

REFLECTION

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RELATION WITH STUDIO TOPIC, MASTER TRACK AND PROGRAM

My interest for heritage buildings in architecture started during my Bachelor studies at the TU Eindhoven. In the third year, we had to work on the transformation of the Schellensfabriek in Eindhoven in multidisciplinary teams. During this project, we just fitted in a new in the existing spaces of the monumental part of the complex and did not touch it for the rest. Another part of the complex was demolished in this design. This way of working raised questions on how to deal with listed buildings, why these buildings are listed and what the possibilities of such buildings are. This interest developed further into the choice for earlier Heritage and Architecture studios and in the end led to the choice for this Graduation studio. This year's Heritage and Architecture graduation studio deals with police real estate. Since the establishment of the national police in 2013, the police force is facing a significant real estate challenge. Around 30 percent of their real estate is in need for redevelopment and in the upcoming ten years, around 700.000 square meter of real estate will be divested. Atelier Politie Bouwmeester provided us with a list of ten buildings that will be divested in the future to work with. Some buildings on the list of the police, including the Koudenhorn in Haarlem I selected to work with, are listed as national monuments because of their cultural-historical value. The Vacant Heritage studio of the Heritage and Architecture track focusses on the preservation, renewal and adaptive

re-use in existing architecture. This also relates to the Architecture Master track that aims to 'draw on the rich architectural culture of the Netherlands'.

The individual research aimed with the theories on public interiors as an initial start, aimed to discover the architectural elements that contribute to the public perception of interior or enclosed spaces. Analyzing the architectural elements in physical case studies resulted in strategies to implement the elements during the transformation of introverted or enclosed heritage buildings into public accessible buildings. Making such buildings public accessible also means that valuable spaces or elements of the existing buildings are added to the public realm.

During the design process, social interaction became a more important concept, where the concept of public interior spaces became a tool in the design for attractive elderly housing. In line with the AUBS master program's aim to 'explore innovative ways to create more sustainable development', the design for adaptive re-use of an existing building is in itself already part of the sustainable developments. Adding the social interaction part to it, so the social sustainability of the re-design adds another layer to the sustainability of the re-design.



Image: Koudenhorn Haarlem | own picture

RESEARCH AND METHODOLOGY

The research for the Vacant Heritage studio consisted of two parts. For the first part of the research, the students had the opportunity to choose between two research groups in the beginning of the graduation studio, the Spatial Building Typology group and the Touch & Feel group. The Spatial Building Typology research that I chose for aims to discover the similarities and differences in the spatial characteristics of a group of buildings and how this influences the redesign options. With the help of archival research, reduction drawings and diagrams, the current situation of eight of the buildings provided by the police are mapped and later on compared. The buildings are analyzed on the scale levels of the inner city, urban block, building object and building envelope with a total of 12 aspects. This overview of the current situation of the Koudenhorn in Haarlem turned out to be helpful to determine goals for the intervention in combination with the results of the individual research. Next to this, the SBT research is published as the second volume in the SBT book series, which contributes to the academic field related to heritage buildings, while it elaborates on the spatial characteristics of a group of buildings. Also the individual research topic and design proposal are integrated within this publication.

This individual research is the second part in the overall research of the graduation studio. During the Msc2 Heritage & Architecture studio, I conducted a small research on the relationship between building and public space. This research did not only focus on the design of the public space, but on the various categories of activities happening in public spaces and the influence of the physical context on those activities. With this research in the back of my mind, the disconnection of several of the police buildings and their surrounding public space caught my attention. The question how the Koudenhorn in Haarlem would function with a public use led to the initial topic of public interiors for the individual research. The research involved literature research on the topic of public interiors, however the literature on this topic often elaborates on the various types of public interiors and does not always go into the physical architectural aspect of such spaces. The book of Matthijs de Boer (2011) 'Binnen in de Stad' helped at this moment while it translated the literature on public interiors into physical elements and examples of those elements in case study research.

