

Graduation Plan

Master of Science Architecture, Urbanism & Building Sciences

AR3AH105 Graduation Studio Adapting 20th Century Heritage

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Personal information

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Studio

graduation studio AR3AH105 Adapting 20th Century Heritage
theme Vacant heritage - Police stations
project Police headquarters The Hague
teachers Joana Dos Santos Gonçalves: Mentor Architecture
Wido Quist: Mentor Research
Frank Koopman: Mentor Building technology

Argumentation of studio choice

The Netherlands is dealing with a huge housing shortage. I believe a part of this problem is due to excessive demolition of buildings which have lost their function or simply don't match with the contemporary aesthetics we ask from buildings. Adaptive reuse can be the key in providing a second life for these buildings. With creative design solutions the existing building can be transformed and preserved in a much more durable way compared to demolition and reconstruction.

This studio is the perfect fit, as it focuses on adaptive reuse and finding/researching the existing values in outdated buildings.

Title

title of the graduation project Storming the Castle

Product

location Police headquarters in The Hague
problem statement The use of precast in the post-war period questions the significance of workmanship and original material in comparison to more traditional buildings. The first wing of the police headquarters in The Hague, constructed in 1958, is only listed as monumental due to the presence of artworks forming unity with the building and the building being a well preserved example of the 'Wederopbouw' (Monumentenzorg, 2018). This statement disregards the presence of its Schokbeton façade, thus over-looking possible scientific values connected to the building.

The later extension, constructed in 1980 by the same architect of the first wing: W.S. van de Erve, did not receive a monumental listing at all. Like the first wing, this façade is also made of precast concrete. However in this extension, the façade is also load bearing and the main aesthetic element of the building.



1958 first wing (The Hague municipal archive)



1980 extension (The Hague municipal archive)

The façade elements in both parts of the building have scientific conceptual values attached to them that are not widely known. As a result, the façade in the police headquarters in The Hague is prone to harmful changes that destroy the essence of it.

Another problem that arises when trying to preserve the façade, or at least the scientific value attached to it, is its character. For the police headquarters, the façade was meant to resemble a keep and its character is thus admonishing. Because the police changed their image from being above the people to being amongst the people, the character of the façade didn't fit. A fitting design solution will have to be found to combine both the values of the present façade with a façade that fits the new character of the complex.

research questions	To what extent do precast concrete facades in post-war office buildings influence our approach to redesign?
subquestions	<ul style="list-style-type: none"> - What is the contribution of precast concrete to Modernist architecture? - What are the character-defining features of precast concrete façades in post-war office buildings? - Which design principles did the architects use when dealing with precast concrete façades in post-war office projects? - What redesign approach does the facade of the police headquarters in The Hague require?

results for design assignment	<p>The design aim is creating a vibrant mix of living, working and leisure. The precast concrete façade will play a major role here, as it will keep the essence of its materiality while having an expression fit for welcoming users of all three functions.</p> <p>The program of leisure will also be carefully chosen, as it will lay the connection between working and living through functions that fit both target groups.</p>
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Process

method description	<p>Research will be conducted first through historic research into the contribution of precast concrete facades to Modernist architecture. Next, case-study research into similar 1960-1980 precast concrete facades is done in order to find similarities and typologies in these facades. This will help categorizing the façade in The Hague and strengthens possible found values. Then, more contemporary case-study research is done in order to find solutions for redesign.</p> <p>Research delivers outputs which will be tested in the (re) design. Vice versa, the design helps the research by providing alternations on the façade typologies, in order to find possible new typologies which fit the new use of the police headquarters in The Hague.</p> <p>Historic research is done up to P2. Afterwards, more research into facade design solutions is done.</p>
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literature and general
practical preference

Relevant literature sources on the topic of precast concrete are retrieved from Heinemann (2013), Macdonald (2001) and Docomomo dossiers. More practical experience is found by analysing case-studies such as the Philadelphia police headquarters in the USA, the Banque Lambert in Belgium, the Torrington factory in Belgium, the CBR office in Belgium and the CGER bank in Belgium. Also, more contemporary case-studies are researched after the P2, with Naturalis Leiden as example.

Reflection

relation studio topic &
relevance

My graduation topic is on precast concrete facades, the studio's topic is about adaptive reuse and the master track is Architecture. The link here is my personal fascination for visible structures. With this I mean structures that can both serve their structural purpose and reach an artistic/aesthetic effect. This studio's subject, the police headquarters in The Hague, is chosen because it fits my fascination due to the presence of a structural precast concrete façade.

I am also interested in adaptive reuse because I believe it is necessary in order to preserve values, battle the housing problem and reduce carbon emissions by keeping the structure for example intact. Keeping the structure while giving it a new aesthetic layer with a new character is something I wish to explore more about.