

ARCHIVED MONUMENTS

A Speculative Reconstruction of the Jubilee Exhibition 1923

by Axel Christensen

Master's Thesis Spring 2023
Chalmers School of Architecture
Department of Architecture & Civil Engineering
Master's Programme in Architecture and Urban Design

Supervisor: Karin Hedlund
Examiner: Daniel Norell

*"Vet du", fortsatte Vendela medan hon lät blicken svepa uppåt de randiga
Minareterna. "Jag tror faktiskt inte att de river det här. Alla byggnader, allt arbete.
Nu när Göteborg äntligen har blivit en riktig stad. Det kommer att förbli såhär, det
är jag säker på."*

- Hermanson, M., (2018)



CHALMERS
UNIVERSITY OF TECHNOLOGY

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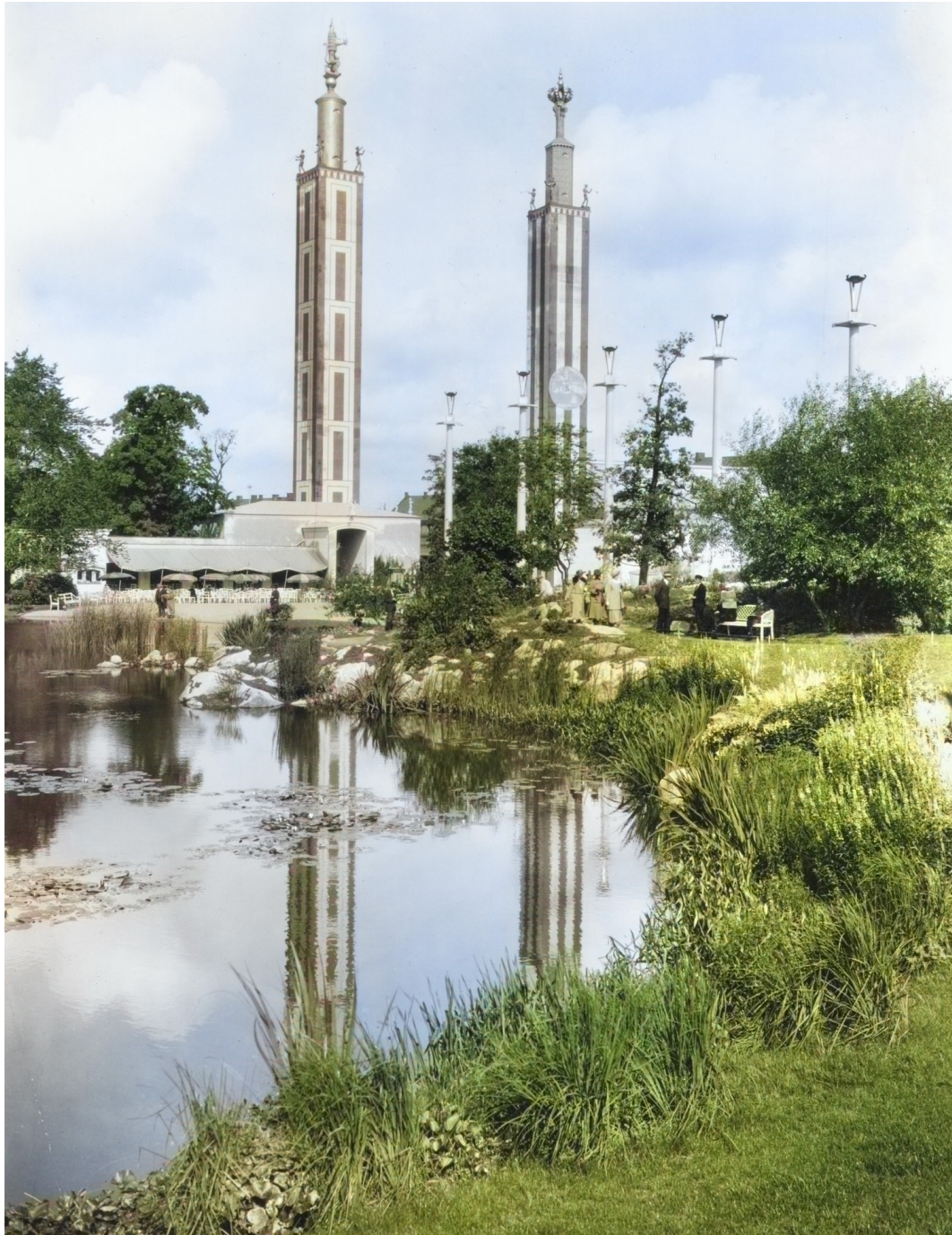


FIGURE I. THE MINARETS AT THE JUBILEE EXHIBITION 1923

The Minarets at the Jubilee Exhibition 1923. Photograph colourised with AI by the author
Original photograph: ArkDes digital collection, unknown photographer (1923)

ABSTRACT

The point of departure for this thesis was a curiosity for architecture history and the built heritage. A site with few visible traces of what had been in the past proved to be the place of an important historical event in 1923 - The Jubilee Exhibition in Gothenburg. The subject of reconstruction came to be the area of interest in order to research the site and the jubilee architecture.

Studies and categorisation of archival material in the form of photographs, drawings and texts were performed in order to provide a basis for a reconstruction. This proved to be of vital importance since none of the temporary buildings built for the exhibition stand today. Reconstruction does not provide one simple solution applicable to all cases. Design strategies were developed during the process through case studies and a number of design explorations. The design approach within this thesis is to execute the reconstruction on its original site, where the jubilee architecture coexists with the current conditions.

Alois Riegl's theories on monuments became very helpful in order to analyse the archival material and the Jubilee Exhibition. Since the archival material is the only recollection of the Jubilee Exhibition's existence, they become the new monuments. Therefore, this thesis is a reconstruction of representations rather than a reconstruction of the original buildings as such.

The result is a reconstruction of the Jubilee Exhibition 1923 that is coexisting with the current buildings and infrastructure at its original site. Some parts are possible to reconstruct relatively intact without causing damage on existing buildings or disturb for example bike lanes. As far as possible, the reconstruction is programmed to contribute to encourage people to explore. In other cases, only material, colour or expression are possible to reconstruct.

Keywords: monument, archive, reconstruction, jubilee exhibition

THANKS TO

Camilla and Nerma for lots of laughter and happy memories.

Karin, as supervisor for interesting conversations, encouragement and guidance throughout the process.

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Peter, Tabita and Per in the workshop for all the tips and tricks in model building.

Friends and family for always being there.

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STUDENT BACKGROUND

AXEL CHRISTENSEN

09/2022-01/2023	<i>Chalmers University of Technology, Gothenburg</i> - Master's Thesis preparation course 1, 4,5 ECTS - Master's Thesis preparation course 2, 3,0 ECTS
09-12/2022	<i>Spring Arkitektkontor, Gothenburg</i> Architectural intern
04-09/2022	<i>Victoria von Gaudecker Architektur, Munich</i> Architectural intern
10/2021-03/2022	<i>Technical University of Munich</i> Exchange studies in Architecture - Studio Krucker & Bates, 15,0 ECTS - The Art of Inhabitation, 3,0 ECTS - Lost and Found: Staging Heritage for Future, 6,0 ECTS - Architectural analysis, 6,0 ECTS
2020-2021	<i>Chalmers University of Technology, Gothenburg</i> Architecture and Urban Design (MPARC) - Matter Space Structure 1, 22,5 ECTS - Sustainable Development and the Design Professions, 7,5 ECTS - Nordic Architecture, 4,5 ECTS - Gender and Norm Critical Design, 3,0 ECTS - Residential Housing - Housing nventions, 22,5 ECTS
06-08/2020	<i>Lidköping Municipality</i> Architectural intern
2017-2020	<i>Chalmers University of Technology</i> Bachelor in Architecture, 180 ECTS
1995	Born in Lidköping

PREFACE

In September 2022, I strolled in central Gothenburg and happened to end up in Renströmsparken, a place I rarely visit, despite its very central location. It felt a calm and green oasis in the middle of the city. The calm atmosphere was slightly disturbed by people in high visibility clothing and excavators parked here and there, almost eager to start working.

Being on a place I barely had visited before, I ended up thinking about what had been on this place through the history. Sitting on a bench and searching on the internet about the site I realised that this was the location of the Jubilee Exhibition 1923. How appropriate, I thought, that next year is the big celebration year of Gothenburg's 400th anniversary.

My curiosity arose straight away, since it was something I only had heard briefly about during lectures at the University or read about in a book. When I searched for information I ended up with a number of photographs, drawings and other kind of sources that told the story about the Jubilee Exhibition. Very few physical traces or clues about this event on this place almost were to be found. It almost seemed unreal...

THESIS STRUCTURE

RESEARCH QUESTIONS

- i How can archival resources in the form of photographs, drawings and texts be used as a basis for reconstruction of architectural monuments?
- ii How can a reconstruction of the Jubilee Exhibition 1923 be designed through adaption to the current conditions at its original site?

PURPOSE AND AIM

This thesis aims to find methods on reconstruction of architectural monuments. The purpose of the reconstruction is mainly pedagogical; to explain and inform about different aspects of the Jubilee Exhibition 1923. As with all cases on reconstruction, there is no general solution applicable on all cases. This thesis will be a part in the overall debate and discussion about reconstruction, trying to bridge the gap between past, present and future.

DELIMITATIONS

Some existing buildings at the site have been demolished during the time working with this thesis. Due to the fact that drawings and site analyses were made before this, this thesis lies within those analyses. The change of conditions at the site during the process has been noted but not taken into account.

This thesis will not follow the detail plan for the area issued by the municipality. The different explorations performed within this thesis are of higher importance.

The project will not try to find a general framework for how to incorporate exhibition architecture in general into the urban fabric. Instead it focuses particularly on the case of the Jubilee Exhibition in Gothenburg 1923.

READING INSTRUCTIONS

The first chapter (I) provides general information about of the site. The second chapter (II) is an overview of exhibitions through history with a particular focus on the Jubilee Exhibition 1923. The third chapter (III) contains different case studies on reconstruction and how different methods on reconstruction can be applied in a design process. Chapter four (IV) demonstrates the different performed design explorations within the subject of this thesis. Finally, in Chapter five (V) is the physical intervention described.

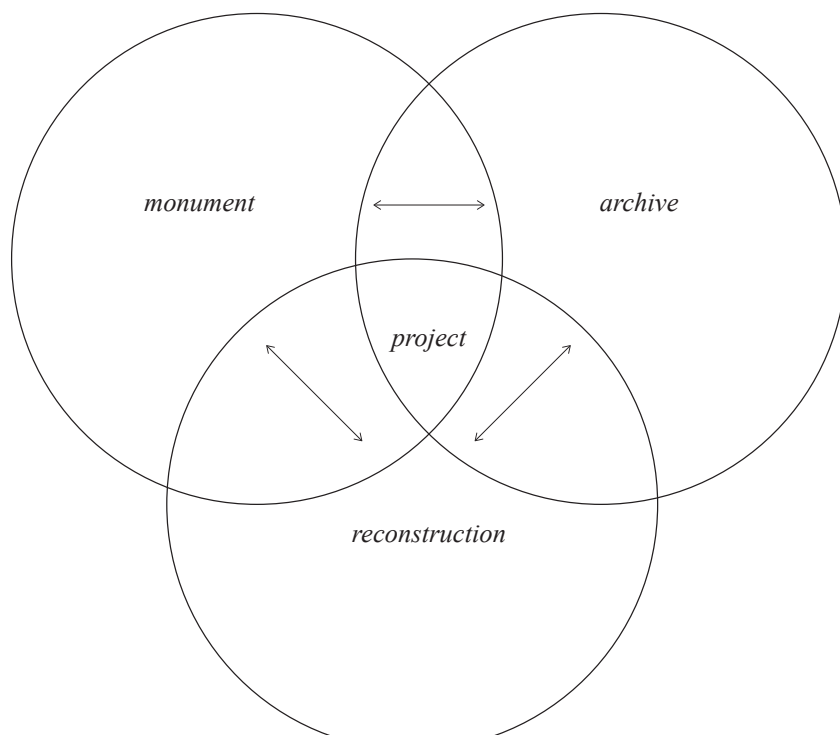
THESIS STRUCTURE

METHOD

This thesis is a research and design project. Since the subject of reconstruction is so closely connected with historical records, the study of archival material has been the basis for this thesis. In order to gain a deeper understanding about the archival material, the material was mapped out and categorised, new drawings produced and compared with the modern context.

The study of archival material and the production of new drawings and other representations are conducted in parallel with each other since new information is constantly discovered which could be important to paint a more nuanced picture. One document can contain some information but in order to complete the full picture may another document such as a photo fill in information that is missing.

The combination older works and newer ones can provoke a contemporary reading of the older artworks (Schwab, n.y.). Therefore has the jubilee architecture continuously been compared with the present conditions at the site. A combination of the two, so called superimposition, has been an important tool throughout the process.



THESIS STRUCTURE

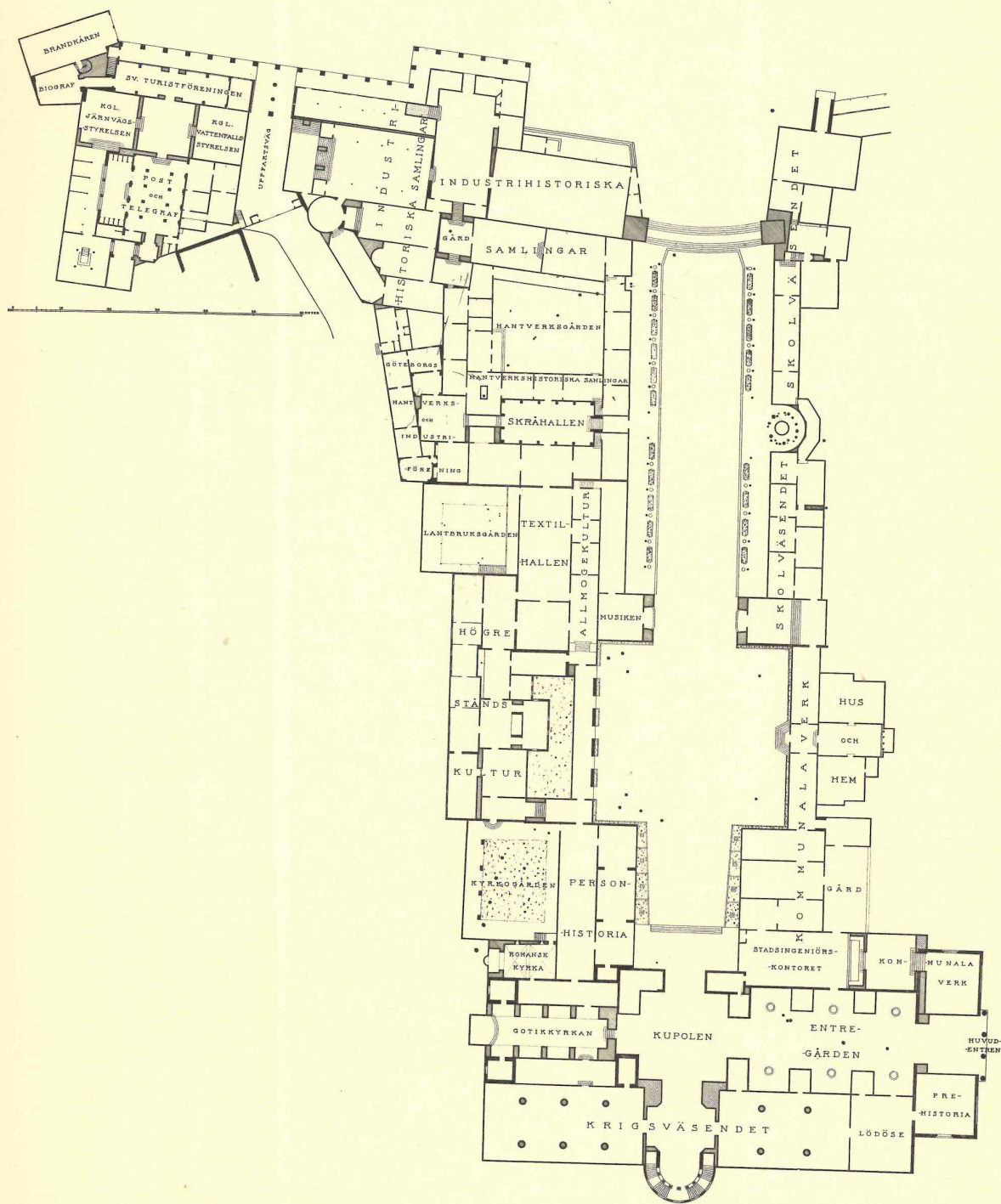
SOURCES

The Jubilee Exhibition in Gothenburg 1923 is surprisingly poorly documented. Some original drawings are preserved in different archives in Sweden, among them Regionarkivet in Gothenburg. Several drawings have also been digitalised and are available at the "ArkDes Digitalt Museum". Other drawings were published in an official publication 1930, written by the architects Sigfrid Ericson and Arvid Bjerke.

A wide selection of photographs taken at the exhibition are also an important source of information. Many of these are available to the public at Regionarkivet in Gothenburg and the digital collections at ArkDes. Several of the photographs show information that are not visible in the digitalised drawings, which makes them an important complement to the drawings. Some photographs were also published in the jubilee publication by Ericson and Bjerke.

Texts describing the Jubilee Exhibition 1923 are another important source. Since the photographs were taken in black and white can colour descriptions be read from texts. The architecture magazine *Byggmästaren* from 1923 contains detailed descriptions by several prominent architects at the time. Some drawings are also available in *Byggmästaren*, although they are in small scale (for example 1:600). For other descriptions, the jubilee publication by Ericson and Bjerke was an important source of information. A more recent publication about the Jubilee Exhibition is the dissertation *Teknikens Tempel* by Anders Houltz from 2003.

Together they make the basis of this thesis. If one of the sources were missing, a reconstruction would not be possible. Drawings, naturally, are an important source when it comes to location, building heights, ornaments, and room configurations. The photographs sometimes show details which are not visible in the drawings but it can also be the other way around, that a drawing can fill in information which is not visible in a single snapshot. Finally, texts are the last piece which can fill in the full picture. Exhibition visitors have written down their experience, architects have made their review on the project, and scientists have tried to research the subject in more recent times.



Plan av minnesutställningen.
Området från huvudentrén till stora gården.

FIGURE II
Plan drawing of Exhibition area as published in Ericson and Bjerke 1930.

Scale unknwn

PROJECT BACKGROUND

INTRODUCTION

This project originates, as well as the reasons stated in the preface, in the fruitful projects in the past when existing architectural projects in detail were examined and studied. Drawings were made, models were built and compared with the context which was at hand for the actual project. A better understanding of examples from the past was gained, existing but perhaps forgotten artifacts were brought into new light, but most of all how our cultural and historical heritage could be used and adapted into a more contemporary context.

