



Research Plan

Courtyard consensus

Vacant Heritage | Police Real Estate

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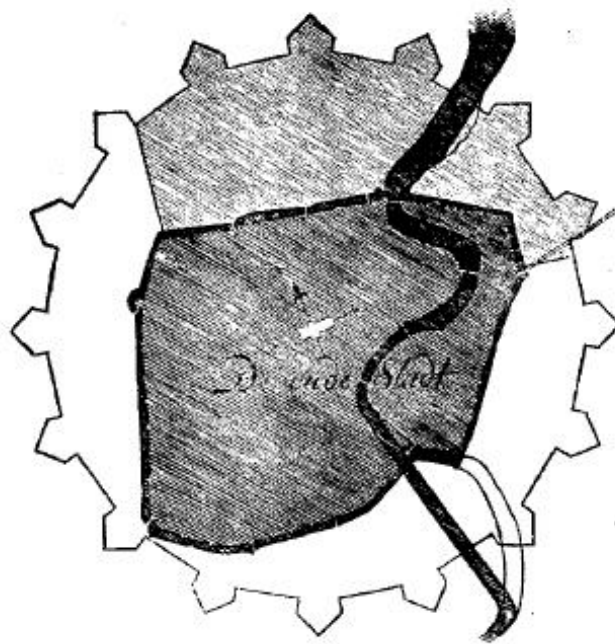
Introduction

The formation of the National Police in the Netherlands in 2013 has thoroughly changed its organizational structure and has brought with it a significant real estate challenge. The Dutch Police aims to adapt its accommodation to the changes in organization, structure of services and the ever increasing digitalization of both the internal workflow and their presence in society. In order to achieve these ambitions 700,000 square meters of real estate will be divested and 200,000 square meters of new real estate will be realized. In addition, 30 percent of police real estate is to be redeveloped. Atelier Politie Bouwmeester has been brought into existence to take on these challenges. Regarding the buildings to be developed, the challenge is “to achieve a good relationship between functional, technical, spatial, aesthetic and financial requirements”. (Weessies, 2017)

The Vacant Heritage graduation studio reflects on the aforementioned redevelopment challenge through research and design, generating proposals for 8 police offices throughout the Netherlands.

In collaboration with other students, a study into the spatial aspects of the 8 police offices will be conducted. This ‘Spatial Building Typology’ research thoroughly explores the buildings on four different scale levels, resulting in a clear understanding of their spatial configurations. The buildings will then be compared on different spatial aspects, leading to conclusions on the different building typologies that will inform the design proposals.

Additionally, individual research will be conducted into the courtyard typology. This subject is directly influenced by the location chosen for the design proposal, as the Koudenhorn police station in Haarlem is a building with a courtyard. The results of the individual research are therefore expected to inform the design proposal.



*Een Ontwerp door Siebrant
Tet de gheheele Vergrootinge der Stad
HAARLEM.
Daer van aen de noort zyde het beginfel, tot den eoften
aanvangh is aengewezen: ende den
inhouc van dit Boeck alleen
is handelende. 20*

Original plan for the fortification of Haarlem; a reminder that not everything goes according to plan.

Guiding Theme

Walking through any Dutch medieval city centre, one only has to look around for the many layers of time to immediately become apparent. Every building has its own story, and together they tell a major part of the city's history. The intricate urban fabric has qualities and elements that cannot be found in modern city planning and could only have originated from organic growth over a long period of time.

So too in the city centre of Haarlem, where the Koudenhorn police station is located. However, the building seems to be superimposed upon rather than embedded into the urban fabric, its large, mostly impermeable footprint contrasting with the grain size of the surrounding building blocks.

A recurring feature in the urban fabric of Haarlem is the 'little courtyard' (Dutch: hofje); a group of consecutive single-room dwellings around a collective outdoor space, situated within a building block. They have been financed through private funds as social housing projects (Wilms Floet, 2014).

The Koudenhorn building shares some similarities with the 'little courtyard' typology. It too was built as a social housing project, originally for unwealthy elderly men and women and children of the poor. The building was also constructed around a central courtyard meant for collective use.

One of the differences with the little courtyards is that the Koudenhorn building does not consist of individual dwellings which makes circulation through its interior possible. This

means the courtyard is not the main means of circulation. Another difference is the size. The Koudenhorn building was made to house 900 people and its courtyard is larger than the largest 'little courtyard' in Haarlem.

The courtyard is currently only used as a means of circulation, and very little at that. The opportunities provided by the size of the courtyard and its direct relation to the building are expected to contribute to the redesign of the Koudenhorn police station.



