

Reflection

HUIS T VELDE STORY-BASED ADAPTIVE REUSE OF AN ESTATE



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This document reflects upon the authors graduation project, its development, results and meaning, up until the P4 presentation. Both research and design, and their mutual relation are discussed. The project is placed in the broader field of Heritage and Architecture, and related to master track Architecture and the master programme of Architecture, Urbanism and Building Sciences. The position and approach of the author as an Heritage and Architect student and future professional in this field are explained, and discussed based on the preliminary results and experiences and the feedback received so far.

Introduction

After a large reorganisation within the police organisation, due to the formation of the Dutch National Police, the demand for real estate for the police is greatly reduced. Additionally, the requirements for the buildings are also changing, due to several societal developments such as digitalisation. Therefore, in the upcoming years, about 700.000 square meters of police real estate will lose its function, and 200.000 square meters will be build new. Furthermore, several of the remaining police buildings will need renovation or functional changes (TU Delft Heritage and Architecture). In my graduation project, I mainly focussed on the possibilities for adaptive reuse for one of these buildings, Huis 't Velde in Warnsveld.

This building, or to be more precise, this ensemble of buildings, is currently used by the police organisation as an education and meeting facility. The buildings are rented from Gelders Landschap en Kasteelen, which also

owns the surrounding estate. On the site is also another element introduced by the police, namely a memorial garden. This garden is intended as a memorial place for police officers who died during their work. On the site are currently 5 buildings, of which 3 are national monuments, the main house, carriage house and dove cote. Also several other objects on the estate, such as the entrance gate, are national monuments.

In order to work with Huis 't Velde, it was necessary to have a look at another group of buildings as well, besides the police buildings, namely country houses. A lot of country houses have lost their function as a private home during the course of the 20th century, among others because of the rising costs of maintenance of these relatively large buildings, and the surrounding estates. This makes the research and design for the adaptive reuse of Huis 't Velde even more relevant, since the findings might also be helpful for other country houses.

Studio

The studio Vacant Heritage is organized by the section of Heritage and Architecture, in collaboration with the Atelier Politie Bouwmeester and researchers of the MBE department. 8 buildings, which are owned and/or used by the police are selected for research and redesign. Within the studio group, the focus lays on Spatial Building Typology (SBT), the spatial building characteristics that are decisive for the possibilities of reusing these buildings for new functions. The work done in the studio is split up in three aspects; SBT research, individual research and design. The building in Warnsveld is



Image 1: Sketch of Huis 't Velde (own image)

somewhat different from most of the other buildings; it wasn't designed as a police building, isn't used as a police office, as most of the other buildings are, and is a lot older than most of the other buildings.

Huis 't Velde within Architecture and MSc AUBS

In my experience architecture plays a role in the field of Heritage and Architecture in (at least) two ways. In the first place, it's important to be aware of the architectural concepts and ideas, such as space, materiality and form in the analysis and understanding of an existing building. In case of my design for Huis 't Velde, it turned out to be quite important to be aware of what has been designed and made by the previous architects or craftsmen working on this building, to make it possible to deal with the existing in an appropriate way, and include a similar degree of craftsmanship in the

new extension. In the second place, architectural design plays a role in making new or adapting the existing spaces. This is for example the case in the addition that I designed for Huis 't Velde; this addition needed to have its own, contemporary qualities and atmosphere.

However there is also a clear difference between the Heritage and Architecture studio and most other studio's within the Architecture track. In other studio, most of the time focus is on the design of new buildings. But the role of an architect does not stop after a building is built. In case of changing functions, an architect with an background in heritage can play an important role, in the adaptive reuse process. This is nowadays especially of importance due to growing attention for sustainability.

