

Individual Research

# STORY-BASED ADAPTIVE REUSE OF COUNTRY HOUSES



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## 2 - STORY-BASED ADAPTIVE REUSE OF COUNTRY HOUSES

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## Introduction

This document is the interim result of the individual research done for the authors graduation process in the Heritage and Architecture studio of the masters in Architecture, Urbanism and Building Sciences at Delft University of Technology. The graduation studio covers the subject Vacant Heritage, and focusses on real estate of the Dutch National Police. The graduation project in this studio consists of three parts; group research, individual research and an individual design. This document is composed prior to the P2 presentation, and contains research done during the second quarter of the year. This research was preceded by a research plan made in the first quarter, which contains a description of the goals and methods of this research. The research is being done parallel to the design, and the research is intended to support the design.

The main research question of this research is, as described in the research plan; How can the architect integrate the stories behind the layers of time in Huis 't Velde in the adaptive redesign process in order to make these stories experienceable for future users?

The sub questions linked to this main question are:

1. Which layers of time are present in Huis 't Velde, and which stories are

behind them?

2. In which ways have time layers been used in existing redesigns(case studies)?

3. Which strategies can be distinguished (in the case studies)?

4. Which spatial characteristics play a role?

5. Which strategy is the most suitable for Huis 't Velde?

It is important to note that this document is not yet the final answer to these questions, but merely a first attempt in getting some first answers on questions that are import for the design, and an overview of the findings so far. The research will continue during the second semester, parallel to the continuation of the design process.



## Theoretical framework

### **Some important authors**

A lot of research into country houses, estates and castles has been done in the last decades. One of the first authors who systematically started describing country houses and estates was H.W.M van der Wyck (1927-2001). His work still functions as one of the foundations of the research of estates, and describes the relation between houses and gardens. He describes the developments over time, based on 4 periods he distinguishes.

Lucia Albers is another important author working on estates. In her dissertation she tries to come up with evaluation method for the (cultural-historical) value of estates (Albers, 1987). She's currently working as advisor on historical parks, and wrote a lot of value assessments and analysis's of estates.

Another important, more recent research has been done by Gerdy Verschuure and is named *Welgelegen; Analyse van Hollandse buitenplaatsen in hun landschappen*. In her dissertation, Verschuure describes country house landscapes in Holland, and focusses on country houses built between 1630 and 1730.

The last person highlighted here is also an author and booster of research on estates is em. Prof. dr. Yme Kuiper.

He was professor Historical estates at Groningen University, and for his farewell as professor a publication named *Huis en Habitus*, was published (Gietman et al, 2017). This book contains texts written by several other experts. The essays written by these experts are all telling something about estates from another perspective, which makes this publication extra interesting for this research.

### **Research into story-based reuse**

In the last years, there is a rising awareness in the Netherlands about the importance of stories behind time layers in heritage and behind heritage in general. Among others Gerdy Verschuure mentions this, and uses the terms narrative of place and heritage experience (Verschuure, 2019). She argues that attention for these things is one of the two essential elements for dealing with country houses nowadays, in the growing interconnectedness of heritage and spatial planning. She says that it is not only essential to conserve the physical structures, but also social-societal and mental aspects need to be taken in account. She herself however mostly focusses on the other essential element she mentions in her dissertation, the growing attention for structure-based protection of heritage based on ensembles of estates (Verschuure, 2019, 41).

Also research done by a group of heritage professionals, the 'Nationale Onderzoeksagenda Erfgoed en Ruimte', shows attention for the non-physical aspects of heritage and the value of the stories behind heritage for reuse, but in a slightly different way. In their paper, the approach considering these aspects is referred to as the vector approach. In this approach, heritage functions as the guiding element that inspires stakeholders in spatial development. In the current situation and developments, a connection is sought with not only the physical aspects of heritage, but among others also the stories of major and minor events, the famous and lesser known historical persons etcetera. The authors argue that, although both in academia and beyond, research is being done, there is no fixed body of knowledge about the vector approach yet – in contrast with the other approaches they discuss, the sector and factor approach. Therefore, they say, more research is necessary (Janssen et al, 2014, 11-14, 22-23)

It's interesting to place country houses in the context of these more story-based approaches. Nowadays, most of the Dutch country houses and estates have lost their functions as (summer)houses for the nobility, as described in the introduction. Starting in the late 19th-century, and accelerated by the social changes of the twentieth century, many of them became vacant. Some were demolished, others got a new function. But still, for many of them no permanent goal has been found, or, in some cases, new function changes are already necessary.