In a time of destruction there lies a frustration among several architects that not enough research is made on existing or already destroyed monuments. Many will agree that we should not rebuild all of our already destroyed heritage. However, a more nuanced discussion about our collective heritage could contribute to a better understanding of the reasons for the destruction of monuments as well as the monuments themselves in order to justify what can be destroyed in the future.

An aspect often raised when dealing with our built heritage and reconstruction is the one about originality; what is the original? Plevoets and van Cleempoel describes in the text *Adaptive reuse of the built heritage: concepts and cases of an emerging discipline* from 2019 three different intervention strategies when working with the relationship between a model (the original) and a copy: *translatio*, *imitatio* and *aemulatio*. *Translatio* uses the model as a starting point and aims for similarity in one way or another. *Imitatio* aims to be equal to the original rather than to be similar. Finally does the term *aemulatio* aim to not only use the model but also improve it. This means that you first need to translate in order to learn and create understanding about the original, then imitate once you have mastered the rules creating the original and finally, once you are able to interpret the original more freely and also involve adaptation, you can proceed to the final step in the process; to critically change the original in order to improve it.

PROJECT BACKGROUND

DEFINITION OF A MONUMENT

A monument is in its most profound sense a human creation in order to keep single deeds by a person or an event alive and convey this message to future generations (Riegl, 1982). The monuments can be both literary or artistic. When judging a monument there are two key elements that need to be answered: does the object in question have a historical or an artistic value?

"It is important to realize that every work of art is at once and without exception a historical monument because it represents a specific stage in the development of the visual arts. In the strictest sense, no real equivalent can ever be substituted for it."

- Riegl, A. (1982)

<i>Artistic value</i>	Subjective definition, agreed individually or agreed by a collective or an entire society.
<i>Historical value</i>	Everything stays in the continuous line of history and is therefore irreplaceable.
<i>Art-historical value</i>	An artifact with historical value and due to its rarity also carries artistic value. In these cases, the two values become inseparable since the latter both contains and suspends the first.
<i>Intentional monument</i>	A monument or a piece of art created with the intention to make it a monument or a piece of art.
<i>Unintentional monument</i>	The modern perception of the monument that turns it into a monument, not its original purpose or significance.

How can the Jubilee Exhibition 1923 be categorised through the above definitions by Riegl? Undoubtedly is it a historical monument due the fact that it is a part of our history. Is it an intentional monument with the intention of being destroyed? If that is the case, the monument is both accepted and discarded simultaneously by the same collective. The original buildings do not stand today, however, the different representations which were the basis for the construction from the beginning, remain to this day. Since these documents are the only recollection of the exhibition are they rare enough in order to be transformed into the new monument.

PROJECT BACKGROUND

TO LEARN FROM HISTORICAL ARTIFACTS

Adrian Forty describes in his inauguration lecture that every representation of an architectural artifact is a new dimension of the original (Borden, Fraser and Penner 2014). A work of art is never finished and as long as new pictures and representations are created of the original, the work will always be in constant development. This means, in the case of the Jubilee Exhibition 1923, that the architecture was not destroyed but rather "resting", waiting to be rediscovered and explored.

The research of architectural history is two-folded; firstly using the experience of examining the work in question and secondly to let theoretical statements question and dispute it (Seelow, A-M., 2016). Fredrik Nilsson describes it in the foreword to *Reconstructing the Stockholm Exhibition 1930* from 2016:

"[...]the development of architecture and its knowledge to a large extent goes through this thinking through material objects and simultaneous construction of physical artifacts and theoretical concepts - and that we need both to think and create architecture."

Although repetition traditionally serves as a method to establish and repeat ideas, repetition also destroys the original meaning of the work in question (Jacobs, S., 2012). Jacobs also means that architecture not only illustrates and represents fictional ideas through programme, matter and space, but also physically embodies it.

The act of copying already existing pieces of art has long been considered as a natural and well integrated part within different fields of art (Plevoets and van Cleempoel p. 31). For example, within the field of architecture, copying of classical architectural buildings was historically a well integrated part of the architect education at Swedish universities (Caldenby C., 2022). We need, in other words, to copy and learn what has been in order to use that knowledge to change or improve it; a starting point of vital importance in the case of a reconstruction.

PROJECT BACKGROUND

RECONSTRUCTION THEORIES

To begin with, full and proper documentation is required in order to achieve a full and precise reconstruction (Giovannoni, G., 1929). Giovannoni also means that a reconstruction should not be done if there are too many significant parts missing.

In the case of the Jubilee Exhibition in Gothenburg, there are no original fragments left of the built pavilions. An evident argument against a reconstruction in this case is that a reconstruction should not be done due to this fact. Are there any arguments that can oppose this very reasonable idea by Giovannoni?

A term closely connected to reconstruction is *translation* (not to be confused with *translatio* as defined by Plevoets and van Cleempoel). When translation is used as a design method, it is important to realize that the original undergoes a change and given an afterlife (Benjamin, W., 1992). Within literature, the purpose of a literary translation is to come as close as the original as possible while transforming it into another language or format. Benjamin explains that also words with fixed meaning can undergo a change; words that once sounded fresh and new may at some point seem timeworn. If compared to architecture and especially the models by Plevoets and van Cleempoel, *translatio* cannot be seen as a using the same language and the same printing technique, striving to be as close to the original as possible. An *imitatio* is using the same language as the original but chooses to add comments or modernise a text, striving to become equal with the original in the eyes of the reader. Finally is an *aemulatio* using a different language as well as a different style of writing, striving to improve the original text.

I

THE SITE

THE SITE

-

INTRODUCTION

The site is located in *Lorensberg* in central Gothenburg. Today, the area is dominated by public buildings such as the Art Museum, the Academy of Music and Drama (more commonly known as *Artisten*) and one of the many libraries connected to University of Gothenburg. A pavement is connecting *Götaplatsen* with *Renströmsparken* and *Carlanderska* hospital. The plot feels a bit hidden despite being situated in central Gothenburg.

When comparing the urban context of 1923 with the one of today (see drawings on the next pages), it becomes clear that the situation has changed dramatically. Unlike other exhibitions, the exhibition area was located with a direct connection to the city's urban fabric and street network. The Long Courtyard was intended to reflect Gothenburg's great esplanade *Kungssportsavenyn* with a monumental building as a backdrop. In addition to the exhibition area did the architects Bjerke and Ericson also present a satisfactory solution to the finalisation of *Götaplatsen*, which at this point had been left unfinished.



SCHWARZPLAN OF CENTRAL GOTHENBURG 2023. EXISTING BUILDINGS AT SITE IN RED.

-
1:4000



SCHWARZPLAN OF CENTRAL GOTHENBURG 1923. EXHIBITION AREA IN BLUE

-
1:4000



THE SITE IN SEPTEMBER 2022

-

View from Fågelsången. Author's photograph



THE SITE IN JANUARY 2023

View from the entrance to the Academy of Music and Drama. Author's photograph

II

EXHIBITIONS

EXHIBITIONS

INTRODUCTION

Generally, exhibitions (more specifically art- and industry exhibitions) are an opportunity to manifest experiments and realise dreams which serve as forerunners to for the architecture as a whole, both technically and aesthetically (Cornell, E., 1952). While the exhibitions of the 19th century focused on technical innovation and engineering were the exhibitions of the 20th century emphasising aesthetics and decoration.

What exhibitions as a medium have in common is the temporarity of the event, both in place and in time. The buildings are intended for temporary use and torn down by the same generation, perhaps even by the same persons who constructed them (Cornell, 1952). Exhibition architecture carries different signs of temporarity; the building material often has a limited life span, and as for the aesthetics are extreme simplicity, extravagant decoration, vivid festivity and other forms of short-lived beauty.

In 1851 was an international exhibition arranged in London (Cornell, 1952). Joseph Paxton was assigned to design a building suitable for this task. The result was Crystal Palace, an enormous greenhouse-like building of glass and steel. When the exhibition was closed was Crystal Palace disassembled and moved from its original site and rebuilt in Sydenham outside London. Crystal Palace served as a host building for a variety of arrangements until it was destroyed in a fire 1936.

To commemorate the French revolution in 1789 was a World Exhibition arranged in Paris 1889 (Cornell, 1952). The main attraction at this exhibition was the Eiffel Tower. Intended to be only a temporary building, it later proved to be a popular landmark of Paris and still stand today.



FIGURE III . CRYSTAL PALACE

*Crystal Palace at the World Exhibition 1851.
Photo: wikimedia commons*

An exhibition was arranged in Stockholm 1930 to show architecture, arts, crafts, gardens and transport (Seelow, A-M., 2016). In comparison with the two previous mentioned exhibitions, it was not a World exhibition but rather a national one, although it gained international interest. It is seen as a milestone in the development of the modern Swedish architecture, as well as very influential on international modernism and architecture. Keywords for the main architect Gunnar Asplund were "beauty and festivity".

Despite the exhibition's temporary character, the importance of this exhibition cannot be underlined enough (Cornell, 1952). Just as in Paris 1889 was a central landmark placed to mark the central point of the exhibition area but instead of an intentional monument (not to be confuse with the terminology by Riegl, author's note) was an advertisement mast placed to mark the exhibition area. The concept was ground breaking; the mercantile symbols that normally would be considered as a disturbing element to the main impression of an exhibition were instead integrated as a key element of the exhibition architecture.



FIGURE IV . ADVERTISEMENT MAST AT THE STOCKHOLM EXHIBITION 1930

Original photograph: ArkDes digital collection, photographer C.G Rosenberg (1930)

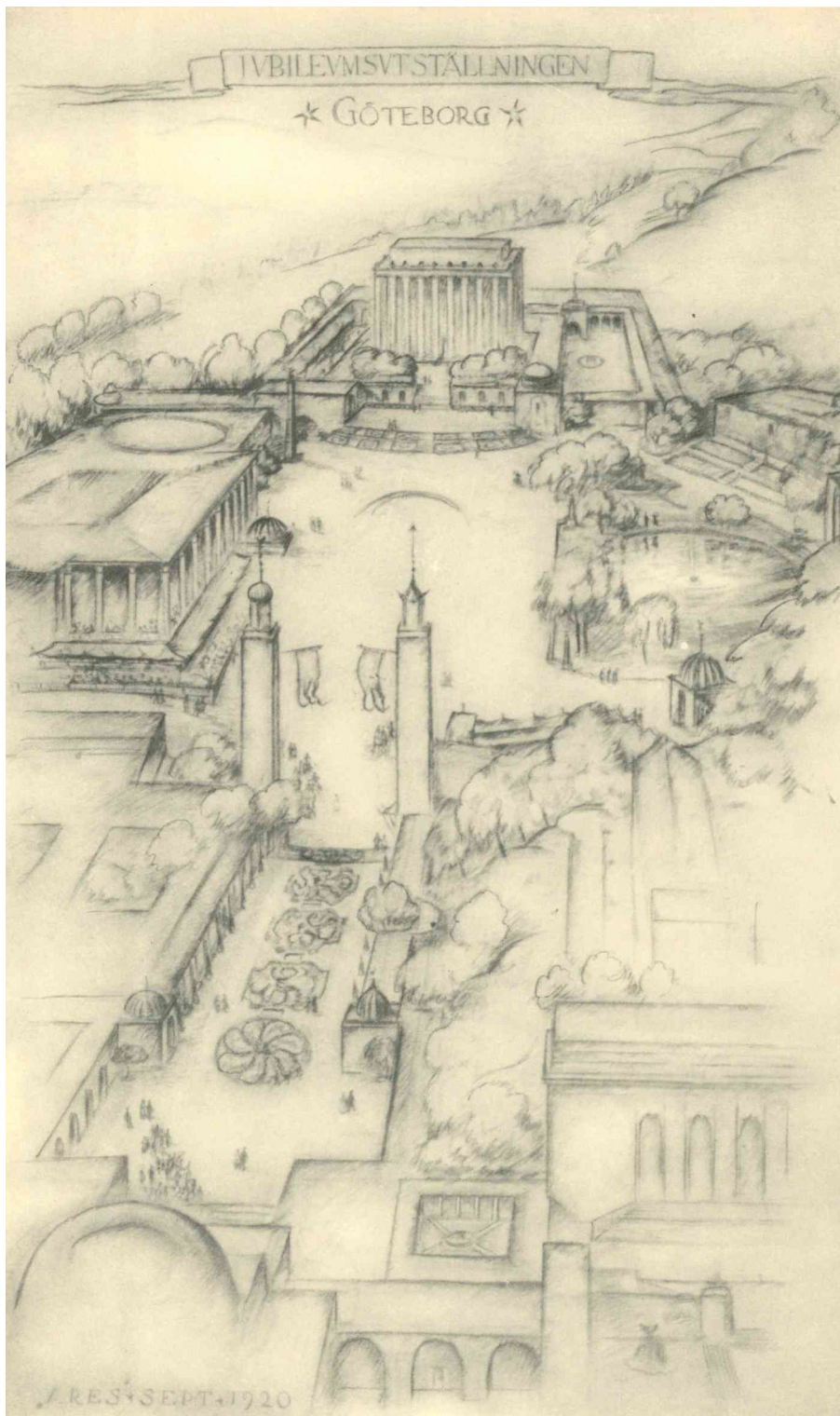


FIGURE V. VIEW OVER THE EXHIBITION AREA FROM SEPT. 1920

Originally published in Bjerke and Ericsson, 1930.

THE JUBILEE EXHIBITION 1923

AN OVERVIEW

The idea of arranging a Jubilee Exhibition in Gothenburg is ascribed to the chairman of the city council, Axel Carlander (Houltz, A., 2003). There were plans of arranging an exhibition already in 1918, although not depending on the city's tercentennial. Gothenburg's official year of foundation is 1621, which means that the natural thing would be to celebrate the city in 1921, although due to the economical difficulties following the First World War and the Spanish flue was the celebration delayed with two years (a jubilee celebration delayed by a pandemic feels very familiar, author's note).

Arvid Bjerke and Sigfrid Ericson, the remains of the architect consortium ARES (RO Swensson and Ernst Torulf had already left the collaboration for other responsibilities) were given the task to design a proposal for Gothenburg's jubilee celebrations (Houltz, A., 2003). The proposal presented not only a proposal for the Jubilee Exhibition but also solved the since long debated finalisation of Kungssportsavenyn which at this point since long had been left unfinished.

After all the preparations and work, the gates to the exhibition were finally opened the 8 May 1923 (Houltz, 2003). What met the visitors in May 1923 was what by many in more recent years has been described as one of the main works of Swedish 1920s classicism. Characterising for the Swedish classicism from the 1920s is the combination between substantial simplicity in construction and expressive, innovative implementation of classical elements such as columns, friezes and temple gables (Houltz, 2003). The architecture at the time went back and forth between extremes; the whole and the detail, playfulness and austerity, historicism and modernism. These contrasts are very much visible in the architecture of the Jubilee Exhibition 1923, according to Houltz. Monumentality and simplicity were combined with a playful handling of details. Historicism and exoticism stood against utility and functionality.

Were the critics in 1923 equally enthusiastic as more modern researchers has described the exhibition? One of the leading architecture critics at the time, August Brunius, describes the following in *Svenska Dagbladet* the 8 May 1923:

"There are many excellent elements in this jubilee architecture: the utilisation of the terrain and the plan's clever adaptations to all needs, the beautiful perspectives up and down the Long Courtyard, the striking colour- and line silhouette towards the sky. But the best of all is the formation of rooms:

|...| are purely triumphant. It exceeds everything previously done on Nordic exhibitions."

- Brunius, A., *Svenska Dagbladet* 8 May 1923 (translation by author)

"Det finns mycket som är utmärkt i denna utställningsarkitektur: terrängens utnyttjande och planens smidiga anpassande till alla behov, de vackra perspektiven uppåt och nedåt Långa Gården, det effektfulla färg- och linjespelet mot himlen. Men det bästa är dock rumsbildningen:

|...| är rent triumferande. Därmed överträffar de allt som tidigare gjorts på nordiska utställningar."

A leading architect at the time, Ragnar Östberg, praised the combination of air and monumentality as well as the playful detailing in the jubilee architecture (Houltz, 2003). Carl Westman, who designed the Röhsska Museum just around the corner from Götaplatsen, believed that the buildings, although many of them were temporary, must be seen as norm setting for the future development of the area between Götaplatsen and Renströmsparken.

Another witness of the exhibition's reception is the architect Gunnar Asplund. He writes in *Byggmästaren 1923*:

"The architectural will of today, when at its best, strives towards a subordination of the detail, a coordination of all heterogenous needs, demands and measurements under a strong architectural concept, around a central idea. It strives towards order and character."

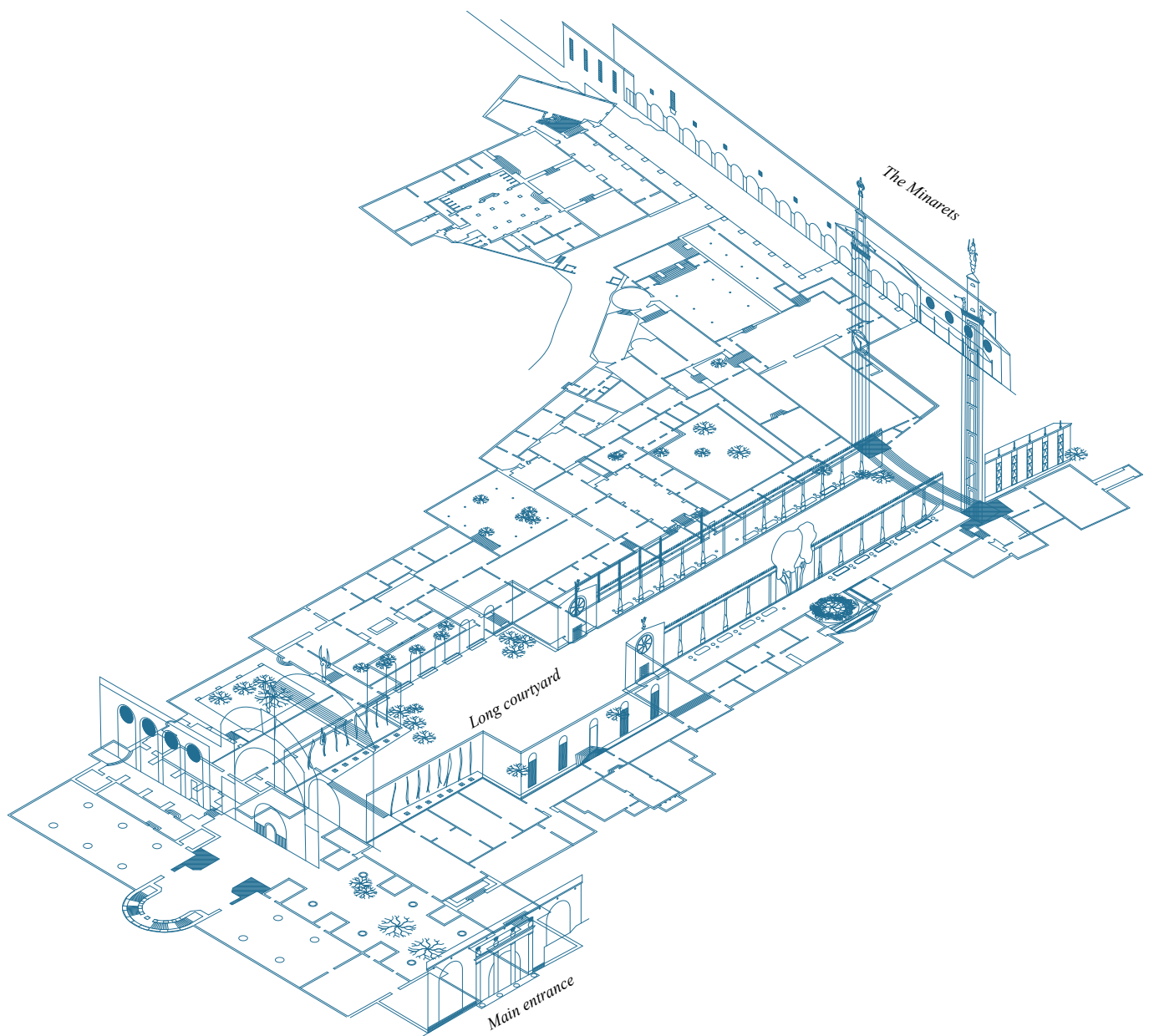
- Gunnar Asplund in *Byggmästaren 1923*. (translation by author)

"Dagens arkitektoniska vilja, där den är som bäst, går mot ett underordnande av detaljen, ett samordnande av alla heterogena behov och krav och mått under ett starkt arkitektoniskt grepp, kring en central idé. Den söker ordning och karaktär."