Figure 3: van de Biezen, B. (n.d.). *Haarlem - luchtfoto overzicht binnenstad*. [photograph] Retrieved from <https://www.hollandluchtfoto.nl/-/galleries/dorpensteden/noord-holland/haarlem/-/medias/df84c409-7b00-41ba-afdf-38396b1bcc3c-haarlem-luchtfoto-overzicht-binnenstad>

Research Aims

This research aims to discover what possibilities for redesign of the Koudenhorn police station are presented by the presence of a courtyard within the building.

Preliminary examination of literature on the subject of courtyards has not yielded any literature specific to the courtyard typology of the Koudenhorn building. A general description of this typology will be written.

This research seeks to understand the courtyard phenomenon not in a vacuum, but in relation to its context. In order to achieve this it is required to create an understanding of the workings of urban spaces to be able to make informative comparisons.

The desired outcome of the research is to find strategies for designing interventions in existing buildings with the spatial typology of a courtyard building. Through the application of these strategies during the redesign process of the Koudenhorn police station, these strategies will be tested on their feasibility, while at the same time informing the redesign proposal.

Research Questions

The main research question is formulated as following:

How can the courtyard typology be characterized and what redesign opportunities does it provide for the redesign of the Koudenhorn police station in Haarlem?

To be able to answer this main research question several sub-questions have been formulated:

- *How can the courtyard typology be characterized?*
- *What is the role of the courtyard within the public and private realm and how has this changed over time?*
- *How do courtyards relate to the context they are situated in and how has this changed over time?*
- *What strategies for adaptive reuse of courtyards exist?*

Theoretical Framework

Atrium: Five thousand years of open courtyards (Blaser, 1985) offers a general but comprehensive history of courtyard housing through a sporadic and successive compilation from different periods and regions of the world.

In her dissertation Wilms Floet (2014) describes the 'little courtyard' typology in Dutch cities. Although this typology differs from the typology of the Koudenhorn building, it also has similarities. The descriptions, systematic methods of analysis and points of focus are therefore relevant to this research.

In *The Concise Townscape* (Cullen, 19671) the concept of 'serial vision' is described as the revelation of the scenery of the town as experienced by the pedestrian in a series of sudden jerks or revelations. This impacts the emotions, which is achieved through manipulation of the elements of the town; the town comes alive through the drama of juxtaposition.

Cullen describes the urban pattern of precincts: Inside is the tightly built-up pedestrian town with its enclosures. Outside are the expressways for transport of people and goods which exist to serve and vitalize the precincts. The enclosure illustrates the polarity between legs and wheels; outside there is the noise and speed of impersonal communication. Inside there is the quietness and human scale of the square or courtyard. It is the place where traffic brings you. Without enclosure traffic becomes nonsense.

The book *Soft City* (Sim, 2019) elaborates on the urban pattern of enclosure: Variations on the enclosed form range from courtyards enclosed by a single building to multiple buildings surrounding several subdivided outdoor spaces. The enclosure inside the block provides several qualities such as privacy and security. The space is physically and visually protected and therefore lends itself to activities either as an extension of life inside the buildings or as a complementary space for other activities (Sim, 2019).

Public Places - Urban Spaces (Carmona et al., 2010) elaborates on the different dimensions of urban design. It is expected to be a useful source for comparing the courtyard space of the Koudenhorn building to other urban spaces. It also refers to Christopher Alexander's book *Pattern Language* (1977), in which urban patterns are described and related to one another. 'Courtyards-that-live' describes ways in which courtyards fail, and thus how they can succeed.

Methodology & Methods

In collaboration with other students a study into the spatial aspects of 8 police owned buildings will be conducted. This 'Spatial Building Typology' research explores the buildings on four different scale levels: the city, the urban block, the building object and finally the façade and roof. For each scale, 3 aspects are analysed through (re)drawing based on the style of the Haussmann method (Jallon & Napolitano, 2017), supported by textual explanations. This will result in a clear understanding of the buildings' spatial configurations. A comparison of the different spatial aspects between all 8 buildings will then be made, leading to conclusions on building typologies that will inform the design proposals. The design proposals will finally be compared to identify certain types of redesigns of the buildings. Additionally, 3 models of the building chosen for redesign will be made to capture its essence: one scale model showing both the contrast in size between the Koudenhorn building and its surroundings and its location along the water, one abstract model showing the main façade materials and one model showing the ornamental entrances. (Zijlstra, 2020)

Individually, research will be conducted into the courtyard typology and the possibilities it provides during the redesign of the Koudenhorn police station and buildings with a the typology of a courtyard building in general.

Through literature study the existing knowledge on the relevant themes of the research will be explored. These themes are the courtyard typology, the public and

private realm, and urban spaces. A general understanding of these themes will serve as the foundation for further research.

The main body of this research will consist of case studies. Through analytical drawing, several courtyard buildings will be analysed on the same aspects:

- division in public and private spaces
- connection of the courtyard to the urban context
- applied reuse strategies.