Due to these former owners, usually families that used the houses and estates for a long period of time,

leaving their houses and estates, a lot of the stories about the buildings, estates, their use and previous users, are no longer being told. Therefore the new, usually more short-term, users are no longer familiar with these stories and backgrounds. In some cases, these stories are written down in research or other texts and therefore known by specialists, in other cases they are slowly fading away due to the people that knew them from the time they were still being told, dying.

Another major characteristic of country houses, which makes it an even more interesting case for working from this perspective, is the fact that they usually consist of a lot of time layers, with even more stories behind them.

## Methods

### Individual research

For the individual research, in order to answer the questions mentioned before, several methods will be used. For question one, literature research will be done, combined with research into primary sources such as (architectural) drawings from the archives, and texts written by previous users and other local residents. To be able to answer the second and third question, several case studies will be selected. The selection will be based on the following criteria: only country houses in the Netherlands are selected. Cases spread across the country are selected so that the strategies found are not specific to one single area. The projects need to have a new function, different from housing for a single private owner, and this change has to be relatively recent. Projects with a scale comparable to Huis 't Velde are selected. Primary sources about the interventions combined with literature research will be used to determine which strategies are used in the redesigns, such as architectural drawings from archives, and texts written by the architects.

To analyze the case studies and make it possible to compare them with each other and with 't Velde, a specific, new, analyses method is being developed and used. For each case, a matrix is created, based on the model of shearing layers of change developed by Steward Brand,

combined with the specific timelayers present in the case studies. This makes it possible to create an overview of all the timelayers, and their impact on all the different scales. The aim of using this matrix is, besides answering the research questions mentioned above, to find out whether this matrix can function as a new research and documentation tool for architects and researchers in the field of Heritage and Architecture. It could be an addition to the existing biographical research methods and the heritage as vector approach, specifically useful for those involved in the design process. 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 scales. The timelayers matrix might help to get an clear, visual overview of all time layers and could function as a starting point for assessing the values of the different time layers. It could be a more efficient way of communicating research, and makes it easier for designers to quickly get an idea of what they are dealing with. It also forces the compiler to at least check whether information on all scales is available.

To answer question 4, the findings of the SBT research for Huis 't Velde are combined with the results of the



foregoing questions, to see which spatial characteristics of the complex are important for the stories behind the time layers. The matrix described above is used to find out more about the relevant timespan of the timelayers, and is used to gain insight in the values of the different layers. The answer to question 5 will be based on the findings of the research, combined with research by design for the case of Huis 't Velde, and will be visible in the final design of the graduation process.

### Design

For the design process, the stories about the Huis 't Velde function as a guiding theme (Van Dooren, 2020). Methods such as model making, reference projects, sketching, detailing and locations visits are used to develop the design. Strategies found in the individual research will be tested and used, in a research-by-design process as described for question five of the individual research.

### SBT group research

For the SBT group research, (building) analysis is the most important method (Groat and Wang, 2013). For these analysis, sources such as maps, architectural drawings and photos are used and re-drawn in such a way that they give specific information about the spatial characteristics of the police buildings involved. The sources are derived from archives, online databases and from the Atelier Politiebouwmeester. Drawings of the different buildings and from different scales will be compared in order to come to conclusion about the spatial characteristics of the buildings.