It is difficult to outline an accurate colour scheme for the exhibition architecture. Although the exhibition was called "The white city", other colours were used to contrast the white lime plaster, such as deep blue, terracotta red and a dark, almost black grey (Bjerke and Ericson, 1930). The dark grey tones were used to give the eye something to rest on, with the other colours used to complement the composition. Inspired by Italian medieval facades, pattern by black and white marble, the tall Minarets were painted with this method. Terracotta red was used painting the loggia of the Long courtyard and the blue tones for the Memorial Hall's main walls behind its white columns.

Unlike other exhibitions was the exhibition area located with a direct connection to the city's urban fabric and street network (Houltz, 2003). A doubling of the city's great esplanade Kungssportsavenyn is just one of several examples of this relationship. Even though the clear conceptual relationship between the exhibition and the urban fabric, the plan was designed to cover and hide the surrounding environment. Instead of free standing pavilion, the plan was designed around sequences of closed patios, towards which the facades were directed.

The exhibition was not only a local or regional event but also gained much attention internationally (Eriksson, E., 2000). During six months was the exhibition visited by 4,2 million people (41 000 visitors from abroad) at a time when Gothenburg had approximately 230 000 inhabitants (Brodin, Carlander, Desaix et al. 2006). To compare with the two other big Swedish exhibitions during the 19th and 20th century (both in Stockholm, one in 1897 and one in 1930) is the number of visitors striking. The exhibition in 1897 had 1,5 million visitors and the one in 1930 4 million.



ISOMETRIC VIEW OVER PARTS OF THE EXHIBITION AREA

Drawing made by the author

SUMMARY

-

EXHIBITIONS

Generally, exhibitions are an opportunity to manifest experiments and realise dreams which serve as forerunners for the architecture as a whole, both technically and aesthetically. What exhibitions as a medium all have in common is the temporality of the event, both in place and in time. Exhibition architecture carries different signs of temporality; everything from extreme simplicity and abstraction to extravagant decoration and other forms of short-lived beauty.

The Jubilee Exhibition in Gothenburg was arranged in 1923 to commemorate the city's tercentennial. Arvid Bjerke and Sigfrid Ericson made a proposal for a big exhibition area which also presented a satisfactory solution to how Kungssportsavenyn should be finished, with the Art Museum.

Many have in more recent years regarded the Jubilee Exhibition as one of the main works of Swedish classicism from the 1920s. The architecture combined monumentality and simplicity with playful handling of details. Integrated in the urban fabric, was the Jubilee Exhibition intended to be a reflection of the city.

CONCLUSIONS / STRATEGIES

-

EXHIBITIONS

Through research about exhibition architecture and the Jubilee Exhibition in Gothenburg 1923 are the following conclusions made:

I.

The Jubilee Exhibition 1923 was intended to be a reflection of the city as a whole (see Houltz)

II.

The Jubilee Exhibition 1923 served as a forerunner for the architecture as a whole (see Cornell and Houltz)

III.

Exhibition architecture often has an astonishingly big scale, often with a visible landmark (see Cornell, Houltz and Seelow)

IV.

Temporary landmarks built for exhibitions have historically shown to be permanently implemented in the urban fabric (see Cornell)

V.

Exhibitions are often arranged to commemorate an important historical event (see Cornell and Houltz)

III

CASE STUDIES

REFERENCES

CASE STUDIES

In this chapter, several case studies have been investigated in order to establish a clearer position within the subject of reconstruction. Other research fields than architecture come into question, such as archeology, music and art. What they all have in common are different strategies on how to fill in missing information, to create a complete picture so to say. They are all relevant in how to reconstruct archival resources in order to gain new perspectives on our architectural heritage as well as the purpose of the reconstruction itself.

The following cases will be presented in this chapter:

- Frauenkirche in Dresden
- Beethoven's Symphony No. 10 ("The unfinished Symphony")
- Neues Museum in Berlin
- The struggle for Troy
- A birthday cake for Ghent University



REFERENCE I. FRAUENKIRCHE IN DRESDEN

*Reconstruction between 1992-2006 after destruction in 1945.
Original photograph: wikimedia commons*

FRAUENKIRCHE IN DRESDEN

RECONSTRUCTION AFTER BOMB ATTACKS

Dresden is a city situated in the east of Germany by the river Elbe. During the Second World War, the city's big cathedral, Frauenkirche, was destroyed due to massive bomb attacks from the allied forces. The remains of the cathedral stayed as a ruin in the middle of the city for several decades, until reconstruction work was initiated in the 1990s (Friedrich 2005).

why?

The church was rebuilt mainly of nostalgic reasons. The people of Dresden had during several years wanted the church to be rebuilt since they felt that the city was missing one of its greatest landmarks. This engagement led to the *Declaration of Dresden* in 1982 which acknowledged the bond between the people and their native land as especially important when reconstructing destroyed monuments (Declaration of Dresden, 1982).

how?

The aim with the reconstruction was to achieve a building looking as close to the original as possible. Some of the original parts were used, assembled together with new parts in the same material. At the moment, the original parts are clearly distinguishable due to the variation in patina and colour but with time, the new light sandstone will be patinated in the same way. The volume and proportions are the same as the original which by time will blur out the discrepancies between what is new and what is old.

In this context, the reconstruction can be analysed through the theories of the Italian restoration architect Gustavo Giovannoni. He describes in his text *Practical Matters of Architecture* from 1929 that a full, precise reconstruction of a monument rarely can be guaranteed since the precise position of the original elements cannot be achieved. For a precise reconstruction, full and proper documentation is required. A reconstruction should not be done if there are too many significant parts missing.

conclusions

Giovannoni's argument about full documentation of a monument in order to justify a reconstruction is obsolete. This mainly since the result of a reconstruction is not visible until the reconstruction is finished and as always, one can never foresee the final result beforehand. The reconstruction in this case was done despite the fact that several of the original parts were missing (e.g. the patina difference between dark and light stones in the facade).

In conclusion, the main strategies in this case were to keep the expression of the original as far as possible due to the public engagement and nostalgia among the people. With the terminology from Plevoets and van Cleempoel it is a *translatio* (striving towards similarity with the original).



REFERENCE II. LUDWIG VAN BEETHOVEN

*Painting by Joseph Karl Stieler from around 1820.
Original photograph: wikimedia commons*

SYMPHONY NO. 10

COMPLETION OF AN UNFINISHED WORK

Ludwig van Beethoven began writing his tenth symphony shortly after he completed his ninth, which among many experts is regarded as one of his finest works (Smithsonian Magazine, 2021). However, Beethoven died in 1827 and never finished it. Beethoven only left some musical sketches to the tenth symphony.

why?

The purpose of this investigation was to fill in the missing parts according to what it might have looked and sounded like. The result of the investigation was two-folded: first the score carrying the notes representing the music (the representation) and second the execution of the notes (the actual music).

how?

Beethoven's sketches were studied and analysed by the musicologist Barry Cooper in 1988 (Smithsonian Magazine). Cooper tried to complete Beethoven's tenth symphony based on original sketch fragments by Beethoven himself, as well as other letter correspondence between the composer and his assistants. Cooper tried to be as faithful to Beethoven's vision as possible which in the end resulted in 250 bars of the first movement. However, the few remaining documents made it impossible to complete the work more than that.

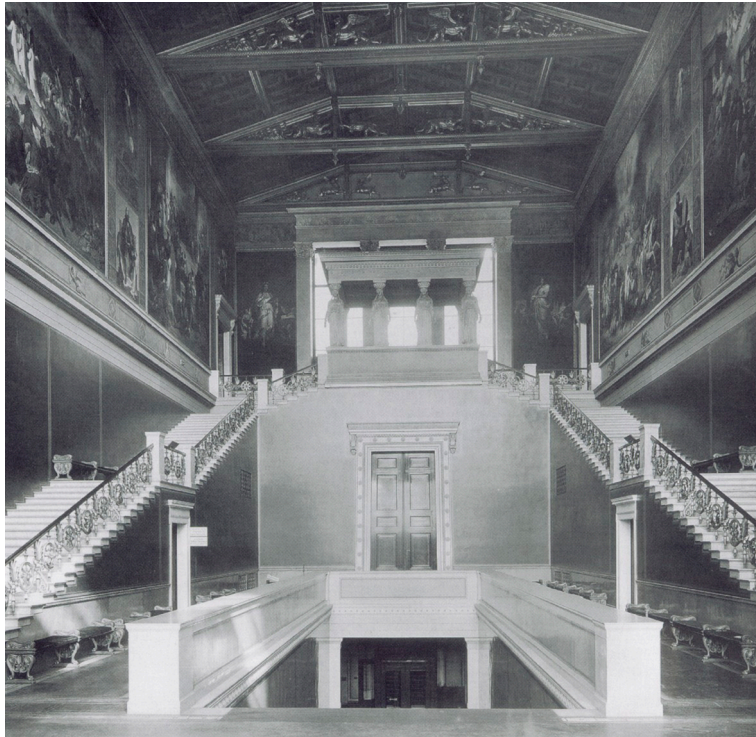
A research team was assembled in 2019 in order to complete Beethoven's Symphony No. 10 by using AI (Smithsonian Magazine, 2021). In order to create a piece the composer might have written, scientists let an AI machine learn Beethoven's creative process, other works by the composer as well as adding the scarce archival material left by Beethoven after his death. The final piece premiered in Bonn on 9th October 2021.

Some critics meant that AI should not have been used in order to imitate the human creative process (Smithsonian Magazine). However, when an audience was assigned to listen to the experimental AI compositions, they were not able to distinguish the original fragments composed by Beethoven from the AI generated piece. In this context, AI could be seen as a tool for artists to express themselves in new ways.

conclusions

The similarities between architecture and music is something that Peter Zumthor describes in *Architektur denken* from 2010 (p. 66). He means that in similarity to the fact that music needs to be performed in order to be heard, architecture must be executed in order to be perceived. Since several archive drawings in the case of the Jubilee Exhibition are the main medium preserved, every reconstruction is a reconstruction of those drawings and not the buildings themselves.

This piece has undergone all of the three strategies mentioned by Plevoets and van Cleempoel; *translatio* (striving towards similarity), *imitatio* (an artistic interpretation of the original and finally *aemulatio* (improving the original by completing it). By using modern technology on historical material, a new layer of the original piece is revealed; the original material created by Beethoven undoubtedly undergoes a change in accordance to Benjamin's theories.



REFERENCE III. NEUES MUSEUM BEFORE AND ADTER RENOVATION

Top: Unkown photographer (n.d.), David Chipperfield Architects
Bottom: von Bruchhausen, J., (n.d), David Chipperfield Architects

NEUES MUSEUM IN BERLIN

RENOVATION AFTER BOMB ATTACKS

The Neues Museum in Berlin was designed by Friedrich August Stüler and built between 1841 and 1859 (David Chipperfield Architects, n.d.). Following the heavy bomb attacks during the Second World War, the building lay in ruins for more than half a century. The reconstruction of the museum proved to be of national significance when Germany was reunited after the fall of the Berlin Wall.

why?

The purpose of this reconstruction was to make the building serve as a museum again. David Chipperfield Architects wanted to highlight the original concept of the building as well as preserving its characteristic patina due to the heavy bombing during the Second World War.

how?

The architects meant to re-complete the original volume but to still restore and conserve the parts remaining after the destruction during the Second World War. The volumes are the same as the original but built in a different material since the architects could not be entirely sure of how these parts were constructed when the museum was built in the middle of the 19th century (David Chipperfield Architects, n.d.).

conclusions

When once again reading the definitions by Plevoets and van Cleempoel, this is a typical example of *aemulatio* (improving the original by completing it as a functional building and telling the story about the building's history). This restoration goes beyond imitation, and transforms, as well as improves, the original. Both the original structures and the new additions are clearly readable. A deeper understanding about the building is created through the differentiation between the original patinated fragments and the new addition made by the architects.



REFERENCE IV. THE STRUGGLE FOR TROY, GLYPTOTHEK, MUNICH

*Assemblage of original fragments in their probable position without addition
Author's own photograph*

THE STRUGGLE FOR TROY

ASSEMBLAGE OF FRAGMENTS

Fragments from the Temple of Aphaia on the Greek island Aegina was found during an excavation in the early 19th century. After several restorations, among them the most famous one by the Danish sculptor Berthel Thorvaldsen where he tried to complete the picture by sculpting new body parts and assembled them on the fragments, the fragments were brought back to their original state in the 1960s (Staatliche Museen zu Berlin, n.d.).

why?

This reconstruction was made mainly of pedagogical reasons. There have been no additions when it comes to material or completion.

how?

Metal bars or tubes have been used to support the fragments in upright position, making the difference between modern addition and historical fragment clearly visible. The assemblage of the fragments is mere an attempt to complete the sculpture by using empty space as a technique to enhance the historical fragments. What you do not know is also a part of the information in this piece.

conclusions

This case undergoes all the three stages of Plevoets and van Cleempoels terminology. Initially, it is a *translatio* (since it aims for similarity in composition and due to the fact that it is the original fragments). *Imitatio* (through Thorvaldsen's restorations where he aimed to freely interpret the work and sculpt new fragments in order to complete the picture). Finally, is it an *aemulatio* (with the modern additions in steel and technique by leaving space blank).



REFERENCE V. A BIRTHDAY CAKE FOR GHENT UNIVERSITY
Bovenbouw Architectuur, A birthday cake for Ghent University (2017)

Photo: Filip Dujardin (2018). Reprinted with permission from Filip Dujardin.

A BIRTHDAY CAKE FOR GHENT UNIVERSITY

BOVENBOUW ARCHITECTUUR, 2017

This piece was commissioned by Ghent University to commemorate their bicentenary in 2017. The Belgian architecture office Bovenbouw Architectuur was given the task to produce a piece for the university's celebrations.

why?

The purpose of this piece is to commemorate a special historical event, in this case a 200 years celebration.

how?

It was a part of a bigger exhibition about the history of the institution. The architects mapped out and gathered information about the sixteen campus buildings. The buildings were reconstructed in soft plastic foam and stacked together into a seven metres tall "birthday cake". Visitors could walk inside in the cake and recognise the different buildings in the city of Ghent.

conclusions

In this piece, the architects are playing with composition, scale and identity. Models of different scales are combined into a new composition, creating a new entity. It is also a relevant project in time concerning a jubilee celebration, working with architectural heritage. To make one detail bigger and big buildings smaller is interesting to explore. Every reconstruction as such is a *translatio* (striving towards likeness with the original in colour and expression) but if looking at the piece as a whole within its context, it must be regarded as an *aemulatio* (improving our understanding of the original buildings by putting the reconstruction within a new context).

SUMMARY

-

CASE STUDIES

The five case studies presented above are important since several valuable design strategies can be extruded from them. They all provide a variation of innovative solutions within the subject of reconstruction. How can different aspects of the Jubilee Exhibition 1923 be highlighted by using conclusions from these cases?

FRAUENKIRCHE

The reconstruction of this church was made due to the will and nostalgia of the people. The aim of the reconstruction was to achieve a result as close to the original church as possible, despite a lack of documentation and several parts missing. It is, to use the terminology of Plevoets and van Cleempoel, a *translatio*, striving towards similarity with the original.

SYMPHONY NO. 10

Two different methods, the 'manual' reconstruction in the 1980s and the "AI reconstruction", are attempts to speculate on how a complete work might have looked like. The result of this reconstruction is two-folded: first the score carrying the notes representing the music (the representation) and second the execution of the notes (the actual music). Just like drawings, musical notes are representations of something that needs to be executed in order to be perceived. The project undergoes all the three stages of Plevoets and van Cleempoel's terminology.

NEUES MUSEM

This project works with the concept of new additions that are clearly distinguishable from the old. A story is told about the building's traumatic history, which simultaneously brings the building into a new era. It is an *aemulatio*.

THE STRUGGLE FOR TROY

Archeological reconstructions like this can provide a helpful strategy to tell a story. Thorvaldsen's reconstruction with new parts of the missing fragments produced a speculative way to complete the picture. Later, when research proved that Thorvaldsen's proposal was wrong, the missing parts were left out entirely and the original fragments were put in their plausible position. The empty spaces are enhancing the importance of the original fragments. Thorvaldsen's reconstruction, together with the modern reconstruction at the Glyptothek in Munich, have undergone all three intervention strategies by Plevoets and van Cleempoel.

BIRTHDAY CAKE FOR GHENT UNIVERSITY

The project is a reconstruction of individual artifacts, as well as a new monument, combining the reconstructions together. A better understanding about the originals is created through the position of the artpiece in a familiar environment (one of the campus buildings). It is a commemorative monument over the university's bicentenary; making it an important reference in how to celebrate a jubilee. Two strategies by Plevoets and van Cleempoel are fulfilled in this case; *translatio* (the individual reconstruction of artifacts) and *aemulatio* (the new monument put in a new context).

CONCLUSIONS / STRATEGIES

CASE STUDIES

From the performed case studies come four conclusions:

I.

A reconstruction can be made even with a lack of documentation and significant parts missing (see reference I).

II.

A reconstruction can take the shape of a reconstruction of representations (see reference II).

III.

A better understanding about the original is created by combining it with a contrasting context (see reference III and V).

IV.

Blank spots or missing parts of a monument is also a part of the information that you know which can be a subject for speculation (see reference II and IV).

As well as the conclusions above come some design approaches which will be applied to the physical intervention. They are as follows:

I.

To not change a thing and reconstruct just as it was to the best of your knowledge (see reference I)

II.

Reconstruct nothing and leave out what you do not know (see reference IV)

III.