These aspects have been translated into the following questions:

- What is the division in public and private spaces within the [case study] building?
- How is the courtyard of [case study] connected to its urban context?
- What strategies for reuse have been applied to the courtyard of [case study] building?

Together with the findings of the literature study, the outcome of the case study analysis will answer the sub questions of this research. The case studies are chosen based upon the following criteria:

- The building has a courtyard typology
- The buildings is located in an urban context
- The building has a public or collective use
- The buildings has been adapted for new use

The analytical drawings will be created in the hand drawn style of Radford et al. (2014). From the analysis and comparison of the case studies, strategies for redesign of the

Koudenhorn police station will be derived and defined. By applying these strategies during the redesign process of the Koudenhorn building, they will be tested on their feasibility, while at the same time informing the redesign proposal.

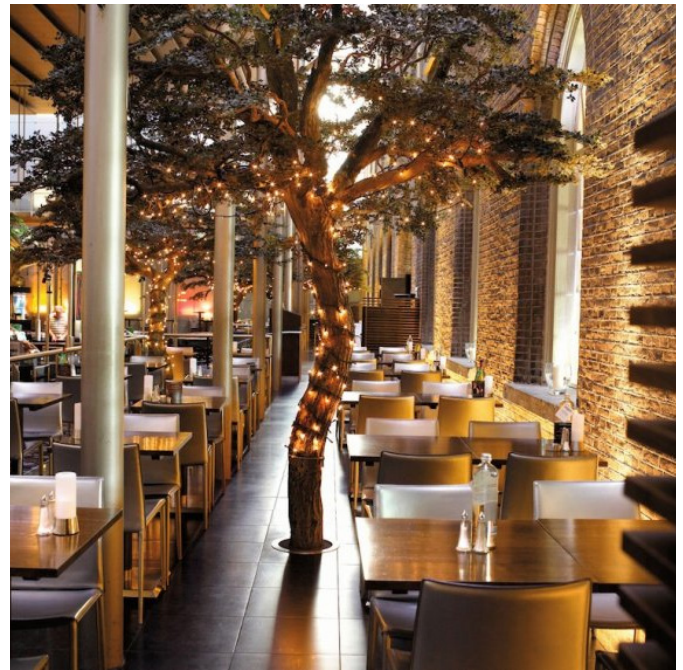
The following case studies have been selected:



Pesthuis, Leiden

Completed in 1662 to house plague victims, the Pesthuis in Leiden is a square shaped building consisting of four wings around a courtyard. The building is, for obvious reasons, located just outside the historic city centre and is surrounded by a small moat. The building was used as an exposition space by the Naturalis museum of natural history. It currently houses pop-up hot-spot 'de Buurt', a mixture of gastronomy, culture, arcade and

local retail. Plans have been approved for a food-court.



Kloosterkazerne, Breda

Completed in 1504 as a cloister, it was later used and expanded as a military barracks. In 1995 the Chasse theatre by Herman Herzberger was built up against the Kloosterkazerne, making it part of a new ensemble. In 2003 the redevelopment into a casino was completed. A new wing has led to the courtyard being fully enclosed. The courtyard has been covered by a new roof.

Figure 4: van den Hoek, M. (2021). *Courtyard of the Pesthuis in Leiden*. [photograph]

Figure 5: Herbestemming.nu (n.d.) [Photograph of the courtyard of the Kloosterkazerne. [photograph]



Rijksmuseum, Amsterdam

Designed by Pierre Cuypers and opened to the public in 1885, the collection of the Rijksmuseum offers an overview of Dutch art and history, and houses paintings of the 'old masters'. Two covered courtyards are situated within the building. In 2000, during the transformation of the building, the two courtyards were lowered so they could be connected underneath the central passage to create a new entrance area.

Koudenhorn, Haarlem

Completed in 1771 as a deaconess-house, it was later used as a military barracks. The rectangular building consists of four wings around a courtyard. In the 1970's a modern addition was built in place of the peat storage building. The building is currently in use as a police station and its internal layout has been changed to facilitate this use.

Value assessment as presented in *Designing from Heritage* (Kuipers & de Jonge, 2017) offers a "framework for systematic interpretation of observations and findings (...) in order to identify and classify the typical and characteristic features of a heritage building in its present state." Through chronomapping, value-mapping and differentiation of the significance of the identified features, a position on the opportunities for possible interventions, obligations for conservation and crucial dilemmas can be determined.

The relation between research and design is illustrated in the diagram on the following page.