Due to the location of Huis 't Velde, and the fact that a large garden belongs to the building, it turned

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Timelayers	Stuff	Space plan	Services	Skin	Structure	Site
1824	Stucco in entrance hall			Stucco facades, 'empire vensters' 		Walls around the forecourt replaced with slopes. Design for the garden by Hendrik van Lunteren in an English landscape garden style. 
1897				Facades covered in vegetation		
1962	Changes in the interior. Spaces painted in the colors of different police forces. New furniture in many rooms	Room at the first floor split up. New meeting rooms created at the attic.		Restoration of the exterior. 'Schuilramen' brought back. Stucco replaced with a layer of chalk paint		Three farms that were part of the estate sold separately
1987						New garden design for part of the park 
2005						Memorial garden for police officers who died during their work

No longer visible
Still visible

Image 2: Example of one of the matrices used in the individual research(own image)

out to be important to not only think about the architecture of the buildings in my graduation process, but also about landscape architecture and aspects related to urbanism, such as accessibility by car, bike and public transport, but also the spatial configuration of the different buildings on the estate. This underscores that it's essential to have some (basic) knowledge about each of these fields when working in the architectural profession. Therefore, I tried to include this in my design as well. This also became clear during the research into timelayers; most of the time, there was a strong relation between the changes in the (exterior) of the main house on the estate, and the surrounding garden.

Also building sciences and technology plays a major role in in the adaptive redesign. Not only for the new extension, but also especially in transformation of the existing buildings. Technical solution needed to be found and integrated in the design in order to make the building more sustainable and to integrate installation for heating, cooling and ventilation.

SBT group research

The SBT research into the police buildings is a follow-up to the SBT research into departments stores in the past years (Zijlstra et al, 2021). During the SBT group research, all 8 buildings were analysed on 4 different scale levels. Subsequently, these buildings were compared on several points. This proved to be a good basis for the design, and made me aware of the specific qualities and characteristics of Huis 't Veld. The building differs strongly from several of the other buildings. In the last chapters, the typology of the existing buildings, and the interventions were compared as well.

Individual research

In the individual research several methods were used, as described in the research plan. Most important for the broader field of Heritage and Architecture was the introduction of a specific analysis method for time layers, namely a matrix based on the Shearing layers model described by Stewart Brand (Brand, 1995). The aim of this matrix was to create a visual

overview of the time layers present in a country house, or other heritage buildings, showing among others also the life span of certain building parts. It could be an addition to the existing biographical research methods, specifically useful for those involved in the design process (Janssen et al, 2017. Hermans, Kolen, Renes, 2015). The existing documentation methods are usually very textually oriented, whereas most designers are more visually oriented. Besides this, the existing methods do not always involve information on all the different scale levels. The timelayers matrix helps to get a clear, visual overview of all time layers and could functions as a starting point for assessing the values of the different time layers.

From my experience in using the time layers matrix, I have concluded that the matrix turned out to be quite useful for analysing the time layers of the different buildings. It helped me to get an visual overview of what has happened. Nevertheless, there are also some points on which the matrix could potentially be improved, based on the first experiences. The first one is the fact that it became clear that the (changes in) owners of the estate were quite important for the changes in the buildings. But, the matrices didn't provide a logical place to include these owners, although this could be valuable. So it might be good to experiment with including them in the scheme as well. Furthermore, also the changes in the context, in case of Huis 't Velde the surrounding park, could potentially be included better in the matrices. The scheme only has one column, site, in which information about the park could be included, while a park also has different scale levels.

Last but not least is the fact that matrix sometimes tends to be an overview of information, instead of an overview of changes. It's important to be aware of this while using the scheme; the fact that certain fields are empty, doesn't per se mean that nothing changed on this scale. Sometimes there simply isn't any information available about a specific topic. Looking backwards, it might have been better to make the aforementioned changes earlier in the process, so that they could have been tested as well. This might also be an point for attention in the coming till the P4; maybe I can try to make these

The three casestudies analysed with the matrix brought me to three important strategy's suitable for the reuse of buildings, adding a new time layer, conservation and reconstruction. These strategies were used as basis in the decision process in the design phase.