Subsequently, the knowledge gained from the literature is applied to physical examples in the form of a case study research. After selecting the first case studies and starting the analysis of the transformations of the project

the terms opening up and public accessible kept popping up. With those terms, the concept of porosity is added to the public interior research. Also the theories of Jan Gehl have been added to the literature, while it deals with the use of public spaces. Those theories are based on outdoor public spaces on a larger scale, but the concepts to stimulate the use of the public space turned out to be applicable to interior or enclosed public spaces as well. Those theories are combined into eight focus points to analyze in the case study research. The research contains how the focus points or architectural elements are applied in the various case studies, which after comparing resulted in various strategies for each focus point.

The research had an influence on the design process, but the design also influenced the research and case study selection. With an initial program selection for the redesign of the Koudenhorn that combined public functions with housing, case studies were added to the analysis with a program that also included housing. The initial idea of the case studies was to only analyze listed buildings that had a public interior use after the adaptive re-use design. However, with the incorporation of housing programs for the analysis, not all case studies in the end met those initial requirements. Also with those new case studies, not all focus points concluded from the literature could be researched in all cases. However, all turned out to be relevant for the process, even if a case study only included a public accessible enclosed site with pedestrian route and without any accessible interior spaces as the transformation of Tuin van Noord in Rotterdam.

An important part of public interior spaces is the experience of the public character of the space, while those spaces are private owned, but have a public feeling. The intention was to include this aspect in the case study research by observing how people used the interior space and how it served for informal use. Due to the Covid-19 regulations, this did not work out as planned. People had to book tickets in advance or show their QR-code at the entrance to visit museums or other functions defined as public interior. Those regulations make the informal use of public interiors almost impossible so observing people use the public accessible spaces and the personal experience of the public accessibility are influenced. So, user experience would have been an addition to the case study research. Not only as an addition in the analysis of the buildings to see how the public interior functions but also in the literature research to get more substantiation on why the selected architectural elements influence the public character of a space.

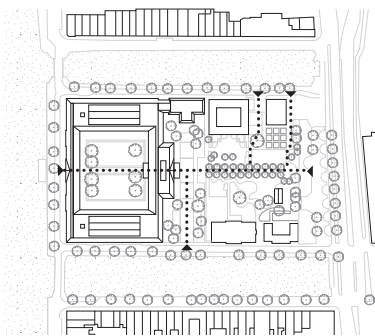
De Boer, M. (2011). Binnen in de stad. Trancity.

Gehl, J. (2011). Three types of outdoor activities. In J. Gehl, Life between buildings. Washington: Island Press.

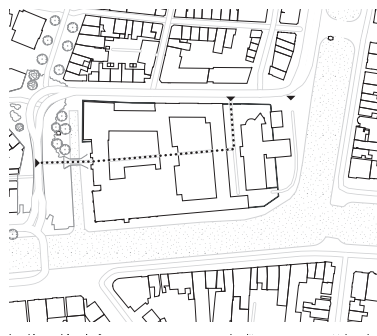
Existing literature on public interiors mainly focusses on the multiple typologies that are included in this concept and the analysis of buildings specifically built with a use seen as public interior. This research takes the overview of architectural elements of this literature and relates it

to the re-designs of existing, and for most case studies monumental listed, buildings to see to what extent those aspects can be implemented during the design for adaptive re-use.