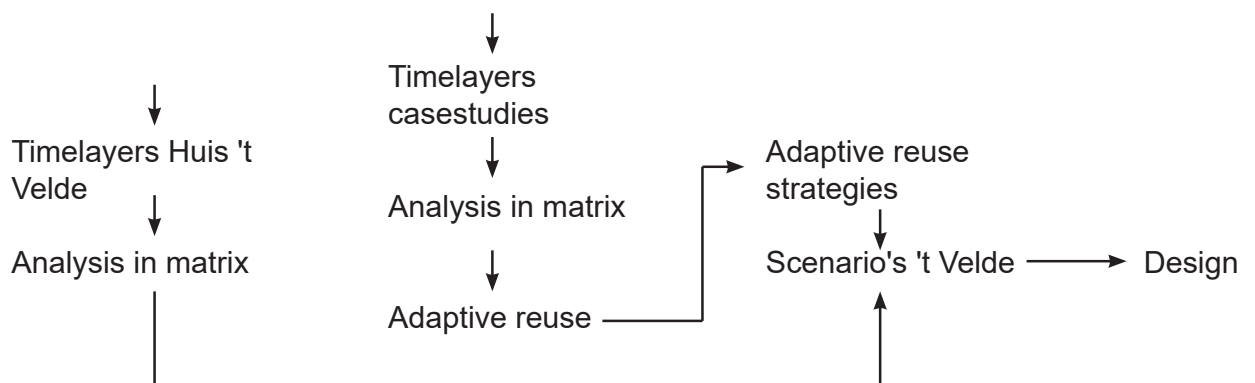


Image 0: Research set-up (own image)

## Chapter 1: Huis 't Velde

Huis 't Velde is the main topic of this research, and topic of the design exercise done for this. Therefore, the history and timelayers of this building are described in short in this chapter. The chapter ends with a matrix comparable to the ones used in the next chapter for the analysis of the case studies, in order to make it possible to compare not just the case studies with each other, but also the case studies with 't Velde. The matrix will also be used as a basis for the scenario's in chapter 3 and for the design. The information in this chapter is based on a publication by Albers and Guinee (2019) and some additional archival material for the matrix.

The oldest part of Huis 't Velde was an so called 'spieker', a small tower-like building surrounded with a canal. Around 1538 this building is extended into a beautiful, richly decorated house. Some of the ornaments are still in place, among others in the front facade. This rebuilding of 't Velde was probably the result of the house getting new owners. These owners were Willem Bentinck (ca. 1500-1577) and Margaretha de Groeff van Erkel (1504-?). Possibly, around the house were a garden and a orchard.

Between 1577 and 1597 their oldest son Eusebius Bentinck and Sofia van Ittersum were the owners of the house. Their daughter Johanna Bentinck was

married to Floris van Buckhorst and after his with Gooswijn van Lawick, they were the inhabitants of the house between 1597 and 1633. In this period, the house was extended in all directions (see images on the next pages). After their death, their son Georg Nicolaas van Lawick inherits the house, but it was less important to him than his other house in Geldermalsen. He has to sell the house in to pay of his debts.

The new owners were Dirk van Keppel (1559-1662) and Theodora van Sallandt (1615-1666). After Van Keppel's death the house has been sold Henrik Schimmelpenninck van Oye (1632-1683) and his wife. After their death, the house has been sold again, this time to Robbert van Heerckeren tot Enghuisen (1655-1699) and his wife Anna Wilhelmina Cecilia van Keppel (1670-1704).

In 1692 the house is sold again to Arnold Joost van Keppel (1670-1718), the grandson of the former owner Theodora van Sallandt. He was one of the most famous owners of the estate, because of his high position at the court of Willem III. Van Keppel was born at the Oude Voorst, and bought 't Velde as a house for his mother. He had a new house built for himself, De Voorst.

After the death of his mom in 1701,

Van Keppel decides to modernize and expand 'T Velde. The main wing was extended and brought under one (new) roof. Also the interior was modernized. The famous architect Daniel Marot, who worked for Willem III, and who also made the design for De Voorst, was called in for this. With this extension, the house reached more or less its current volume. However, in the following centuries, several changes were made to the architecture of the building. A second building was added to the complex in the 18th, the Koetshuis.

Also most of what we know about the garden around the house is from a later date. The first reliable map is from 1778, and shows a formal garden with at one side of the house a vegetable garden and on the other side an ornamental garden described as 'de engelsche partie'. An avenue structure is also visible, which connects the garden with a.o. De Voorst. This avenue structure has probably been made for Arnold Joost van Keppel.

After 1718, when Van Keppel died, his son William Anne became the owners of the estate. He lived in England for almost his entire life, and sold the estate in 1745. The estate was bought by Johan Adolph Hendrik Sigismund baron van Dorth (1720-1798) and Jacoba Schimmelpenninck van der Oije (1711-1776). They might have made the aforementioned 'engelsche partie'. He also worked on the construction of a so-called 'sterrenbos' in front of the house. Possibly, Van Dorth's daughter Judith initiated the construction of a aviary/dovecote besides the house.