Design

One of the first steps in the design process was finding an appropriate new function and user group for the estate Huis 't Velde. I based my decision regarding these functions mostly on the existing spaces and qualities, as they were found in the research with the SBT group and the analysis of the building. A public functions was chosen, in order to make the building experienceable for a wider public.

One of the main starting points for the design was based on natural growth of (the main house of the complex of) Huis 't Velde. From the analysis of the time layers, I concluded that over time, the building was extended and changed several times due the changing functional and/or aesthetic demands

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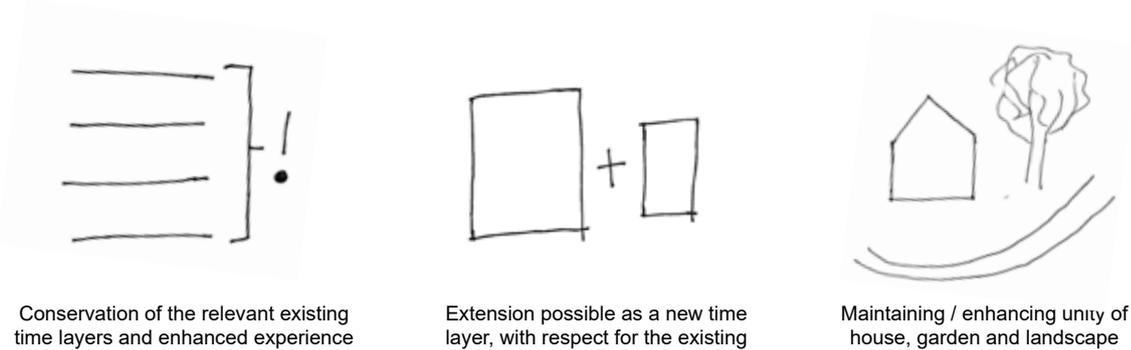


Image 3: Design starting points (own image)

for the building (image 4). Since the demands for the building will also change due to the new use it will get in adaptive redesign, I concluded that it would be appropriate to make another, new addition.

In order to let this extension actually function as a new time layer, it was necessary to find a balance in the design between harmony with existing, historic architecture, and recognizability as something designed in 2022. In order to find this balance, the first step I took was finding the right building volume. The volume had to fit to the scale of the existing time layers, and needed to be clearly recognizable and understandable. To find this volume, I used a physical model, in which I tested different volumes and shapes. This turned out to work quite well; a fitting location on the north-west side of the building was found. Furthermore, this model helped me understanding the spaciousness of the existing building even better than I did already by doing the SBT research. There is, however, a caveat to be added here when looking back. The fact that this volume was based on a form studies, and not on the first place on its function, made it somewhat more difficult to come up

with a good design for its interior.

As a next step, it was necessary to find an architectural expression from which the new timelayer could be recognized. This was done by looking closely upon the existing architecture, and using the elements found in an abstracted way. For example, the existing roof consist of black glazed roof tiles, combined with plumbum around the edges. In the new roof, zinc was used as the main material, referring to the plumbum, and black solar panels were used, referring to the black color of the roof tiles.

Later on in the design process, I realised that adding a new time layer might change the way the future users experience the building; the new addition could lay a focus on these changes, and therefore make the users also more aware of the previous time layers in Huis 't Velde.

This also connects the extension with the second design principle, which was conservation of the existing time layers, and making them more experienceable for the future users. One of the ways of doing this was deciding what to show at certain placed. I learned throughout the research and design

process that when dealing with these time layers, it's sometimes impossible to keep everything, because very often irrelevant things are very much diffusing the experience of what's really important. An example of this is the carriage house, where the interior of the ground floor used to be very open, because of the functional character of this building; there was a large working space, a space for carriages and for animals. Nowadays, all these spaces are split up into small hotel rooms, without any historic character. By re-introducing the larger spaces, and giving them a more appropriate function, such as a common rooms and shop, this building gets back its characteristic, functional character.