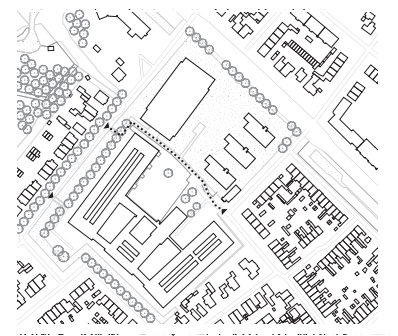
Analysis of focus point



Hermitage | Amsterdam

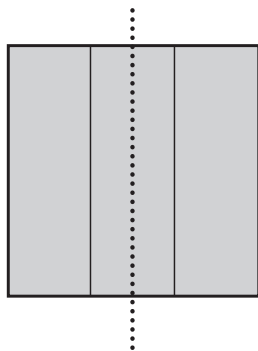


Blokhuispoort | Leeuwarden

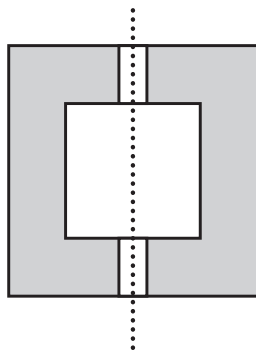


Neherpark | Leidschendam

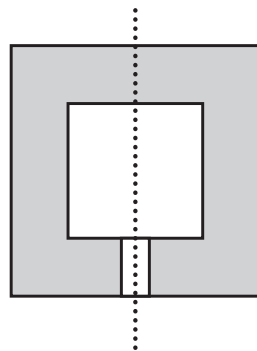
Strategies



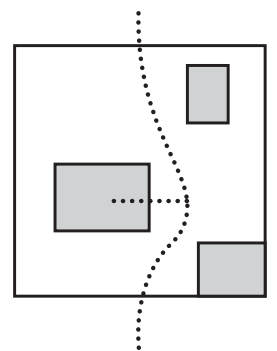
Routing through building



Routing through courtyard

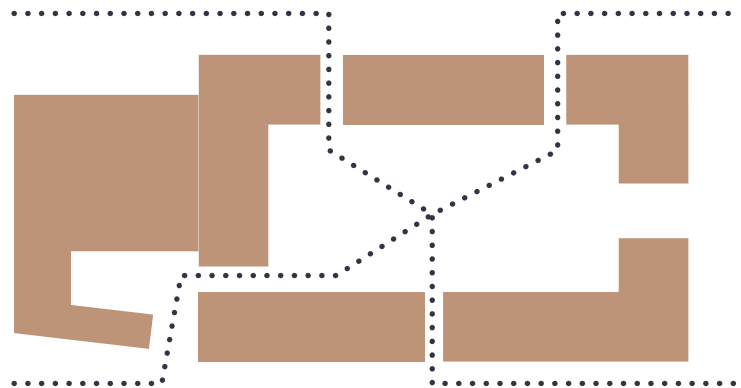


Routing through courtyard and building



Routing through enclosed site

Design goal



Relation research and design, from analysis to strategic overview to design goal

RELATION RESEARCH AND DESIGN

The research provided initial options for a program for the redesign, such as a museum. However the need for housing is still an actual problem. Part of this problem is a lack of (suitable) elderly housing, which is also a problem in Haarlem. This led to the design goal to incorporate public accessible functions with elderly housing in the Koudenhorn to stimulate social interaction, both for the inhabitants of the building and with the people in the area. Two important concepts in this design goal for the relation between the research and the design are public accessibility and social interaction.

Public accessibility:

One of the fundamentals of public interiors is the public accessibility of a private plot that thereby allows for informal use of the interior or enclosed space. The first focus point that has an influence on the public character of the space is the embedding of the building in the city. Especially the connection of the space with the pedestrian network is important. Also the location, design and number of entrances is of importance. If the space has multiple entrances, it is possible that a new pedestrian route will emerge through the building. The research showed various strategies on how to create a route through an existing building with interior or exterior passages, a combination or only a route over the site without entering the building. The design of the entrances can be monumental and outstanding or in a subtle way both as part of the existing building or as interventions. In the case of the Koudenhorn, three monumental entrances were already present, so those are used as passages through the building. This also means that the courtyard becomes accessible for the public and can play a role in the public realm. With an additional passage on the side of the Zakstraat, a shortcut through the large Koudenhorn building can emerge that connects the courtyard with the city center and the Koudenhorn street along het Spaarne and on the other direction the train station to the bridge across het Spaarne to the area of the Koepelgevangenis.

The research into public interiors also influenced the program for the redesign. Part of this program should be dedicated to public accessible uses to stimulate the social interaction, not only of the inhabitants of the building, but also with the people in the neighborhood. Therefore, the program includes collective spaces for the

elderly in the building, but also functions that serve for both the inhabitants and the neighborhood, such as a multifunctional/sport space, gym, auditorium, restaurant and creative hub. The multifunctional/sport function is the largest public accessible space that also requires more openness to the surroundings. The newer volume of the Koudenhorn building could serve for the openness needed for this function.