In 1801, the estate was auctioned. Anna Aleida Brouwer bought the 'T Velde, probably as an investment. She enlarged the carriage house, which made it about

twice its original size. After she died, her brother Arnold Hendrik van Markel Bouwer (1771-1826) becomes the owner of the estate. Around this time, a start was made on changing the layout of the garden. The canals were changed, and a design for the entire garden was made a few years, around 1824, later by Hendrik van Lunteren. In the same period, the exterior of the house changed quite substantial. The house was plastered, windows were changed, and also the forecourt was changed a lot.

Between 1849 and 1883, when the estate was property of Jan Godfried Carel van Dijk, the garden kept developing. Especially a lot of trees were added to the estate. In 1893, Johannes Alexander van Dijk van 't Velde inherited the estate. Van Dijk did not live on the estate for a large part of his life, but in Indonesia. During this period, he probably rented it out. He died in 1954 in Warnsveld. Since then the house is no longer private property.

In 1959 the house was bought by Het Geldersch Landschap, nowadays Geldersch Landschap en Kasteelen. This foundation is still the owner. Between 1962 and 1964, the house was renovated, on the basis of plans of H.F. Rappange. The first tenant was an agricultural training center. In 1976, the police became the new tenant. In 1989 a design was made for the transformation of the western part of the garden by garden designer Hoefakker. In 2005 a plan was made and performed by Poelmans Reesink for a memorial garden in this part of the garden. This garden was meant to commemorate police officers who died on the job.