Additions should clearly distinguishable from the existing context (see reference III)

IV.

Several reconstructions can combined form an artifact of their own (see reference V)

IV

DESIGN PROCESS

DESIGN PROCESS

THE BASIS FOR A RECONSTRUCTION

This chapter contains categorisation and analysis of archival resources and how they may be used in a reconstruction. Sometimes, the different sources correspond with each other well and in other cases have a certain level of guessing been involved.

Firstly, new drawings of the jubilee architecture were produced in order to gain deeper understanding of measurements and proportions, as well as the advantage of having the material digitalised.

Secondly, many of the found photographs from the exhibition were colourised by using AI. These were in turn compared with the descriptions in the literary sources. The colourised photographs and the literary sources turned out to correspond well with each other.

Juxtaposition was used to compare the contemporary context at the site with the jubilee architecture. It is important to stress, however, that the position of the Jubilee Exhibition plan, entirely is dependent on reference points in the urban context, such as the art museum or the villas in *Nedre Johanneberg*.



FIGURE VI. THE LOGGIA
The loggia by the Long courtyard colourised with AI by the author
-
Original photograph: ArkDes digital collection, unknown photographer (1923)

DESIGN PROCESS

-

ARCHIVAL RESOURCES

To understand the colour palette, several photographs from the Jubilee Exhibition were colourised by using AI (for the original black and white photograph and the full library of colourised photographs, see Appendix A). It is necessary, since the original photographs are black and white, to compare the colourised photographs with literary descriptions regarding the colour palette of the Jubilee Exhibition.

Anders Houltz gives an elaborate description in *Teknikens Tempel* from 2003:

"Minnesfältets byggnader hade genomgående en ljus vit kalkfärg. Mot denna kontrasterade kraftiga nyanser av terracottarött (som i Långa gårdens loggior) eller djupblått (som Minneshallens väggar innanför den vita pelarraden) samt förgyllda detaljer."

"The buildings at the Memorial field were generally painted in a light white lime plaster contrasted by strong nuances of terracotta red (like the loggias of the Long courtyard) and deep blue (like the walls of the Memorial hall behind its white columns) as well as gilt details."

[translation by author, 2023]

Regarding other colours than red and blue, the architects themselves describe the concept of the Minarets:

"Minareternas svartgråa randning, den måhända djärvaste av utställningens färg effekter, blir med hänsyn till de nämnda erfarenheterna mindre vågad, och denna pregnant behandling av utställningens mest iögonenfallande parti vann i själva verket, sedan isen väl blivit bruten, en överraskande stor popularitet."

- Bjerke & Ericsson (1930)

"The blackgrey stripes of the Minarets, perhaps the bravest of colour effects of the exhibition, becomes less brave on the basis of the previous mentioned. This pregnant treatment of the most eye-catching piece of the exhibition, grew later surprisingly in popularity."

[translation by author, 2023]

The photograph, in comparison with the drawing below, reveals the pilasters hided behind the columns supporting the roof to the loggia.

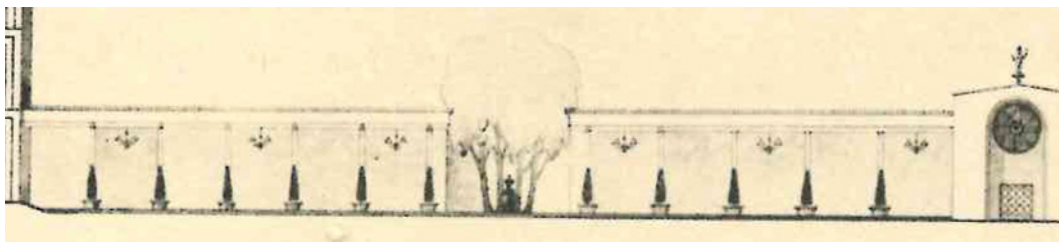


FIGURE VII. THE LOGGIA
The loggia by the Long courtyard. Archive Elevation drawing

-
Published in Bjerke & Ericsson (1930)



FIGURE VIII. THE SMALL COURTYARD
The Small courtyard colourised with AI by the author

Original photograph: ArkDes digital collection, unknown photographer (1923)

DESIGN PROCESS

-

ARCHIVAL RESOURCES

The drawings below and the photograph to the left do not depict the same objects. As Houltz mentions, the buildings were generally painted in a light white lime plaster. It is therefore very plausible that the archways along the Long courtyard (see elevation drawing below) were painted in the same type of white plaster as the Small courtyard. Some kind of ornamentations are visible over the windows but the motif is very blurred and not distinguishable.

What is not clear in the case of the archways along the Long courtyard are the windows. There are no windows in the plan (see picture below), but, there are windows in the elevation. Possibly there are blind windows to create an illusion. This is a potential area for speculation.

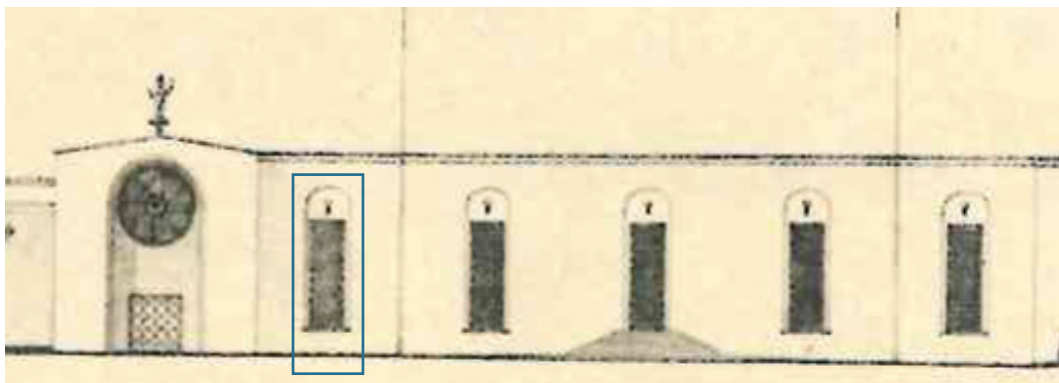
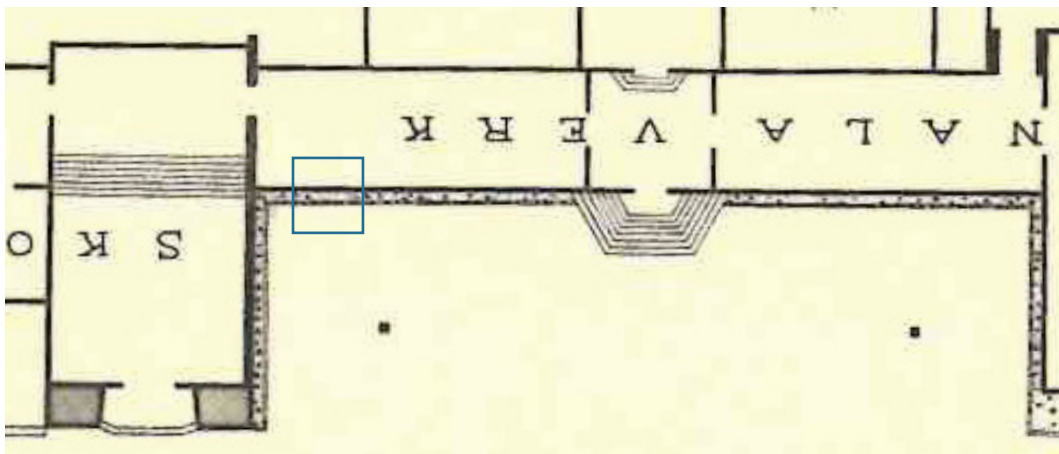


FIGURE IX-X. "PAVILION WITH BLIND WINDOWS"
Pavilion with blind windows. Plan and elevation archive drawings

-
Published in Bjerke & Ericsson (1930)

INDEX

V1	Volume exploration 1
V2	Volume exploration 2
V3	Volume exploration 3
P1	Plan exploration 1
P2	Plan exploration 2
P3	Plan exploration 3
P4	Plan exploration 4
E1	Elevation exploration 1
E2	Elevation exploration 2
E3	Elevation exploration 3

In order to understand the expansion of the Jubilee Exhibition, the produced drawings were combined with the current context. It becomes clear that existing buildings and infrastructure make it impossible to reconstruct the exhibition in its whole. The conclusion must be that adaptations to the site have to be made in order to make a reconstruction possible.

Interesting intersections where the two contexts collide were analysed in three different steps on the basis of the findings in the drawing to the right; volume, plan and elevation.

There are three layers in this drawing. First, is the context of today. Second, is the Jubilee Exhibition 1923. Third, the design explorations performed within this thesis.

JUBILEE EXHIBITION

ELEMENTS FROM EXISTING BUILDINGS

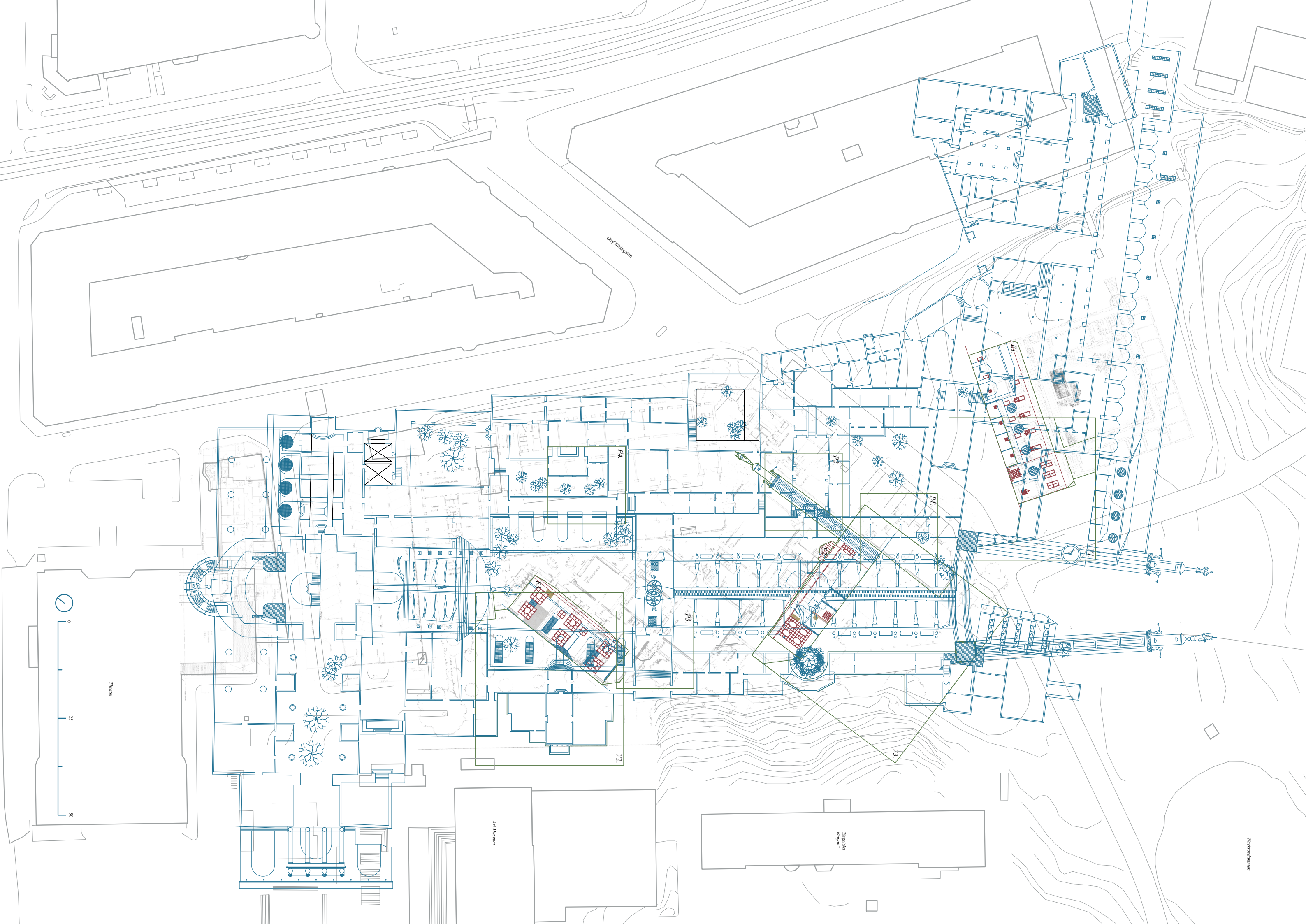
OUTLINE DESIGN EXPLORATIONS

GROUND FLOOR PLAN EXISTING BUILDINGS

RIGHT: OPERATIVE DRAWING

-

No scale.



Old Wilsgate

P4

P2

P1

P3

I2

I3

Theatre

Art Museum

"English Language"

Nidhollundinn



0 25 50

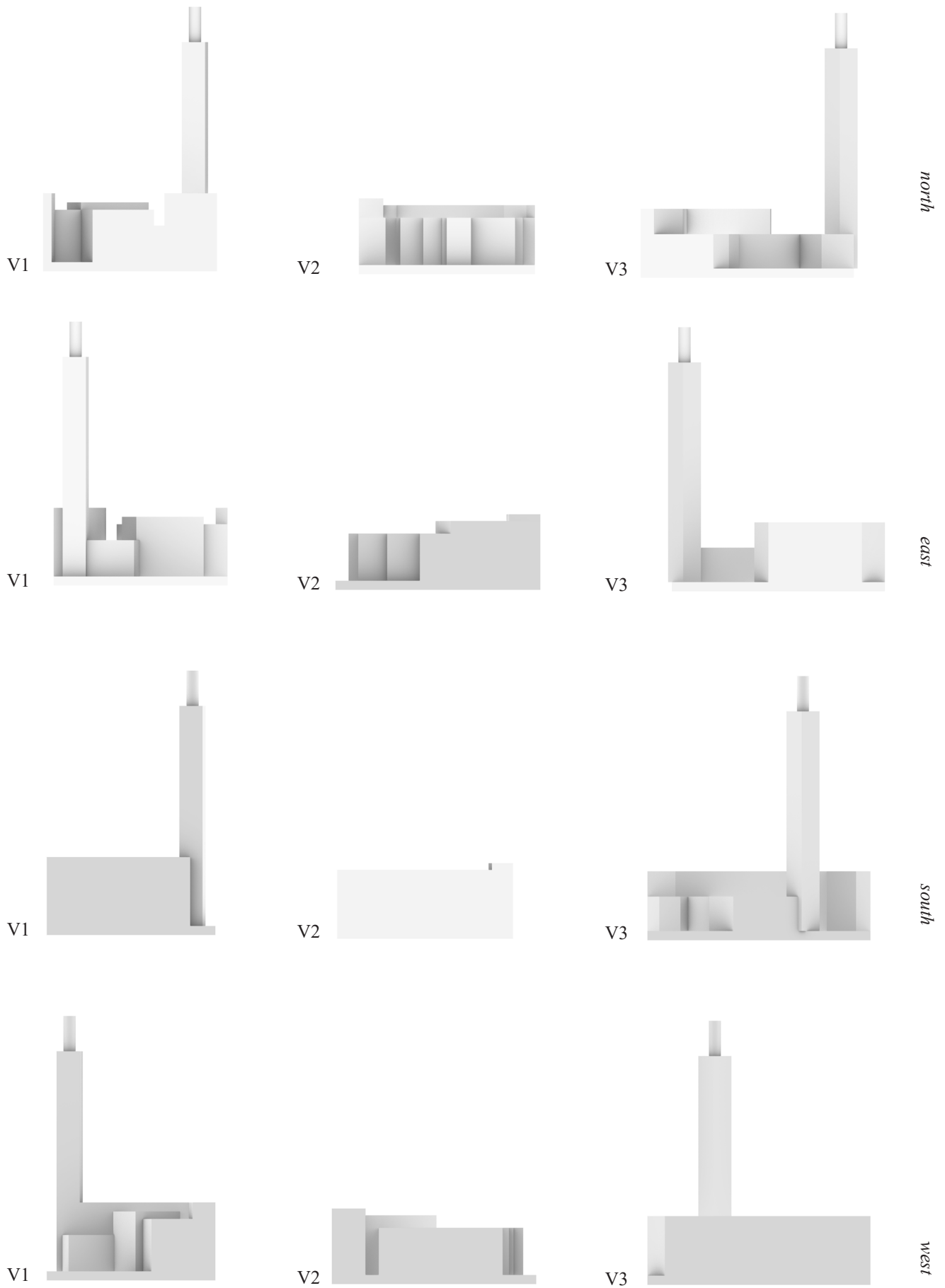
UNFOLD.

DESIGN PROCESS

- VOLUME

After the intersections in plan were determined, building heights were specified based on elevation drawings from archive and observations on site. At this point, the differentiation between existing buildings and the jubilee architecture was not of vital importance; the purpose was merely to get an idea of the scale and proportions of the compositions at an early stage in the process. The relatively small scale made it impossible to add smaller details. Some abstraction was necessary to create the volume studies.

Just as the case with Neues Museum, a deeper knowledge is developed through the combination between old and new. Parts of the exhibition are merged with a character standing there today, which makes it a link between past and present.