Another point I tried to reach was maintaining and enhancing the unity of house, garden and landscape. One of the ways to enhance this unity was to make a stronger visual connection by adding large windows in the extension of the main house. Furthermore, a

vegetable garden will introduced to the estate. Products from this vegetable garden will be sold in the shop in the carriage house.

Looking back on the whole design process I think that my decision for the growth-principle was a very educative one. It turned out to be rather difficult to come up with a fitting solution, and required a very detailed way of looking at interventions, but also at the existing building. Another kind of solution – such as hiding the extension, or making it secondary to the main building, as was done in the Duin- en Kruidberg building I analysed, might have been easier to design, but wouldn't have required this much of a relation with the existing building. Furthermore another lesson I learned during the tutoring was to dare to make decisions, to try and work things out, and that has and will definitely help improve my designs in the future.

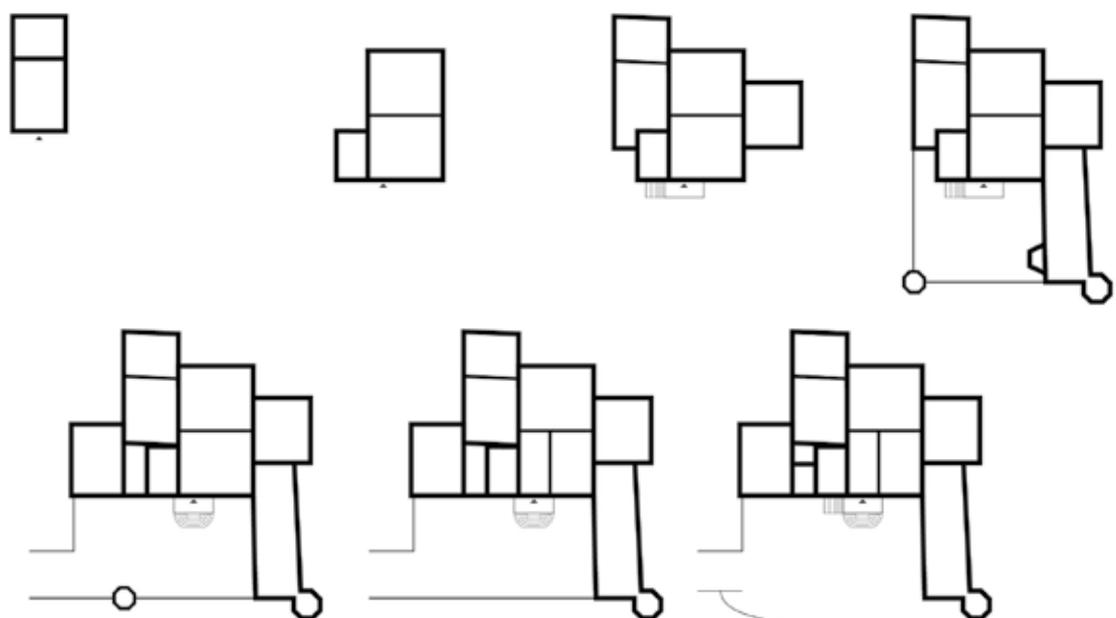


Image 4: Analysis drawings of the growth of the building (Mathyn Klein)