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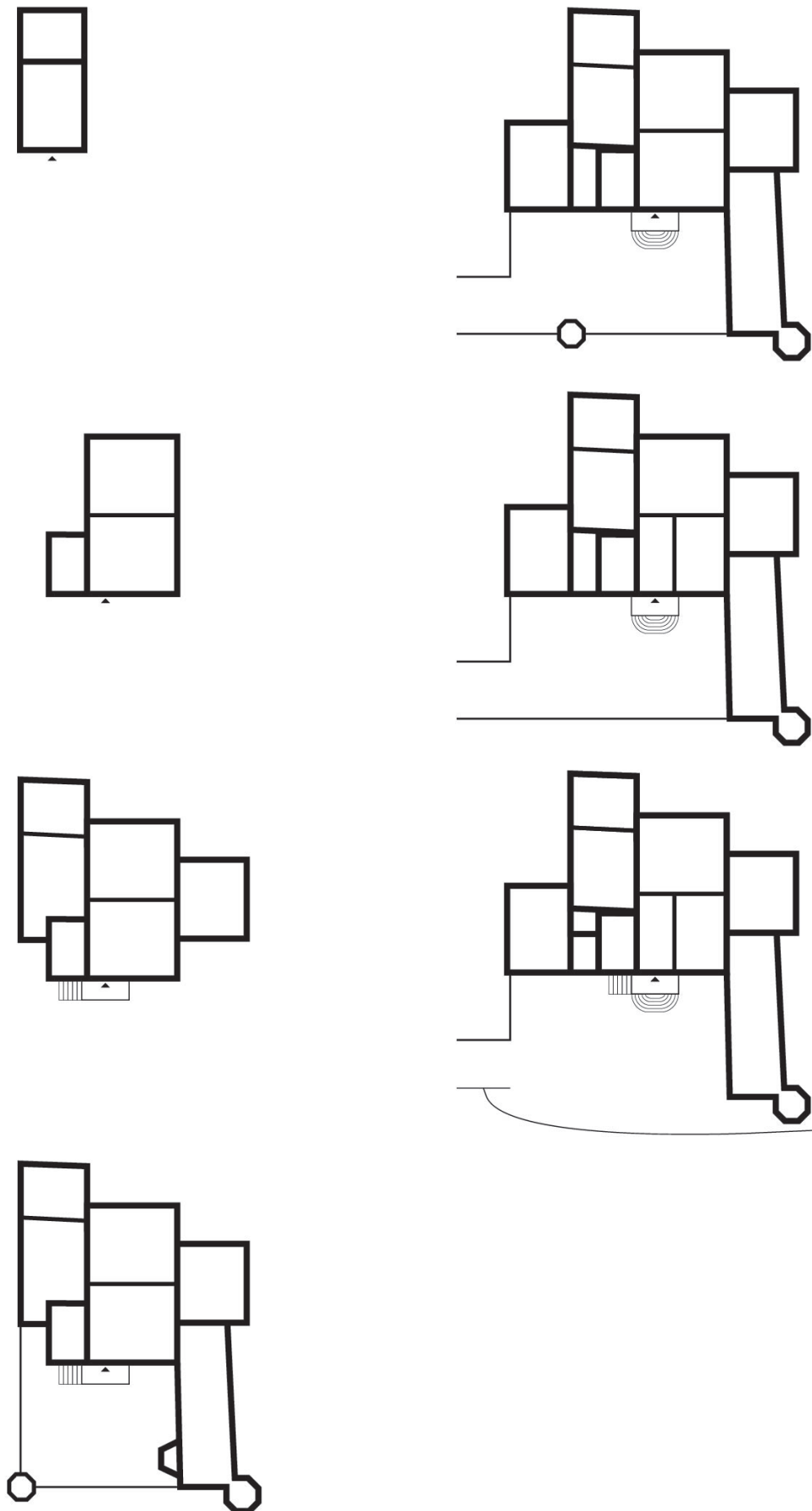
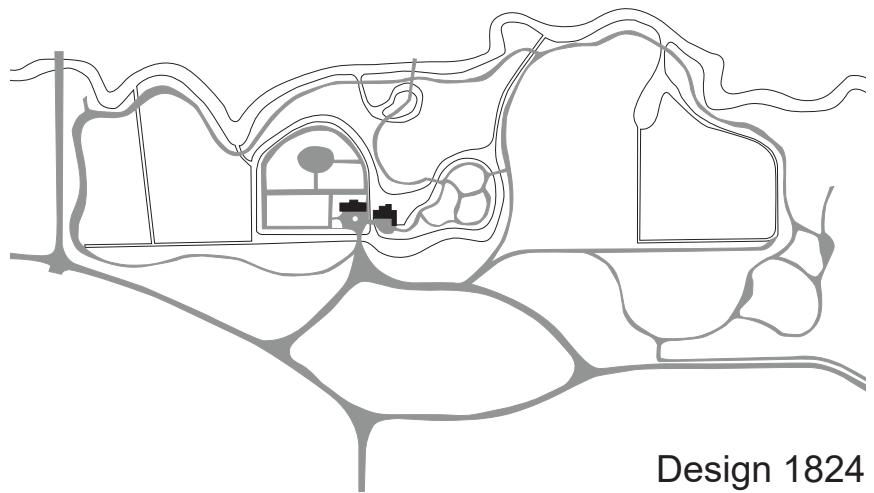
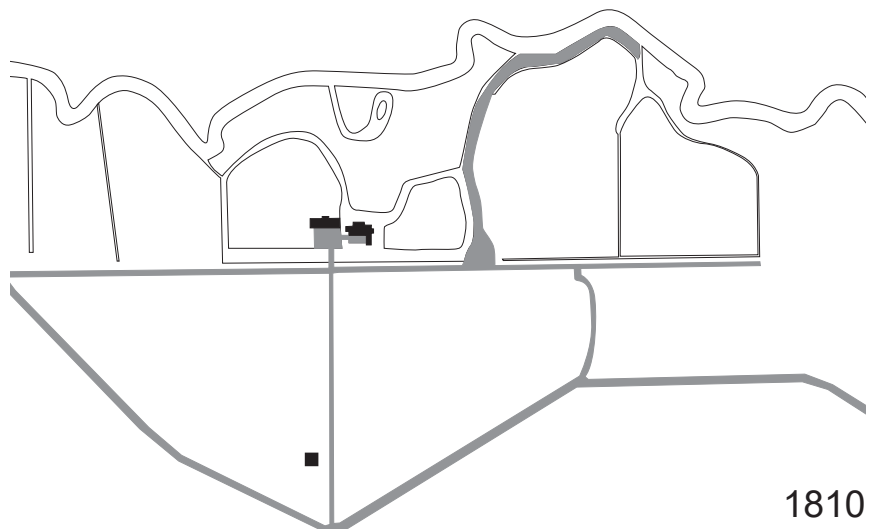
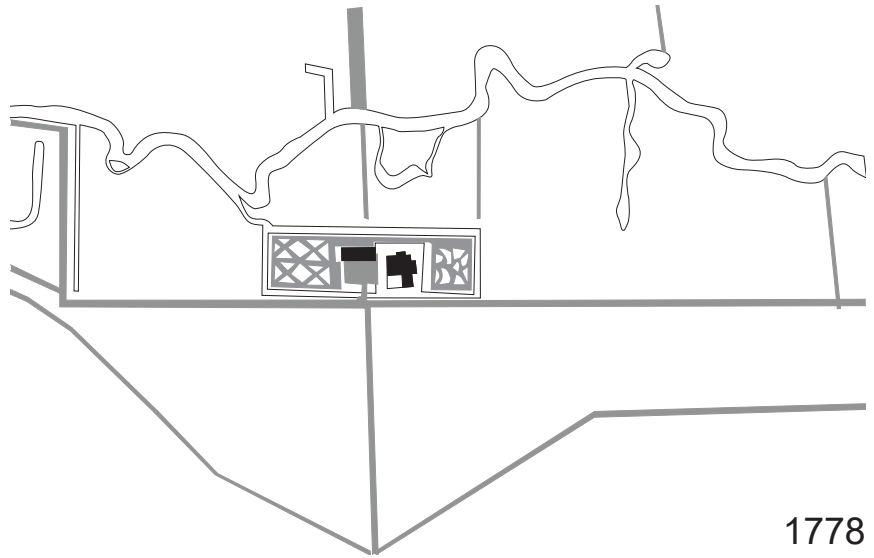