VOLUMETRIC EXPLORATIONS

-

*Volumetric explorations over intersections between existing buildings and the jubilee architecture
 Right: Model in white plaster of Volume study 3 seen from southwest. No scale.*

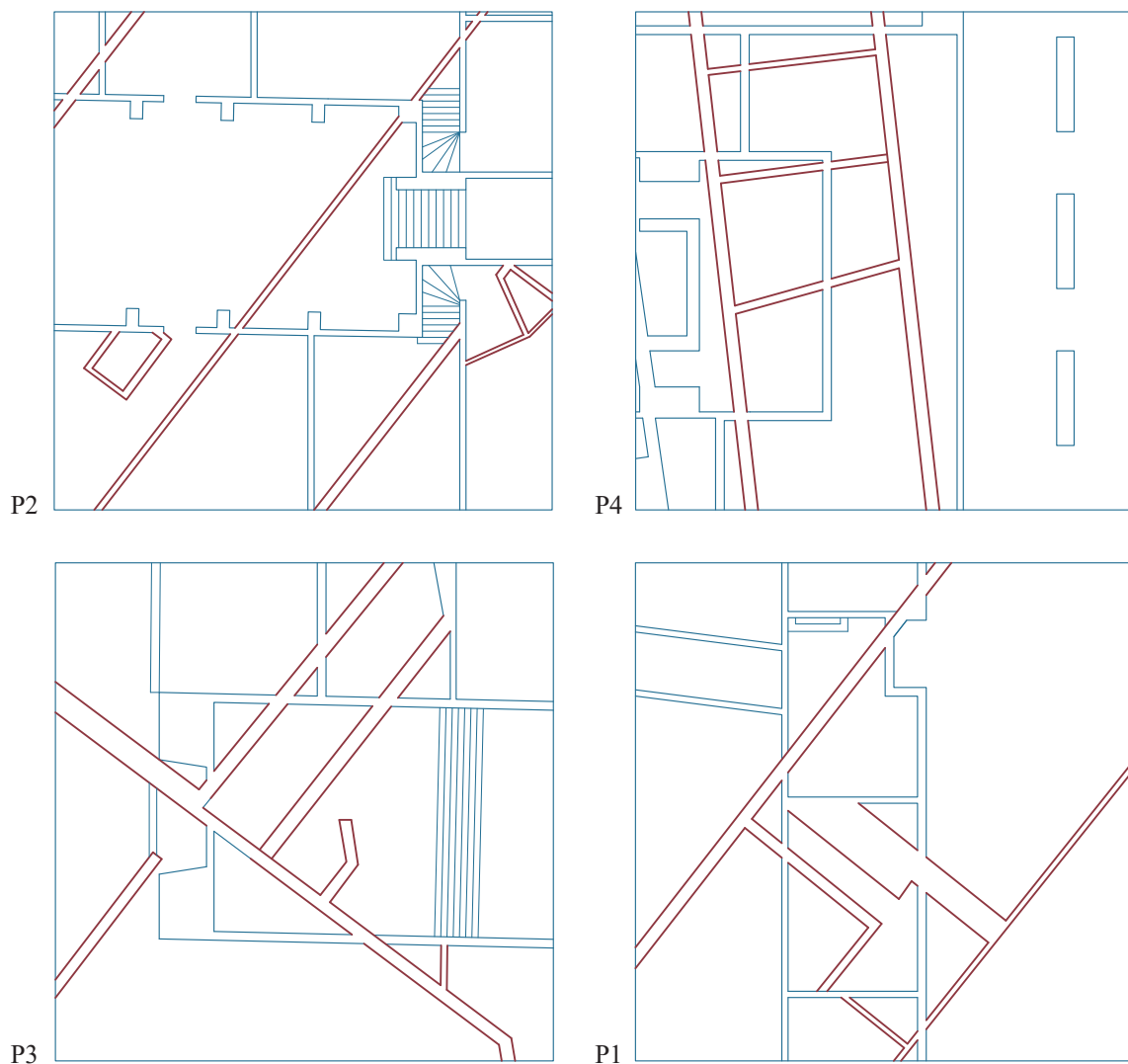


VOLUMETRIC EXPLORATION NO 3

-

Model in white plaster seen from southwest. No scale.

The process of combining the two contexts was repeated by studying the intersections in plan. A big room is divided with a wall; either if it is by a wall in the existing context, or a part of the exhibition. Situations with small niches and oddly shaped rooms are created just as in the case with the original plan of the Jubilee Exhibition. Some amount of guessing has been involved when translating the plan into volume, such as door heights and staircases.



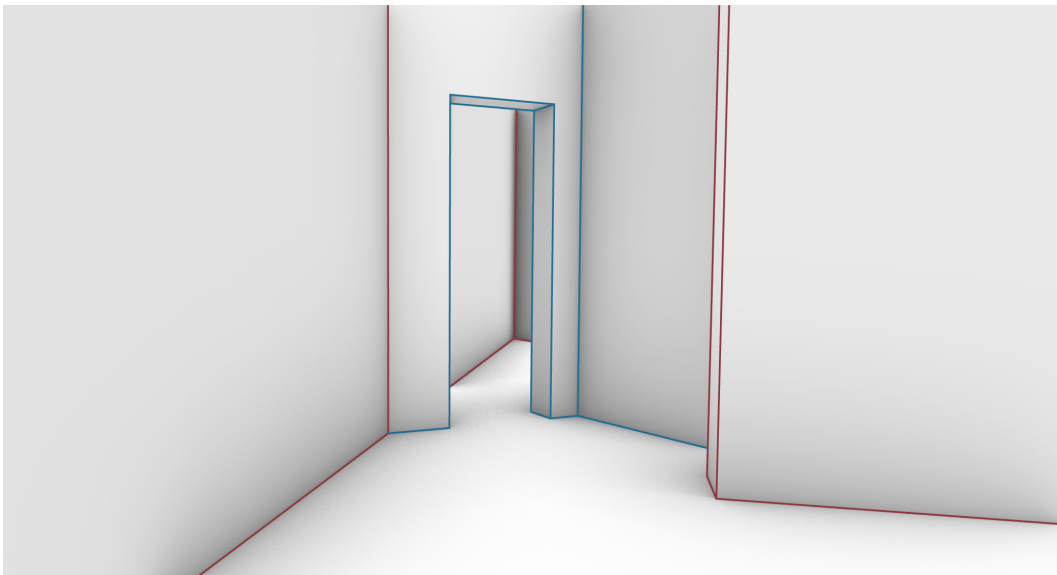
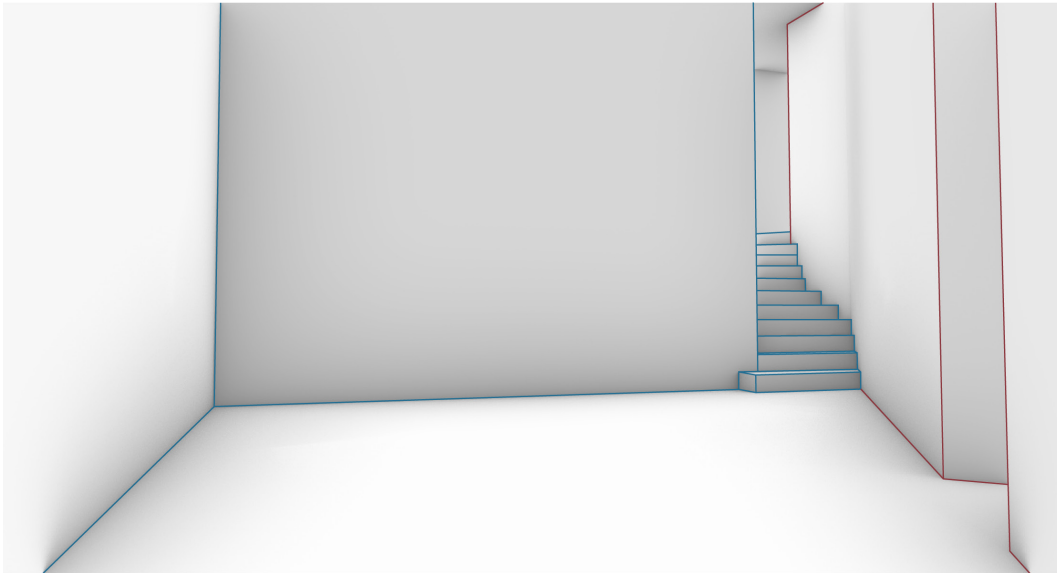
JUBILEE EXHIBITION
EXISTING

PLAN EXPLORATIONS

DESIGN PROCESS

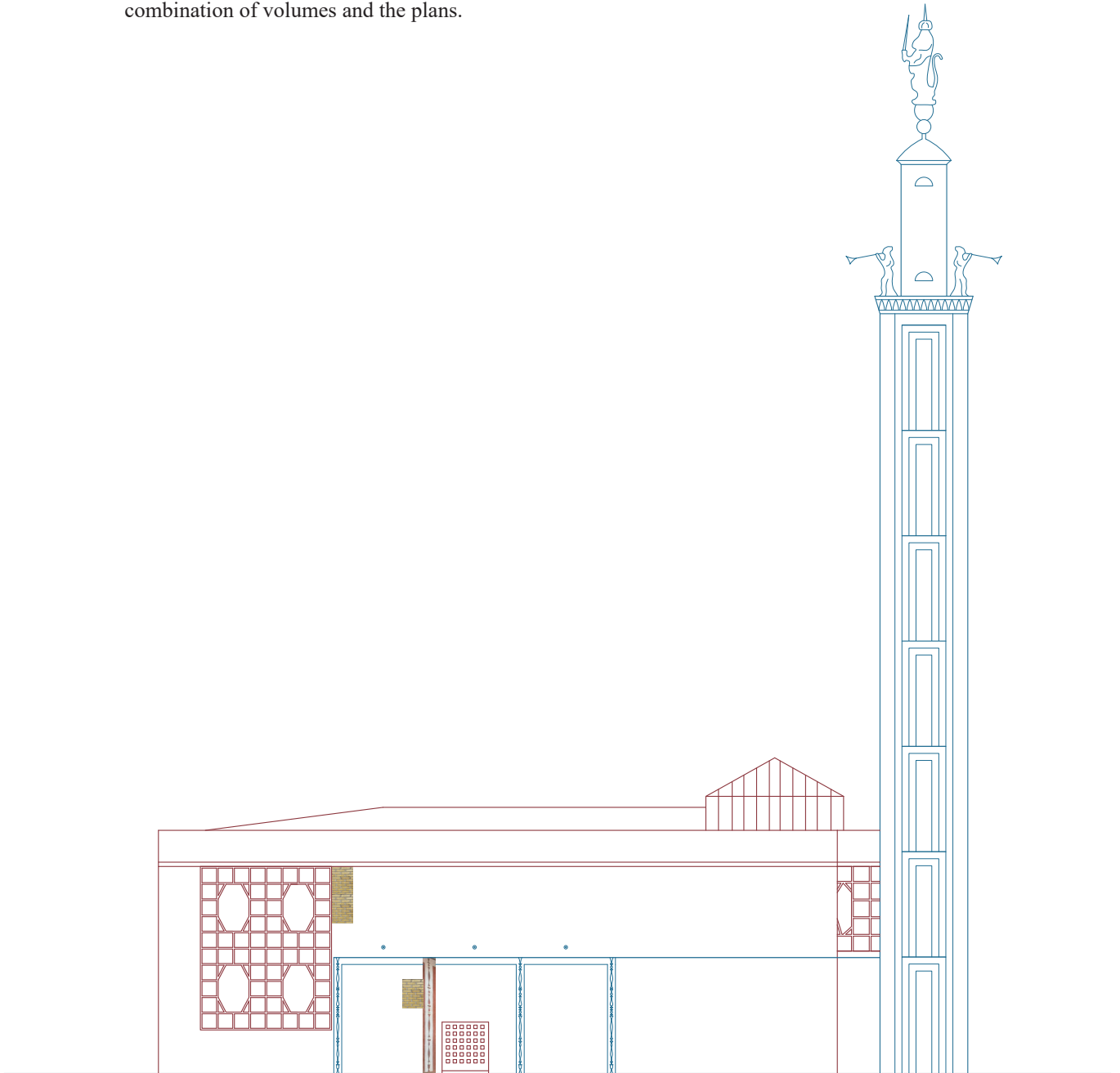
-

PLAN



PERSPECTIVES OF PLAN EXPLORATIONS

The combination of the two contexts (the existing buildings and the Jubilee Exhibition), almost creates a new typology. It blurs the lines between the two originals and starts to merge two characters together. The starting point for this investigation were both the combination of volumes and the plans.



JUBILEE EXHIBITION

EXISTING

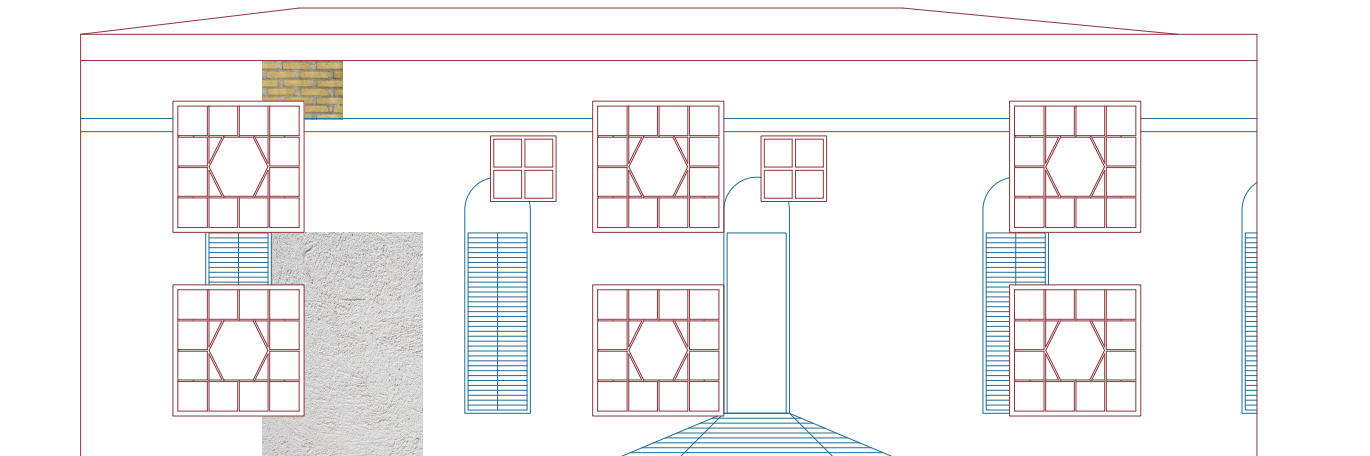
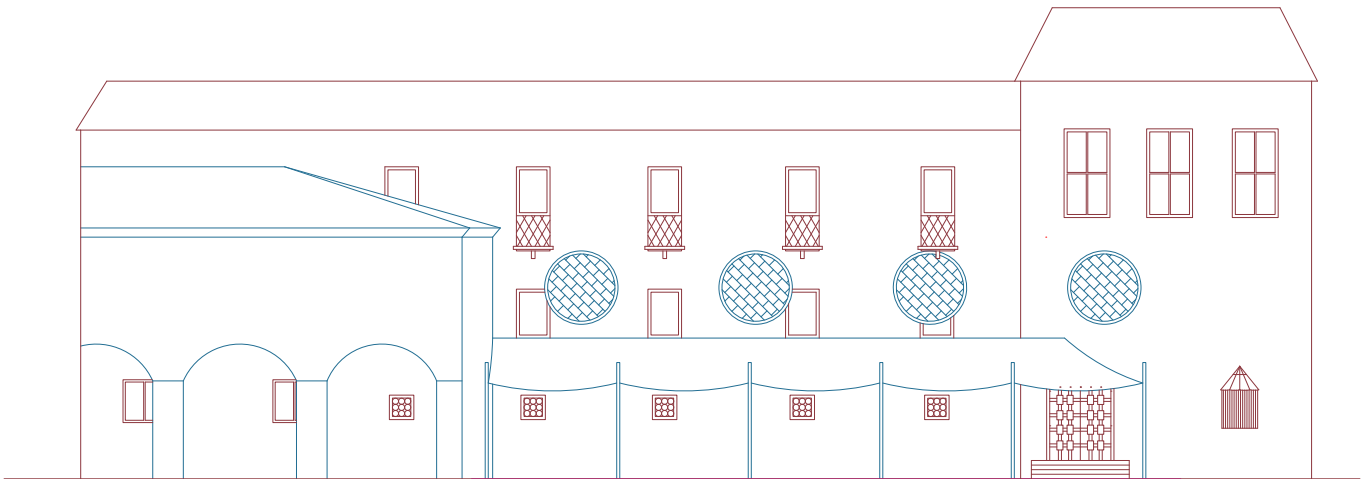
ELEVATION EXPLORATION 2 (E2)

-
No scale.

DESIGN PROCESS

-

ELEVATION



ELEVATION EXPLORATION 1 AND 3 (E1 AND E3)

-
No scale.

SUMMARY

-

DESIGN EXPLORATIONS

The collected archival material was the point of departure in the performed design explorations. Through comparison between the jubilee architecture and the current conditions at the original site were several conclusions drawn.

An operative drawing became an important tool to gather information and reach conclusions. Three layers were collected; the existing conditions at the site, the Jubilee Exhibitions, as well as the performed design explorations.

Archival material must be continuously compared and analysed in order to reach a satisfactory basis for a reconstruction. If one of the sources was missing, a reconstruction would not be possible. Photographs can fill in missing information in drawings and texts can be a compliment to the two.

CONCLUSIONS / STRATEGIES

-

DESIGN EXPLORATIONS

From the performed design explorations come the following conclusions

I.

A deeper understanding is developed by the contrast between the existing context and the jubilee architecture (superimposition).

II.

The archival resources communicate with each other to form a basis for a reconstruction (photographs, drawings and texts).

III.

A reference point is inserted through the contrast between the existing context and the jubilee architecture (superimposition).

IV.

Elevations can be combined to showcase cultural heritage, without function or programme.

V.

The different explorations showcase a variety of aspects, all important to understand a whole.

As well as the conclusions above, some design approaches are developed to be applied in the physical intervention. They are as follows:

I.

In some cases are colour and materiality most important.

II.

In some cases are proportion and volume most important.

III.

What is unknown is left to the viewer for speculation.

IV.

Elements which seem to have full documentation can be reconstructed in full.

V

PHYSICAL INTERVENTION

PHYSICAL INTERVENTION

INTRODUCTION

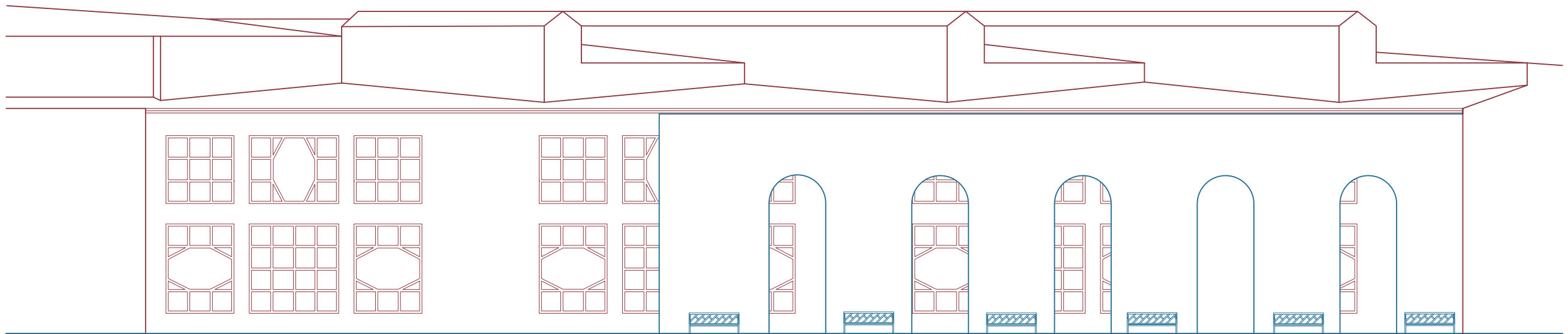
In order to make the intervention something more than purely decorative follies, it is as far as possible given a programme to support the already existing context. Due to the vastness of the original exhibition area, the interventions are concentrated around the geographical area which was the focus during the design process.

The reconstruction is designed to coexist with the current buildings and infrastructure. Some parts are possible to reconstruct relatively intact without causing damage on existing buildings or disturb for example bike lanes or pedestrian streets. In other cases, only material, colour or expression are possible to reconstruct. Depending on the context, one object is reconstructed or represented in different ways.