The use of materials also influences the public character of interior or enclosed spaces. To enhance the public accessibility of the courtyard, the pavement of the quay continues through the passages and into the courtyard to define the routing. Also the wooden materialization of the gallery in the courtyard continues into the public accessible and collective spaces connected to it to indicate its public character.

Social interaction:

The mixed program is also important for the social interaction. The various uses provide the opportunities for encounters and meetings of inhabitants and other people of the area and city. Also the location of the functions and their entrances matters to stimulate social interaction. If entrances of multiple functions are connected to a shared public space, the various users groups are more likely to interact with each other. In the case of the Koudenhorn, such a central space to assemble various functions and entrances is already present in the form of the courtyard. So the public accessible functions are organized with the entrances towards the enclosed outdoor space. Also part of the vertical circulation for the housing can be accessed from the courtyard, so people who live in the building enter and leave the housing volumes via the courtyard.

To stimulate social interaction and to make it possible to position public accessible or collective functions on other floors than the ground floor, and thereby create a both vertical and horizontal mixed use building, a freestanding wooden gallery is added on the courtyard side of the northern volume. To make the gallery work for the social interaction concept, it also connects to the entresol level of the building. The window openings are extended vertically both above and below the original windows to create new windows and entrances to the dwellings connecting to the courtyard. This stimulates the use of the gallery by various groups of people.

DILEMMAS AND ETHICAL ISSUES

A first issue that occurred during the redesign of the Koudenhorn was the decision to demolish the façade and a small part of the newer volume to create a new and more open appearance for this volume. Such an action means that a part of the history of the building would get lost, while in other parts of the building that are part of the same history of the building are remained. This new volume is designed to be more open at plinth level and to make the volume permeable and at the same time with more height. This height makes it possible to use the already existing large open space as a sports facility.

Another dilemmas that occurred during the development of the typologies for the Koudenhorn. The original ground floor has a height of almost 6 meters with large high windows. An entresol is already added to a part of the building to create an additional level. The height therefore also provided the opportunity to create split level dwellings, however this typology would not really fit within the idea of creating elderly housing. Using the entresol over the complete width of the building would mean that the floor ends halfway the high windows, which could mean that an intervention in the highly valued facade of the building is needed. The aesthetic of the solution and the relation to the values of the building plays an important role when dealing with such dilemmas during the design. A mix of both solutions in the end is integrated in the design. On exterior side of the wings along the Nieuwe Gracht and Koudenhorn, split level apartments are implemented, which means that those

dwellings can only be used by elderly who have no walking difficulties yet. On the interior side, the height is divided over two apartments, while on this side, the concept of social interaction turned out to be more important. The original windows are replaced with new higher windows in the same rhythm to take into account one of the most important attributes that makes the facade valuable.

This last intervention in the end led to a design decision that interferes with the heritage values of the building. The gallery works best in terms of social interaction if as much people as possible make use of the space it creates. Again as a result of the window sizes, this meant that the biggest part of the windows on that one façade had to be replaced with new window and door frames creating a new time layer in this façade. The dilemma here was to choose between creating a active gallery with as much entrances as possible with a direct connection to the gallery and thereby affecting the façade, or maintaining more of the windows and thereby create less connections between dwellings and the gallery or create larger apartments with the result that less people will use the space.