Image 1: Construction phases Huis 't Velde (Mathyn Klein)



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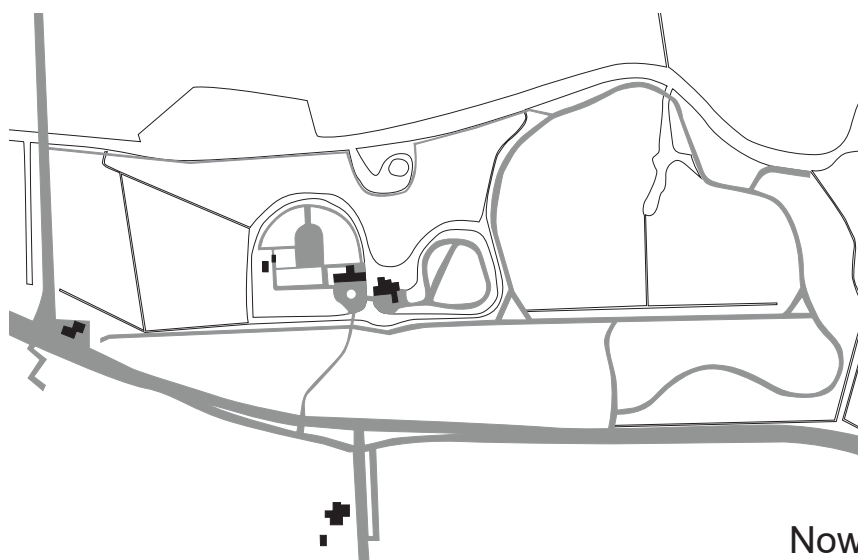
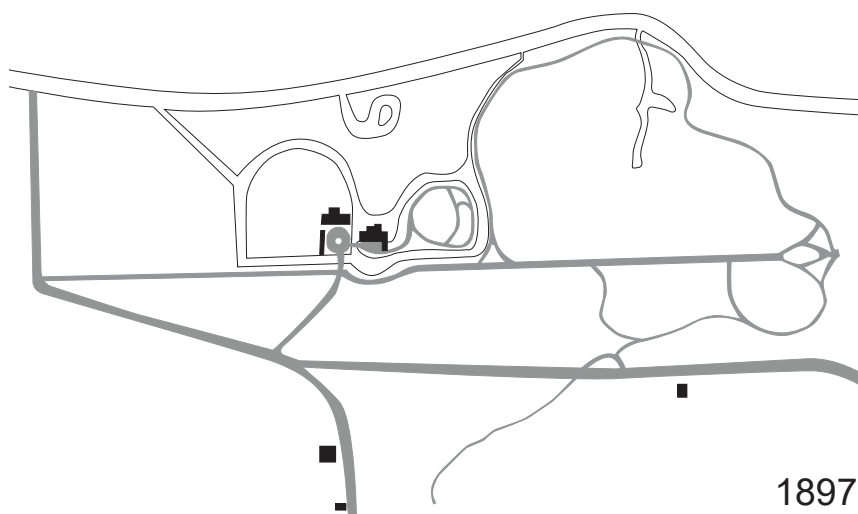


Image 2: development of the estate around Huis 't Velde (own image)



Image 3: Huis 't Velde before the restoration (Regionaal Archief Zutphen)