Three focal points were identified as appropriate for an intervention. Firstly the Minarets, which as the architects stated, perhaps were the most eye-catching piece of the entire exhibition due to their tall and slender volume as well as the brave decorations. Secondly the loggia towards the Long courtyard, which was painted in another colour than the otherwise white painted pavilions. Another reason for the loggia to be of great interest is on an urban level. The plan of the Jubilee Exhibition was intended to be a reflection of the city; the loggia was the main element which marked the correlation between Kungssportsavenyn and the Long courtyard at the exhibition. Thirdly are the two slightly taller facades facing the Long courtyard. They are painted in the white lime plaster that the most of the pavilions were painted in, which makes them an important contribution to the whole colour palette. Positioned where there are few intersecting element in the existing context, big parts of the facades can be reconstructed relatively intact.

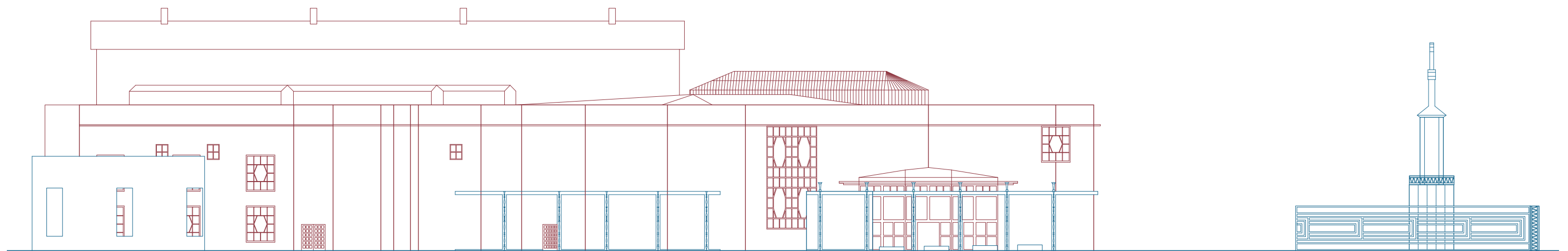
A model in scale 1:75 was the most important design tool. The model was divided in five modules of 600x700 millimeter due to the model's big format of 3000x700 millimeter.

UNFOLD.



THE INTERVENTION. ELEVATION TOWARDS COURTYARD AT ARTISTEN

-
1:200



THE INTERVENTION. ELEVATION TOWARDS PAVEMENT

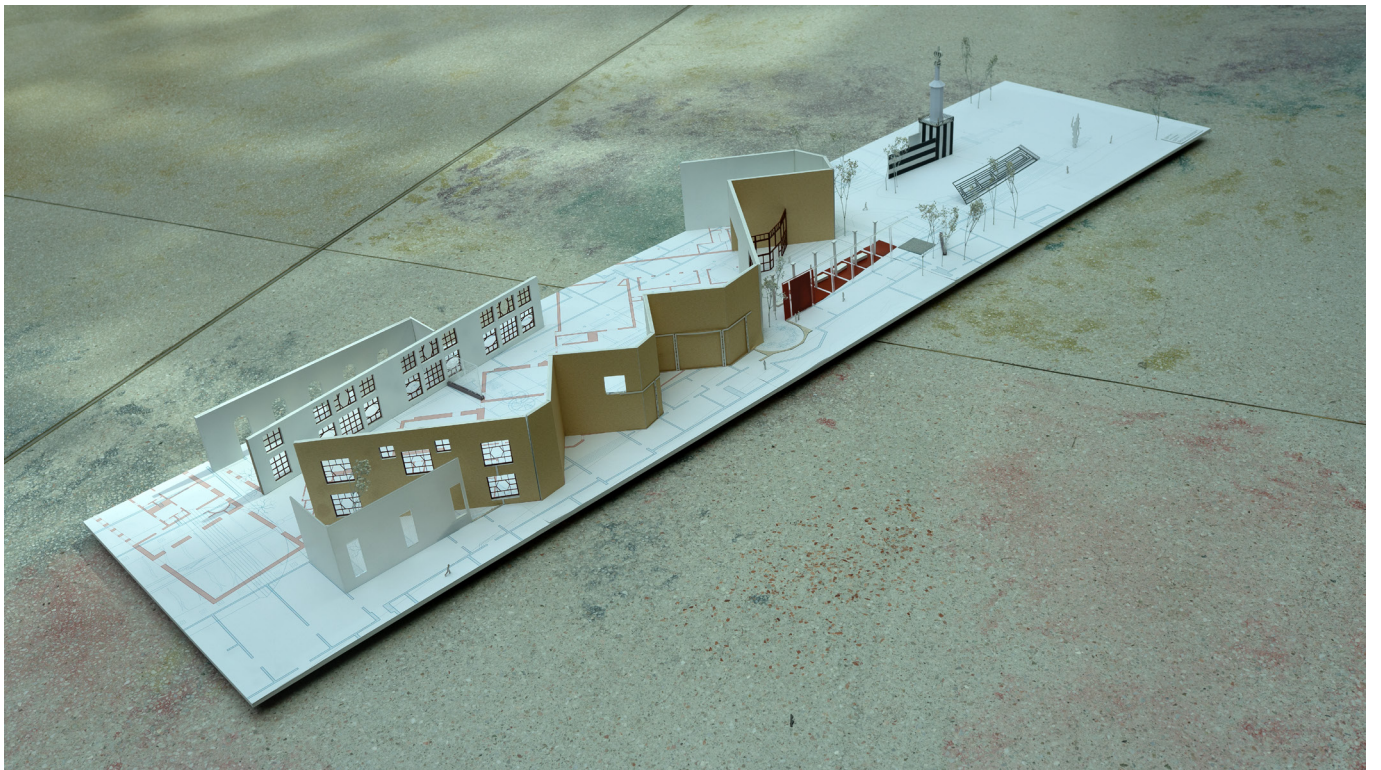
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1:400

UNFOLD.



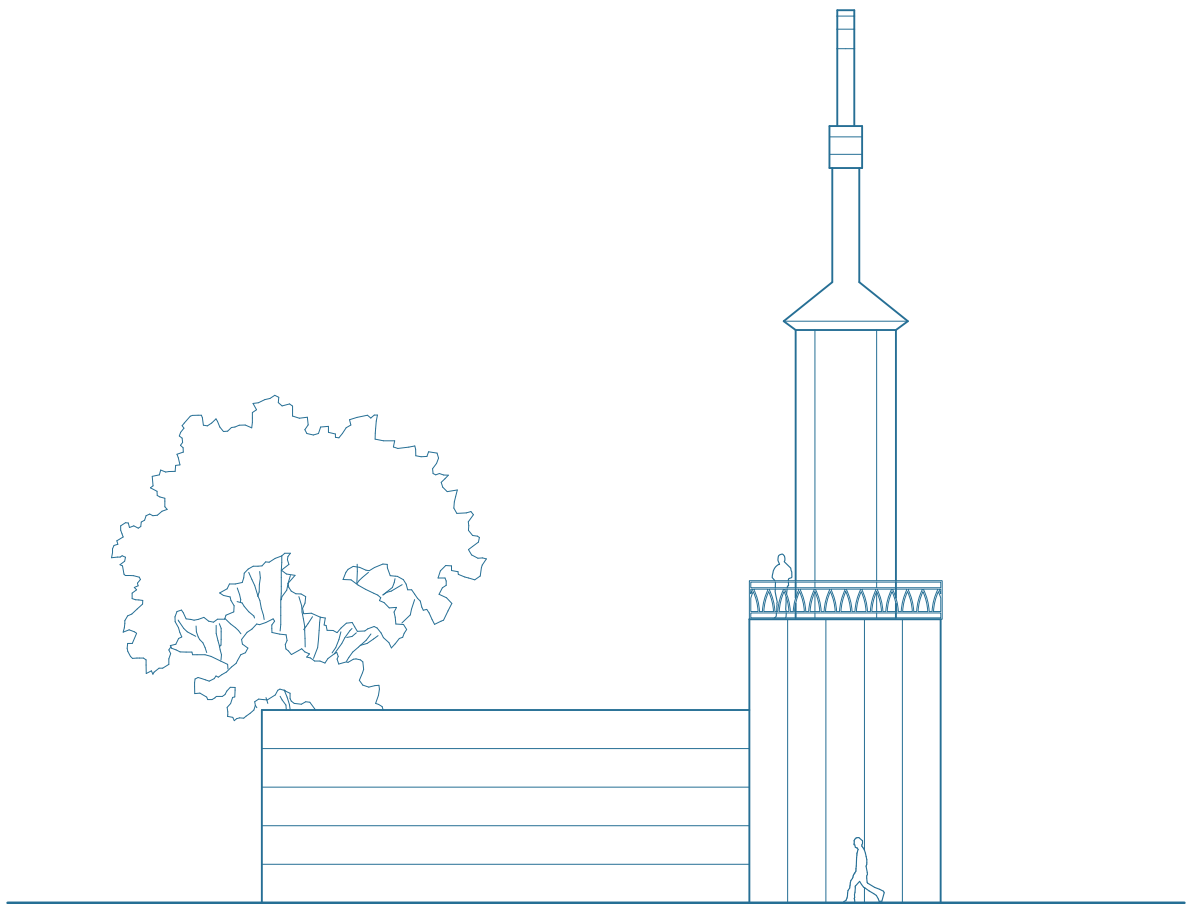
THE INTERVENTION. LION SCULPTURE

-
1:100



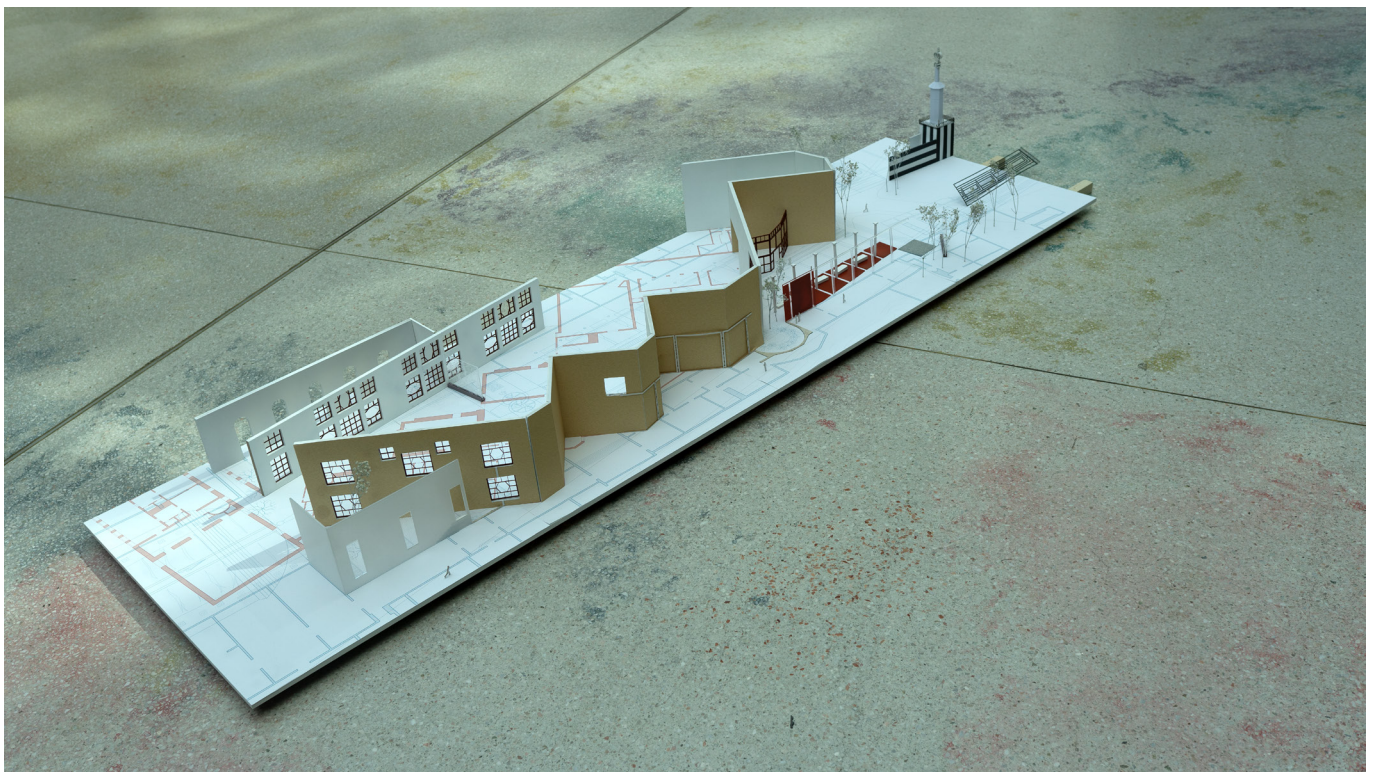
THE INTERVENTION. MAIN MODEL 3000x700 mm 1:75. 5/5 MODULES

MDF board, pine, cardboard, paper, 3D printed plastic, plexi glass, plaster, flowers, acrylic paint, spray paint, sand, sandpaper



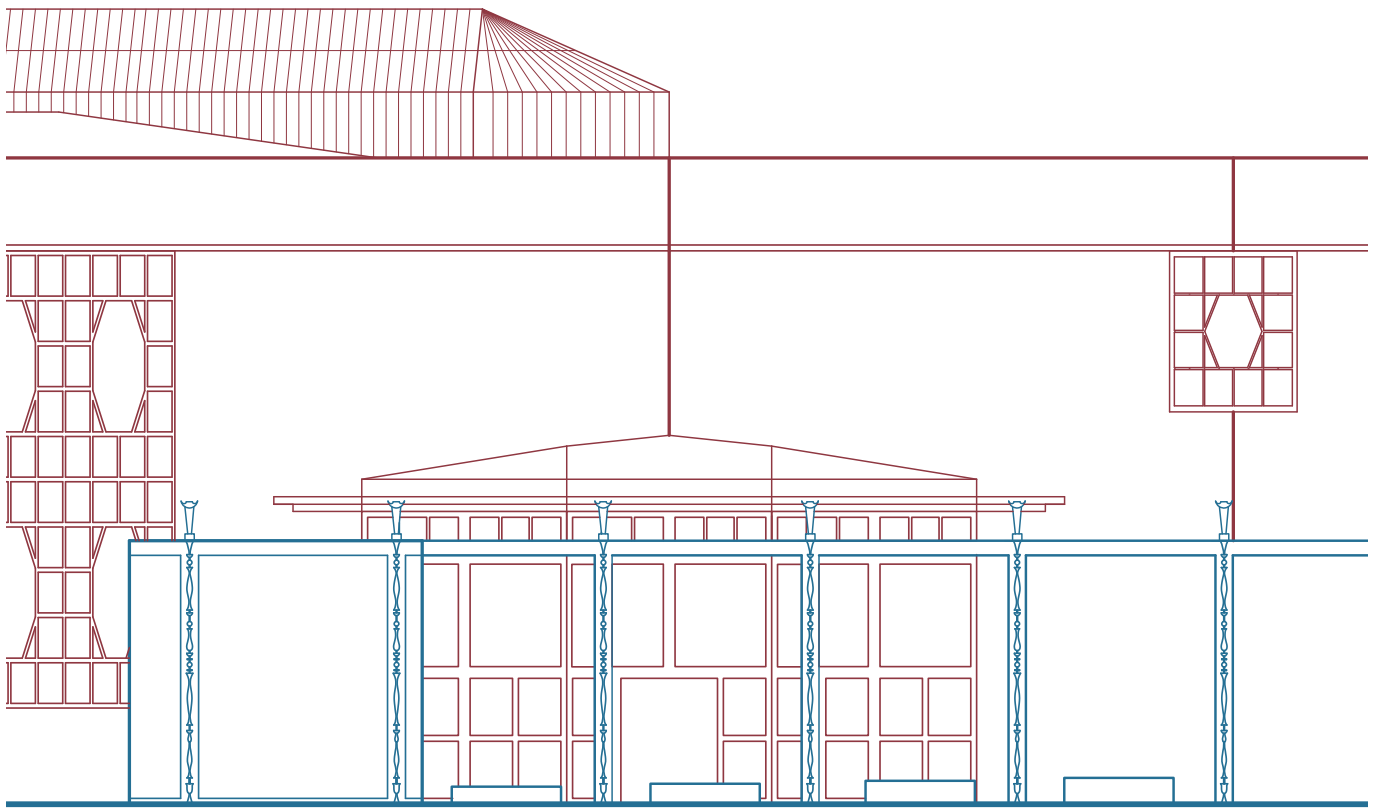
THE INTERVENTION. THE MINARET

-
1:200



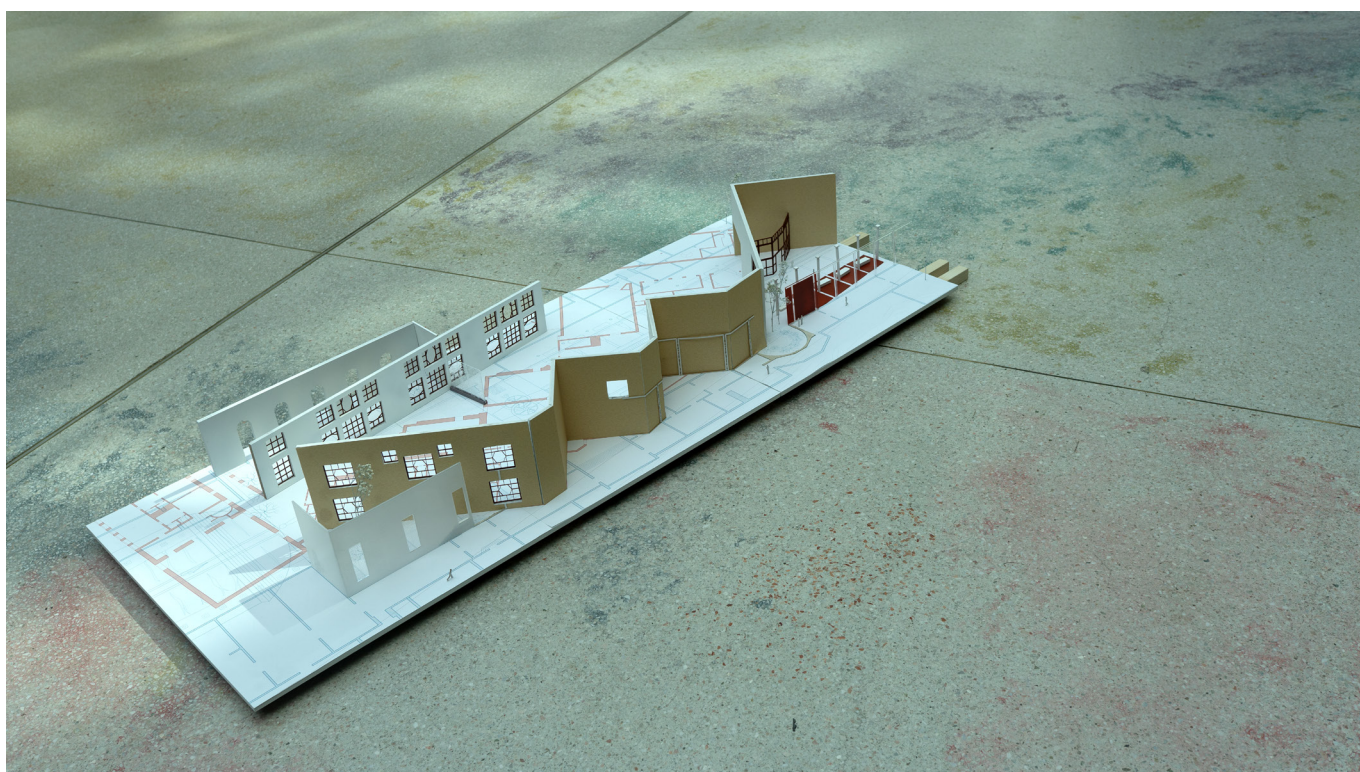
THE INTERVENTION. MAIN MODEL 3000x700 mm 1:75. 4/5 MODULES