Figure 6: Pegenaute, P. (n.d.). [Photograph of the courtyard of the Rijksmuseum]. [photograph]
 Figure 7: Klein, M. (2021). *Courtyard of the Pesthuis in Leiden*. [photograph]

Vacant Heritage - Police Real Estate

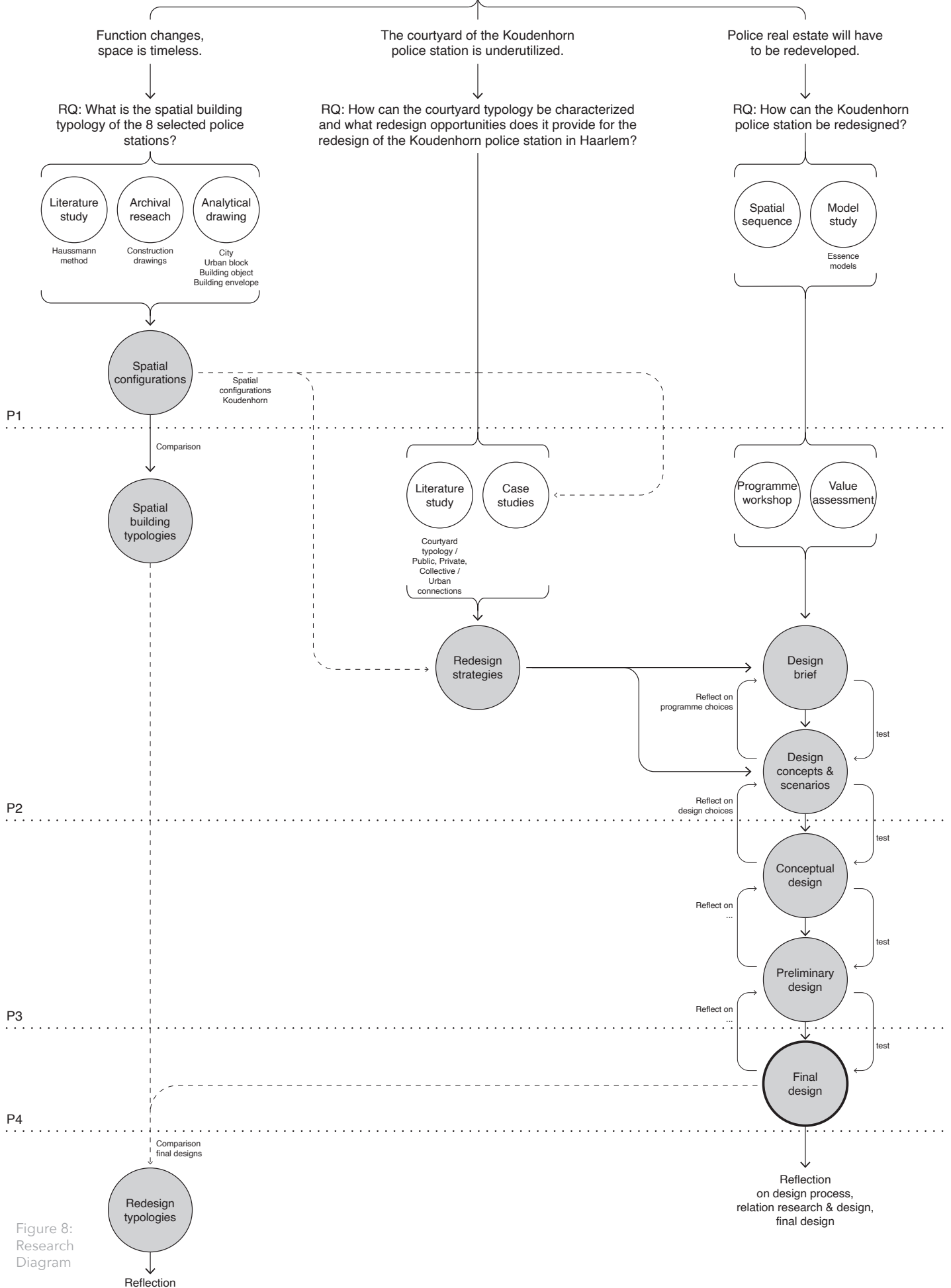


Figure 8: Research Diagram

Relevance

Throughout the Netherlands there are many buildings with a similar typology to that of the Koudenhorn police station. Some of them have undergone extensive modifications to facilitate new use, while others have undergone more subtle changes. Some redevelopment strategies, such as covering the courtyard to create an indoor space, are already more widespread than others. The Dutch government has even issued *Historische binnenplaatsen overkappen* (Snoodijk, 2012); a guide on covering historical courtyards. This research will explore strategies for intervention in the Koudenhorn building. These strategies can offer solutions for redesign of other existing buildings with a courtyard typology.

When the Koudenhorn police station is no longer owned by the National Police, a large building with a large courtyard space will become available for new use in the city centre of Haarlem. This offers the opportunity to add to the collection of different uses in the city, or to expand existing use if required. A major incentive for the choice of a new programme could be the current housing crisis. One million houses are to be built within the next nine years. By utilizing the existing building stock to create housing, some of the pressure on the housing market may be alleviated.

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