Image 4: Front facade Huis 't Velde (own image)

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Image 5: Front and side facade Huis 't Velde (own image)



Image 6: Back facade Huis 't Velde (own image)






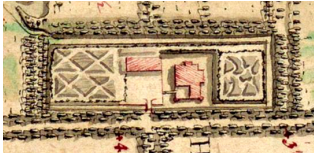
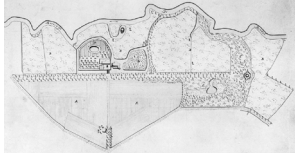
Image 7: Side facade carriage house (own image)



Image 8: Dove cote (own image)

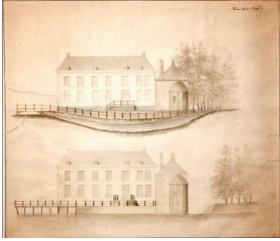



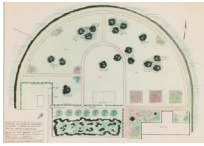
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| <b>Timelayers</b> | <b>Stuff</b>  | <b>Space plan</b>   | <b>Services</b>  |
|-------------------|---|---|------------------|
| <1538             |   | Simple square shaped building with souterain, two floors and attic        |                  |
| 1538              |   | New building, besides the existing building. Rectangular shaped building. |                  |
| ca. 1560?         |   | New wings on the back and sides of the building                           |                  |
| 1597              |   | New wing on the front side of the building                                |                  |
| 1701              | Modernization of the interior by Daniel Marot. Still visible in at least two rooms at the first floor | Main wing of the house extended   | Two new chimneys |
| 1778              |   |   |                  |
| 1810              |   |   |                  |

| Skin  | Structure   | Site   |
|---|---|--|
| Brickwork walls   | Brick walls and oak floor and roof construction, gable roof   |  |
| Brickwork with ornamentation in natural stone;  | Brick walls and oak floor and roof construction, gable roof   | Probably vegetable garden and orchard  |
|                        |   |  |
| Brickwork, existing windows replaced with 'schuiframen met roedes', two new windows in the front facade | New roofstructure for the main wing, (in pinewood?), hip roof | Construction of the avenue structure around 't Velde and De Voorst   |
|   |   | <p>Plan of the garden shows first reliable information. Rectangular canal, vegetable garden, 'engelsche partie', sight lines towards De Voorst and in front of the house</p>  |
|   |   | <p>Changes in the canal structure around the house. No longer straight, but in more natural forms, based on the ideas of the English landscape garden</p>                     |

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| <b>Timelayers</b> | <b>Stuff</b>  | <b>Space plan</b>   | <b>Services</b> |
|-------------------|---|---|-----------------|
| 1824              | Stucco in entrance hall   |   |                 |
| 1897              |   |   |                 |
| 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. |                 |
| 1987              |   |   |                 |
| 2005              |   |   |                 |

| Skin  | Structure   | Site  |
|---|---|---|
| <p>Stucco facades, 'empire vensters'</p>  |  | <p>Walls around the forecourt replaced with slopes. Design for the garden by Hendrik van Lunteren in an English landscape garden style.</p>  |
| <p>Facades covered in vegetation</p>  |   |   |
| <p>Restoration of the exterior. 'Schuiframen' brought back. Stucco replaced with a layer of chalk paint</p>               |   | <p>Three farms that were part of the estate sold separately</p>   |
|   |   | <p>New garden design for part of the park</p>    |
|   |   | <p>Memorial garden for police officers who died during their work</p>   |

No longer visible  
Still visible

## Chapter 2: Case studies

In this chapter, 3 case studies will be discussed and analyzed. The first one is Hofwijck, an estate in Voorburg. The second is Oud-Amelisweerd in Bunnik. The third is Duin en Kruidberg, located in Santpoort-Noord. All of these case studies are examples of estates that are no longer used for their original function, i.e. private habitation. They have all been given a new function, which required various interventions. For each of these interventions, a different approach is chosen, and in all cases is dealt with the existing time layers in a different way.

Every case study will first be introduced, using photo's and/or drawings and a short written description, to get an idea

of the current situation and function of each estate, and it's background.