MDF board, pine, cardboard, paper, 3D printed plastic, plexi glass, plaster, flowers, acrylic paint, spray paint, sand, sandpaper



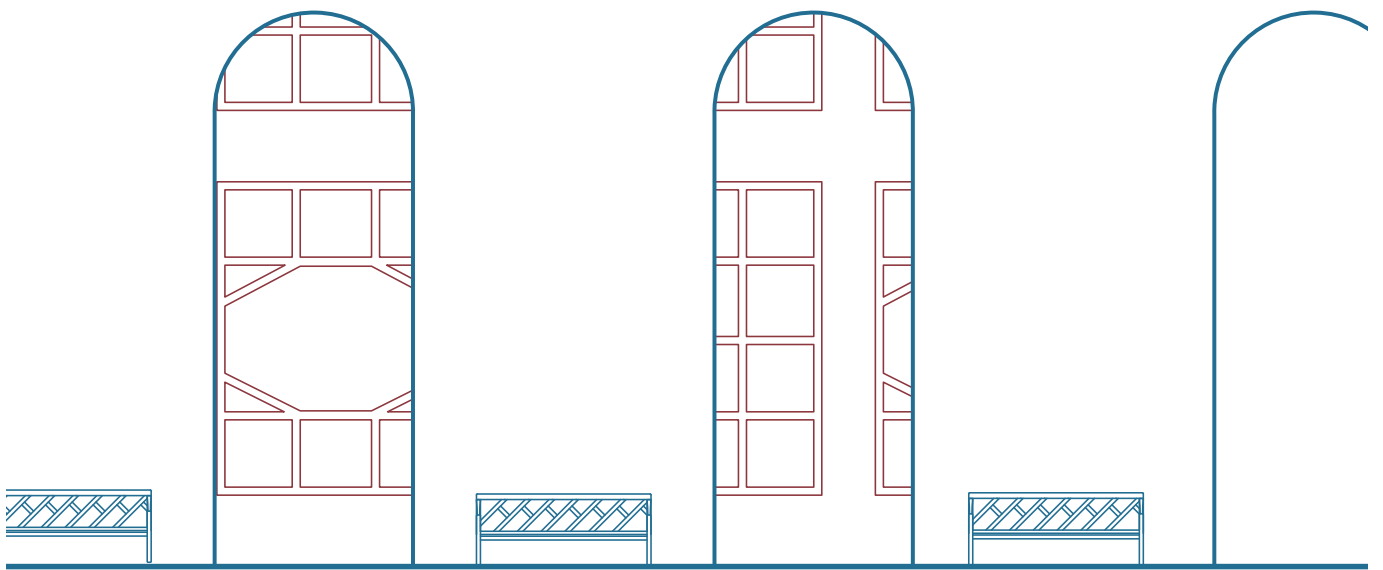
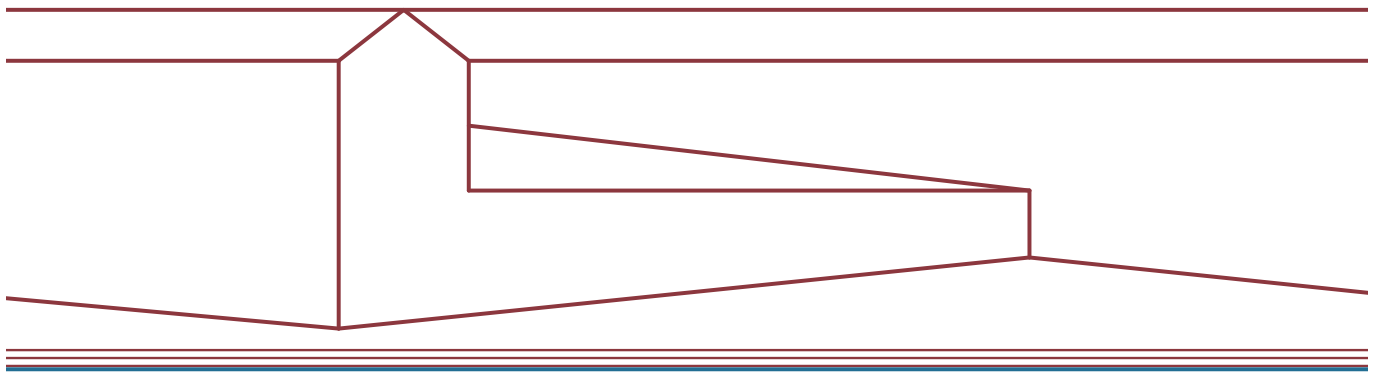
THE INTERVENTION. THE LOGGIA

-
1:200



THE INTERVENTION. MAIN MODEL 3000x700 mm 1:75. 3/5 MODULES

MDF board, pine, cardboard, paper, 3D printed plastic, plexi glass, plaster, flowers, acrylic paint, spray paint, sand, sandpaper



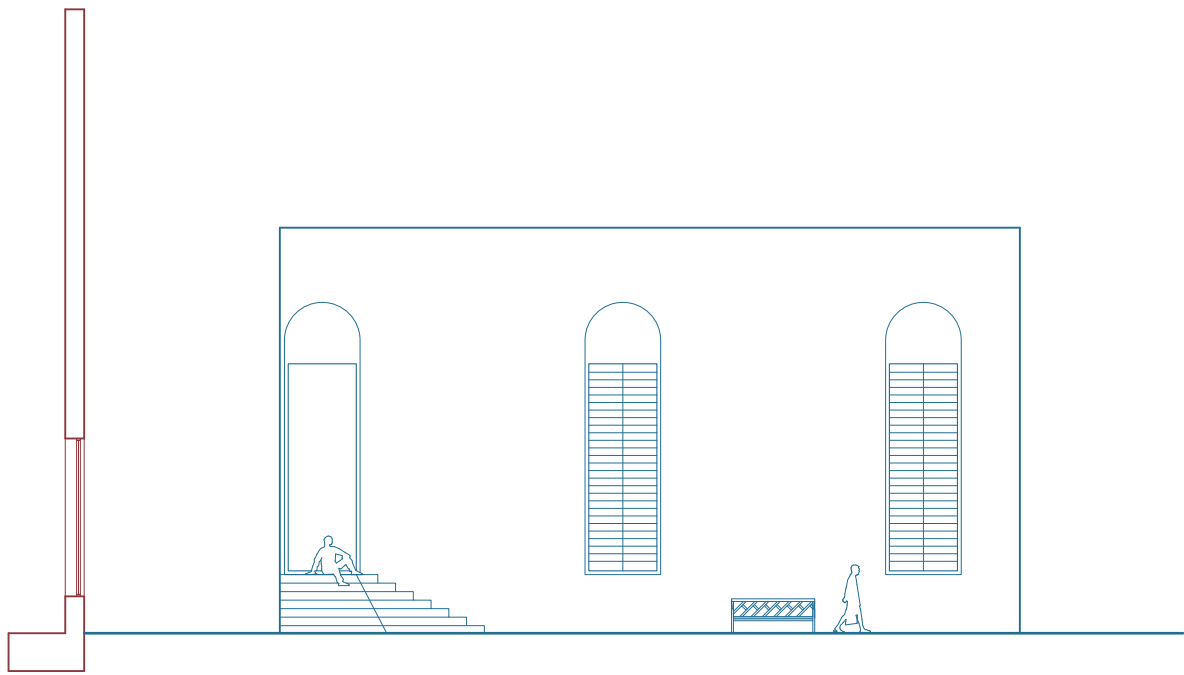
THE INTERVENTION. THE VAULTS

-
1:100



THE INTERVENTION. MAIN MODEL 3000x700 mm 1:75. 2/5 MODULES

MDF board, pine, cardboard, paper, 3D printed plastic, plexi glass, plaster, flowers, acrylic paint, spray paint, sand, sandpaper



THE INTERVENTION. THE NEW COURTYARD ELEVATION

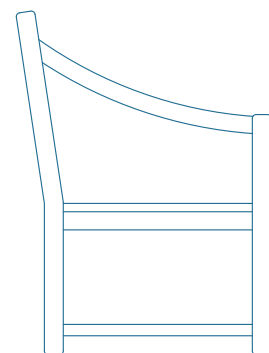
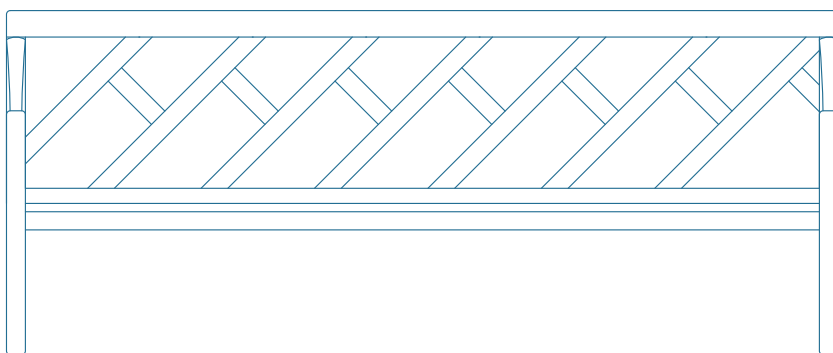
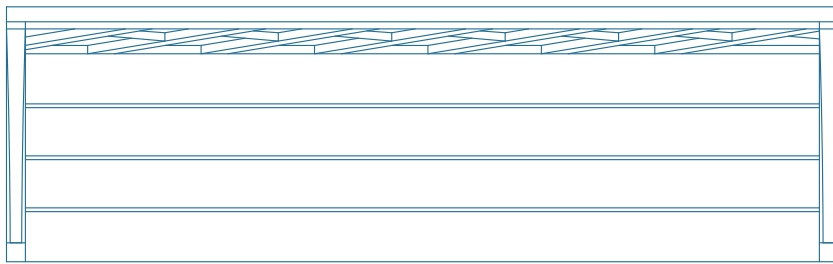
-
1:200



THE INTERVENTION. MAIN MODEL 3000x700 mm 1:75. 1/5 MODULES

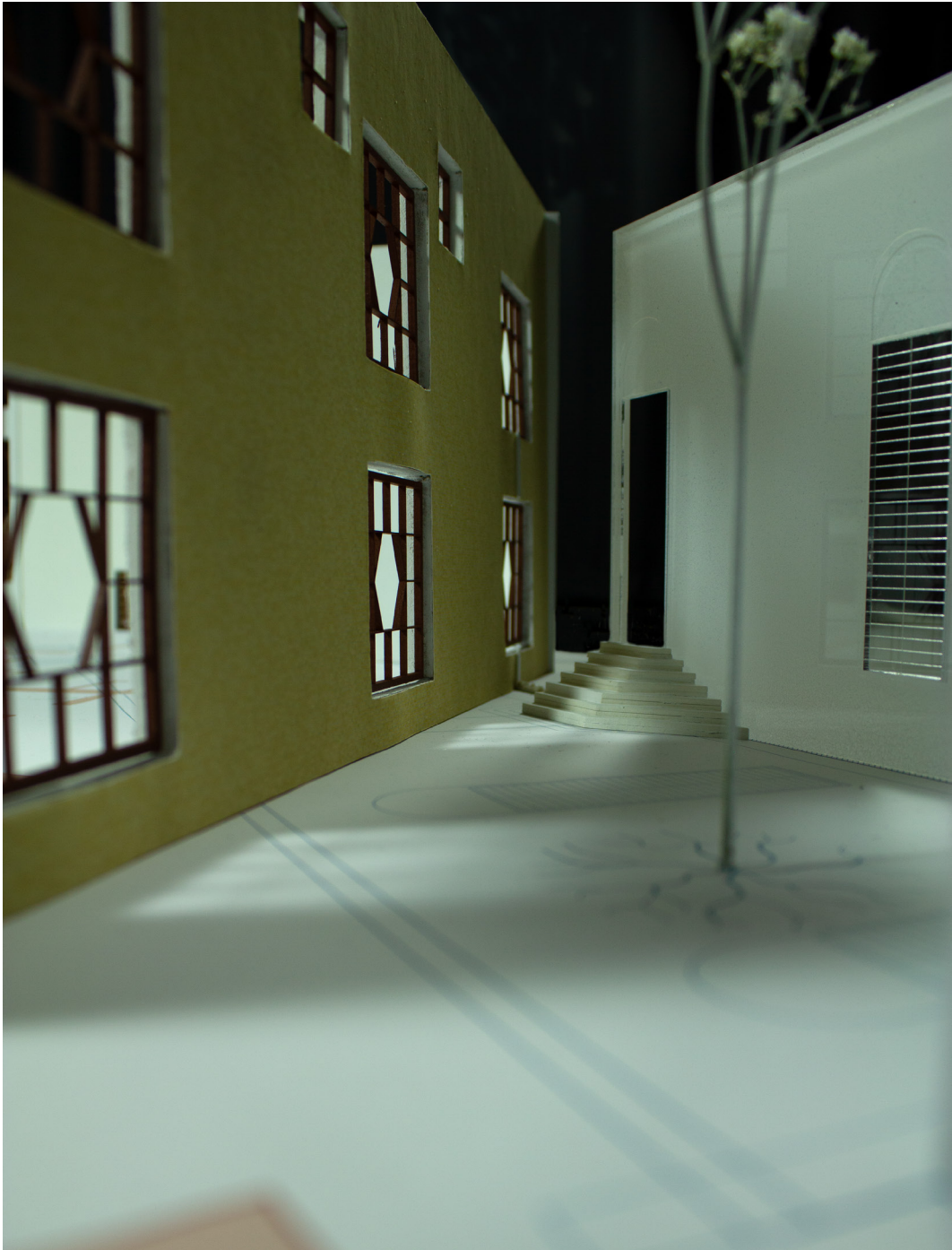
MDF board, pine, cardboard, paper, 3D printed plastic, plexi glass, plaster, flowers, acrylic paint, spray paint, sand, sandpaper

Seating opportunities are few at the site. Several photographs from the Jubilee Exhibition depict park benches similar to the one below (see Appendix B). In combination with the spaces created through reconstruction, the benches can enhance the experience of the jubilee architecture.



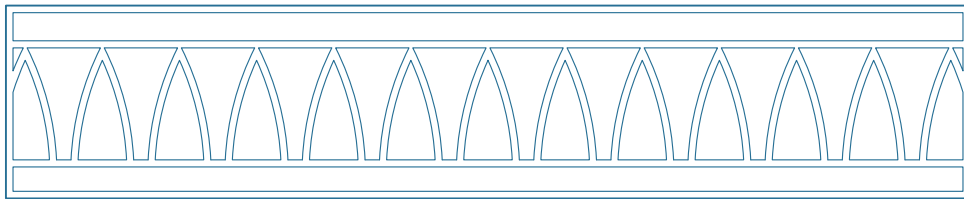
OBJECTS. PARK BENCH

-
1:20



THE INTERVENTION. VIEW FROM NORTH TOWARDS NEW COURTYARD.

To prevent people from falling down from the Minaret, the original ornamentation is translated into a balcony railing.



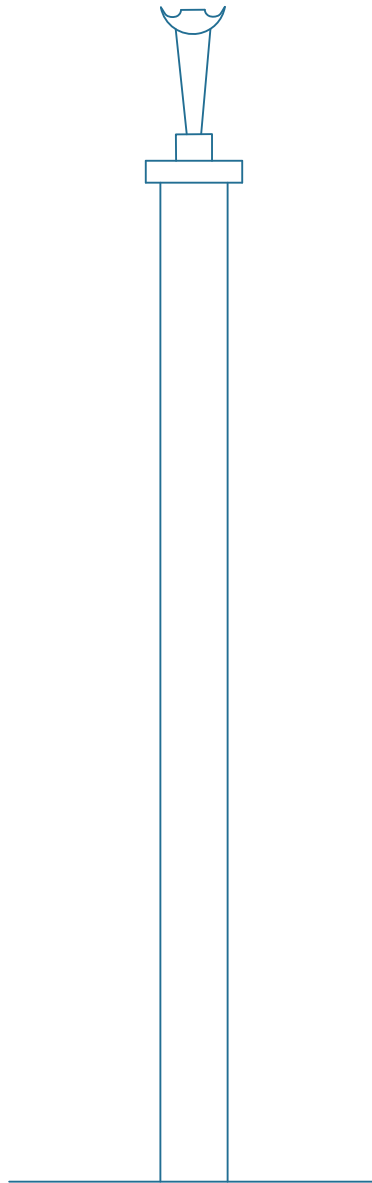
OBJECTS. RAILING

-
1:40



THE INTERVENTION. VIEW FROM SOUTHWEST TOWARDS THE MINARET.

Illumination by night is also an aspect which the site is missing today. The columns that were carrying the loggia along the Long Courtyard are here transformed into lamp posts with inspiration from other lamps found in archive photographs.



OBJECTS. LAMP COLUMN

-
1:50



THE INTERVENTION. VIEW FROM SOUTH TOWARDS THE LOGGIA

DISCUSSION

Instead of reconstructing the Jubilee Exhibition on an empty field with no 'disturbing' elements in its surroundings, which could result in a physical reconstruction in its whole (given more time for research), another approach was chosen in this thesis; to combine it with the present context at its original site. The result of this approach has several advantages. Firstly, there is the aspect of honesty. The conceptual ideas when designing the exhibition area in 1923 had profound support in the urban fabric. It became clear during writing this thesis, that this was important to highlight, in one way or another. Secondly, there is the aspect of sustainability. If reconstructed on its original site can fragments instead of the whole exhibition area be reconstructed which requires a lot less building material and yet achieving an impression of an entity. Finally, that a reconstruction can, with adaption to its original site, support the existing structures and activities that are already there and contribute to the urban life.

This thesis shows that a reconstruction can be made, as long as the sources are compared and used in a systematic way. Where there is a gap in the information, this isolated aspect can be a subject of speculation or translation to something else *within* the term reconstruction. While this thesis covers reconstruction of destructed buildings must this also be applicable to transformation and restoration projects of existing monuments, an aspect most relevant to every practising architect.

What a reconstruction can be and what it means is an aspect that has been central through the entire process. Is the project a reconstruction of memories? Or rather a reconstruction of representations? Can memories be reconstructed when there are (reasonably) not a person alive who actually visited the exhibition and can tell the story from a first-person perspective?

