existing key buildings by Alvar Aalto.



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