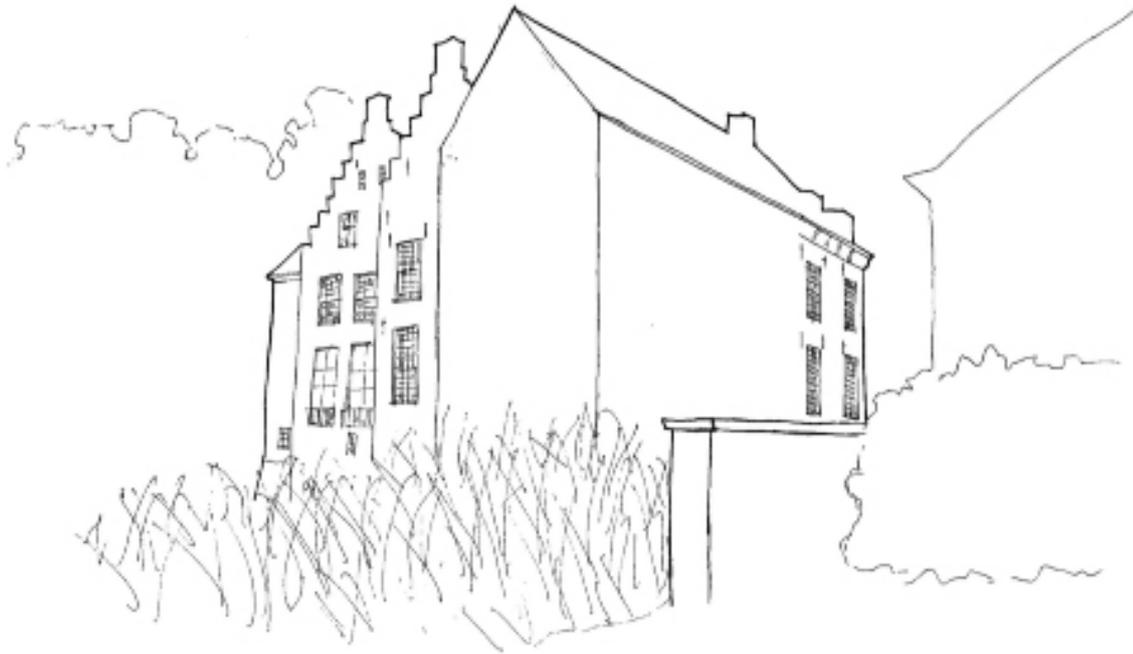


Image 5: sketch of the extension (own image)

(Design) ethics

When working on a historic building, such as the Huis 't Velde, ethical questions and discussion frequently play a role in the design process. The first point on which ethics plays a role is already the main approach or strategy. In the individual research, three strategy's were pointed out; adding a new time layer, conservation and reconstruction. To what extend these strategy's are used obviously depends on the existing building, but probably even more on the ethical dilemma's about how much change is acceptable in a building such as Huis 't Velde. A carefull consideration of the values of the building is necessary to make decisions about this topics.

But these ethical questions play a role throughout all the scale levels. For example, one out of the many discussions in case of Huis 't Velde concerns the windows and window frames. When speaking strictly from the point of

sustainability, it would be a very good idea to add new, insulated windows. But, in order to do so it's necessary to replace the historic materials with new materials. This raises the question, how a societal broad issue such as sustainability should be compared to such a specific value as material authenticity.

Another ethical issue concerns the memorial garden for police officers who died during their work, which is currently located on the estate. The garden has a strong connection with the current user of the buildings on the estate, the police. So therefore, it would be an option to remove this garden after the police leaves the estate. This would give a lot of options for new functions in this garden. But, ethically this is very difficult to justify; a large group of relatives would lose their place to mourn, and the act of removing the garden elements with the names of their beloved ones could potentially be very painfull for them.

Relation research and design

As mentioned briefly before, the relation between the individual research and the design is partially quite direct. The conclusions about the layers of time in Huis t Velde were used in making starting points for the design, and in the design process itself, both for making decision concerning the new addition and interventions in the existing buildings and garden. But, also the research into the case studies was used in the design process to find the right way of dealing with time layers, in order to make the time layers and their stories visible for the future users. Additionally, these case studies were also used in a less direct way, as inspiration during the design process. The SBT functioned as a basis in knowledge and drawings, used especially in selecting a target group and deciding on how implement the new functions on the estate.

Sources

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