It has become clear during this thesis process that every case of reconstruction needs to be treated individually. Depending on the situation can a reconstruction take many shapes, such as reconstruction of an expression of a facade or even a reconstruction of an entire volume. It has also been shown that a reconstruction can be an attempt to get a complete description about a historical event.

By exploring reconstruction in one specific case, the Jubilee Exhibition 1923, can other, more critical cases be discussed. One example is the war in Ukraine, where the built environment, encapsulated with people's memories, at this very moment are being destructed by war. The question is how these buildings should be reconstructed, even if they at all should be. Should they be marked by a small metal plaque on the wall of the new building? Or should they be reconstructed just as they were? Are there perhaps also reasons for not reconstructing buildings destructed by war? To tell the story about the destruction should be equally important as to look into the future. The two contexts could coexist; to keep the memories alive about how a monument was destroyed as well as trying to adapt to a new situation and see opportunities for how to build something new.

Conclusions

This thesis shows that archival resources constantly communicate with each other to provide a reasonably accurate basis for a reconstruction. Through adaption to the current conditions at its original site, can one element for reconstruction take many shapes and form interesting sequences.



THE MODEL IN ITS FIVE MODULES 2023-05-18

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IMAGES

All images courtesy of the author unless otherwise stated.

Figure I:

Photographer unknown. (1923) *Göteborgs Jubileum (Minnesutställningen), 1923 Näckrosdammen, Klippträdgården, Minareterna. Konditoriets utserving i bakgrunden* [electronic image]. Available at: <https://digitaltmuseum.se/011014983170/goteborgs-jubileum-minnesutställningen-1923-nackrosdammen-klipptradgarden> Retrieved 2023-01-23.

Figure II:

Bjerke, A., Ericson, S., (1930) p. 61. *Utställningens arkitektur*. [scanned by author]

Figure III:

Photographer unknown. (n.d.) *Crystal Palace from the Northeast during the Great Exhibition of 1851*. [electronic image]. Available at: https://upload.wikimedia.org/wikipedia/commons/9/92/Crystal_Palace_from_the_northeast_from_Dickinson%27s_Comprehensive_Pictures_of_the_Great_Exhibition_of_1851._1854.jpg Retrieved 2023-03-09

Figure IV:

Rosenberg, C.G., (1930) *Stockholmsutställningen 1930 Festplatsen från Corson, hall 14. Exteriör med reklammast, flaggor och paviljonger*. Available at: <https://digitaltmuseum.se/011014979391/stockholmsutställningen-1930-festplatsen-fran-corson-hall-14-exterior-med> Retrieved 2023-05-09

Figure V:

Bjerke, A., Ericson, S., (1930) p. 55. *Utställningens arkitektur*. [scanned by author]

Figure VI:

Photographer unknown. (1923). *Göteborgs Jubileum (Minnesutställningen), 1923 Långa gårdens loggia vid Lindgrottan*. [electronic image] Available at: <https://digitaltmuseum.se/011014983106/goteborgs-jubileum-minnesutställningen-1923-langa-gardens-loggia-vid-lindgrotta> Retrieved 2023-01-23

Figure VII

Bjerke, A., Ericson, S., (1930) p. 73. *Utställningens arkitektur*. [scanned by author]

Figure VIII:

Photographer unknown (1923). *Göteborgs Jubileum (Minnesutställningen), 1923 Entrégården*. Available at: <https://digitaltmuseum.se/011014983044/goteborgs-jubileum-minnesutställningen-1923-entregarden> Retrieved 2023-01-23

Figure IX-X:

Bjerke, A., Ericson, S., (1930) p. 61 and 73. *Utställningens arkitektur*. [scanned by author]
Courtesy of the author.

Reference I:

Photographer unknown. (2012) *Frauenkirche in Dresden*. [electronic image]. Available at: https://upload.wikimedia.org/wikipedia/commons/e/e6/Ev.-luth._Frauenkirche_Dresden.jpg Retrieved 2023-02-09

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Photographer unknown., (n.d.). [electronic image] Available at: davidchipperfield.com/project/neues_museum Retrieved 2023-03-09

Reference IV:

von Bruchhausen, J., (n.d.). *Neues Museum* [electronic image] Available at: https://davidchipperfield.com/project/neues_museum Retrieved 2023-03-09

Reference V:

Courtesy of the author.

Reference VI:

Dujardin, F., (n.d.) *A birthday cake for Ghent University*. [electronic image] Available at: <https://bovenbouw.be/projects/a-birthday-cake-for-ghent-university-ghent/> Retrieved 2023-03-09.

APPENDIX A

COLOURISED PHOTOGRAPHS



ARCHIVE PHOTOGRAPH I

Photographer unknown. (1923) *Göteborgs Jubileum (Minnesutställningen)*, 1923 Näckrosdammen, Klippträdgården, Minareterna. Konditoriets uteservering i bakgrunden [electronic image]. Available at: <https://digitaltmuseum.se/0111014983170/goteborgs-jubileum-minnesutställningen-1923-nackrosdammen-klipptradgarden> Retrieved 2023-01-23.



COLOURISED PHOTOGRAPH I

*The Minarets at the Jubilee Exhibition 1923.
Photograph colourised with AI by Christensen, Axel*



ARCHIVE PHOTOGRAPH II

Photographer unknown (1923). *Göteborgs Jubileum (Minnesutställningen), 1923 Entrégården*. Available at: <https://digitaltmuseum.se/011014983044/goteborgs-jubileum-minnesutställningen-1923-entregarden> Retrieved 2023-01-23



COLOURISED PHOTOGRAPH II

-

*The entrance courtyard at the Jubilee Exhibition 1923.
Photograph colourised with AI by Christensen, Axel*



ARCHIVE PHOTOGRAPH III

Photographer unknown. (1923). *Göteborgs Jubileum (Minnesutställningen), 1923 Långa gårdens loggia vid Lindgrottan.*
[electronic image] Available at: <https://digitaltmuseum.se/011014983106/goteborgs-jubileum-minnesutställningen-1923-langa-gardens-loggia-vid-lindgrotta> Retrieved 2023-01-23



COLOURISED PHOTOGRAPH III

*The loggia at the Long courtyard at the Jubilee Exhibition 1923.
Photograph colourised with AI by Christensen, Axel*



ARCHIVE PHOTOGRAPH IV

Photographer unknown. (1923). *Göteborgs Jubileum (Minnesutställningen), 1923 Konstindustrins byggnad, huvudentré med skulpturer*: [electronic image] Available at: <https://digitaltmuseum.se/011014983355/goteborgs-jubileum-minnesutställningen-1923-konstindustrins-byggnad-huvudentre> Retrieved 2023-01-23



COLOURISED PHOTOGRAPH IV

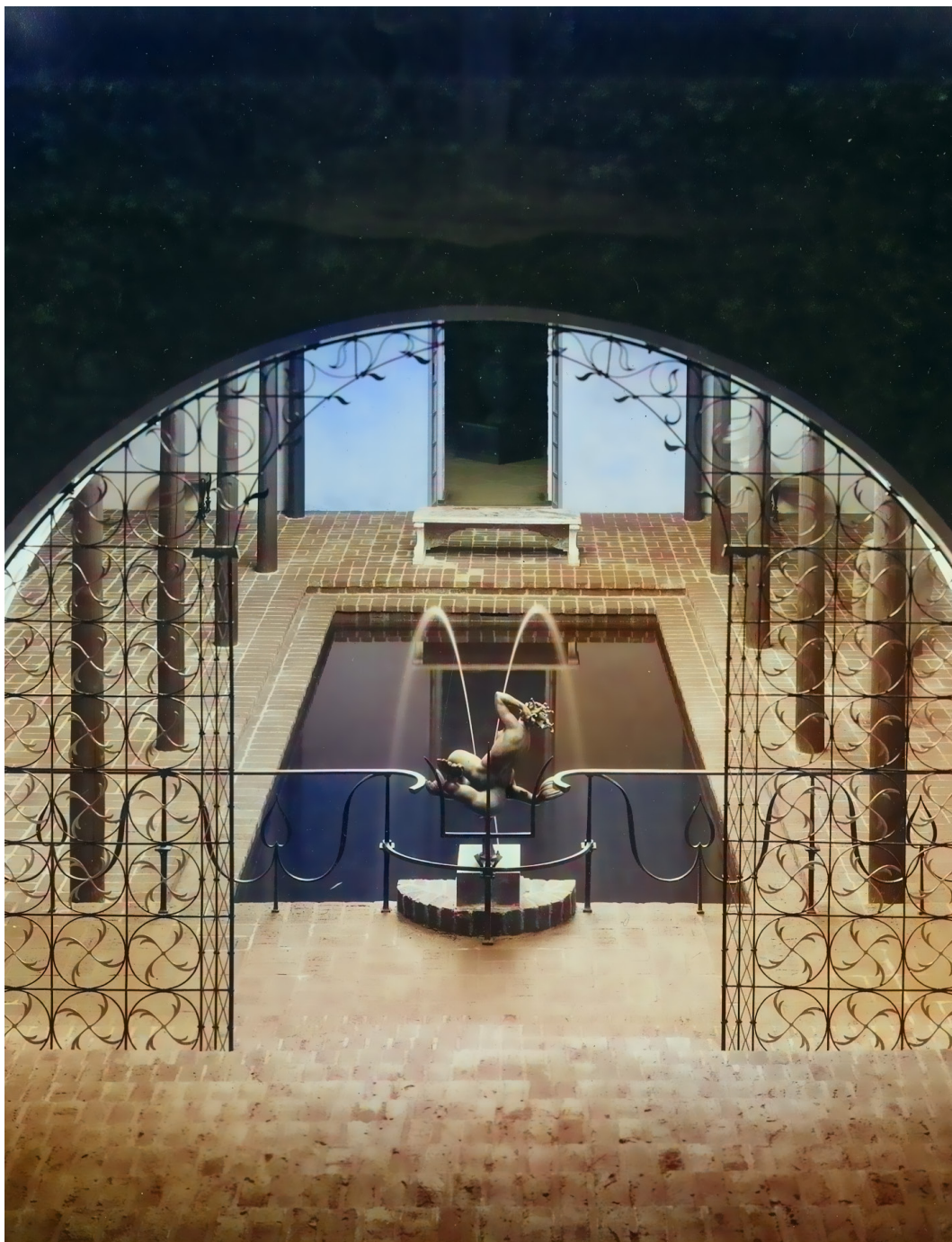
*The entrance to the Art Industry pavilion at the Jubilee Exhibition 1923.
Photograph colourised with AI by Christensen, Axel*



ARCHIVE PHOTOGRAPH V

-

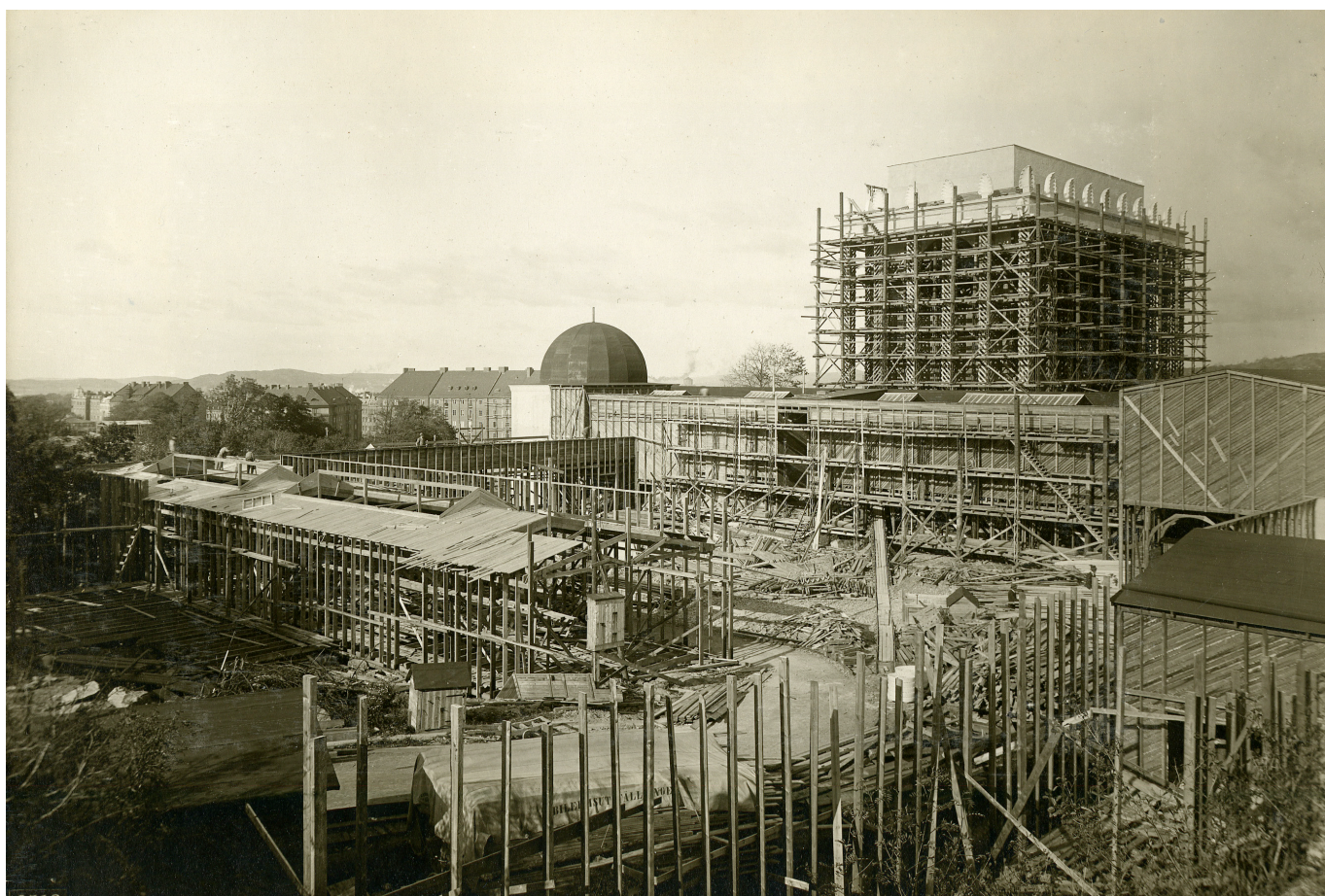
Photographer unknown (1923). *Image no 166*. Regionarkivet Göteborg. [electronic image, scanned by Regionarkivet]



COLOURISED PHOTOGRAPH V

-

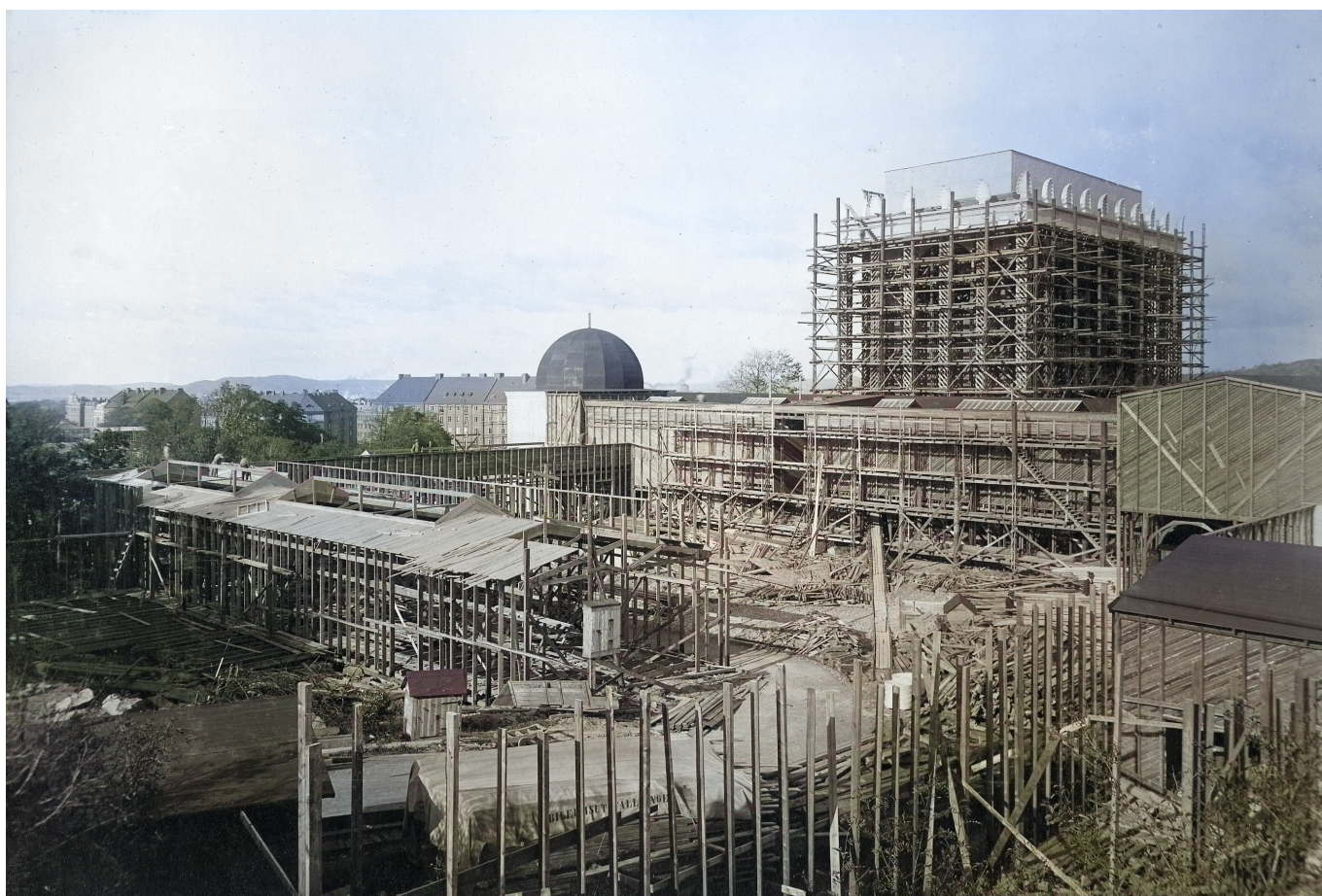
*The atrium in the Art Industry pavillion at the Jubilee Exhibition 1923.
Photograph colourised with AI by Christensen, Axel*



ARCHIVE PHOTOGRAPH VI

-

Photographer unknown (1923). *Image no 3518*. Regionarkivet Göteborg. [electronic image, scanned by Regionarkivet]



COLOURISED PHOTOGRAPH VI

-

*Parts of the exhibition under construction
Photograph colourised with AI by Christensen, Axel*



CHALMERS
UNIVERSITY OF TECHNOLOGY

Archived Monuments

A Speculative Reconstruction of the Jubilee Exhibition 1923

by Axel Christensen

Master's Thesis Spring 2023
Chalmers School of Architecture
Department of Architecture & Civil Engineering
Master's Programme in Architecture and Urban Design

Supervisor: Karin Hedlund
Examiner: Daniel Norell