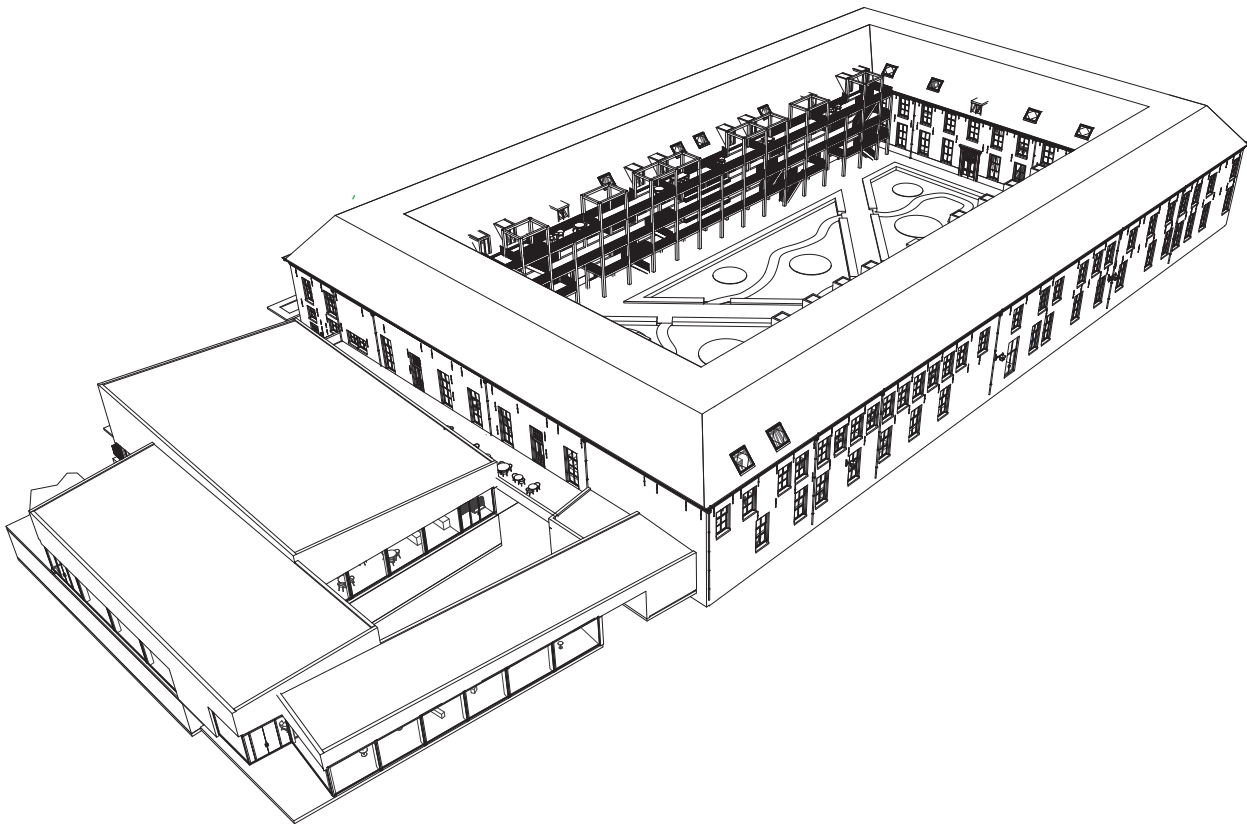
The choice was made to affect this one façade facing the courtyard to a larger extend and create the new connections between the dwellings and the gallery for the purpose of social interaction and creating a space for people on this gallery that they can claim for themselves in front of their dwelling.

TRANSFERABILITY OF THE PROJECT

The housing shortage in the Netherlands is still an actual topic. Part of this problem is assigned to elderly, while they often stay in their current housing situation for a long time and thereby the flow in the housing market flow gets stuck. However, most of the time it is not the case that those elderly don't want to move out of their current situation, but there are no other housing facilities available or if they are available the new situation is not appealing enough to move to. Elderly housing could benefit from public interior functions while it has the possibility to create daily activities in the form of work or hobbies. The public interior/accessible functions could be the collective spaces only for the inhabitants of the building or even function for a bigger area surrounding the site to make interaction between the inhabitants and various other users groups possible. This approach is also in line with several of the sustainable development goals of the United Nations, such as good health and wellbeing and creatin sustainable cities and communities.

The research into the architectural elements that influence the public character of a space offers an overview of the elements that are important for the public accessibility with several strategies. Those elements and strategies can be seen as guidelines or focus points during the design for adaptive re-use of buildings that require more openness or accessibility for its new use. Which strategy can be applied and how the intervention aesthetically looks is dependent on the context, existing building and in the case of listed buildings the values of this building.

The mixed program, concept of the gallery and creating spaces for social interaction are elements that could be transfered to other (re)designs for buildings. However the specific functions are dependent on the target group and existing context of the building. For the implementation of the gallery, the affect on the facade of a building has to be taken into account.



Overview of redesign