After the introduction, all case study's are analyzed using a specially designed scheme. This scheme is based on the Shearing Layers model which was introduced by architect Frank Duffy and elaborated by Steward Brand in his book *How Buildings Learn: What happens after they're built* (1995). The layers introduced in this book are placed in a matrix, and combined with the timelayers that are present in each case study. For each scale level, the interventions (if present) in this time layer are described. In this way, the scheme makes it possible to visualize for each timelayer what

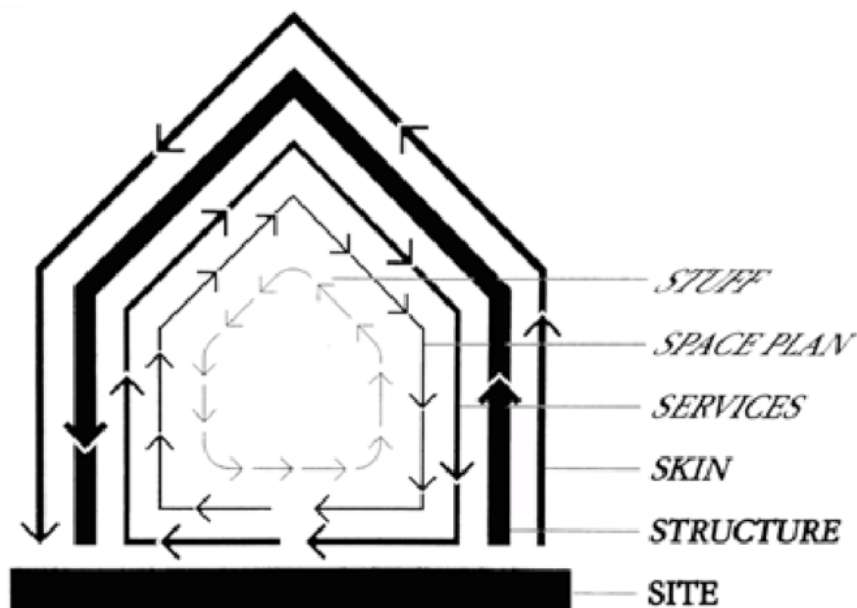


Image 8: Shearing Layers model (Brand, 1995)

| <b><i>Timelayers</i></b> | <b>Stuff</b> | <b>Space plan</b> | <b>Services</b> | <b>Skin</b> | <b>Structure</b> | <b>Site</b> |
|--------------------------|--------------|-------------------|-----------------|-------------|------------------|-------------|
| ....                     |              |                   |                 |             |                  |             |
| ....                     |              |                   |                 |             |                  |             |
| ....                     |              |                   |                 |             |                  |             |
| ....                     |              |                   |                 |             |                  |             |

has been changed, added or perhaps disappeared on every scale level. This also makes it clear what the lifespan of the elements on the different scales is.

Last, the interventions that were necessary for the adaptive reuse of the are described. Hereby, the focus is in particular on the way in which is dealt with the existing timelayers, and on how the new time layer(s) are integrated, using the matrix made before.

# Case study 1: Hofwijck

## Background

Constantijn Huygens decided in 1939 that he wanted to build a (second) house for his family, to escape from his busy workplace The Hague. He worked there for the stadtholder Frederik Hendrik, son of Willem van Oranje for over 60 years. Huygens town house at the Plein in The Hague was built just a few years before, by two famous architects, Jacob van Campen and his student Pieter Post, showing his interest and appreciation for architecture. Unfortunately this building no longer exists. The information in this paragraph is based on a book by Boers and Van der Leer (2015), the website of Hofwijck, and a location visit.

The estate Hofwijck is designed with the idea to create a paradise for rest, harmony and silence for the owners. Huygens was hoping to find rest and silence in nature, and therefore selected the location in Voorburg. He based his way of creating harmony on the ideas of the Roman architect Vitruvius, who said that harmony could be found in the proportions of the human body. Therefore, these proportions were used in the design for house Hofwijck, in a similar way as in Huygens first house in The Hague. But, Huygens also went a step further with Hofwijck. He also introduced not only these proportions of the human body, but also its form in the garden.

Characteristic for the garden was the strong emphasis on symmetry. All paths were rectilinear, and all vegetation formed rigid, square figures. In the middle of the garden was a long sight line from the house, along a path crossing the garden, that also formed the symmetry axis of the whole garden.

## Current situation

House Hofwijck is currently surrounded with a reconstruction of (part of) the original garden, based on the shape of the human body, as described before. Also the house itself has been completely reconstructed. The building has a simple square-shaped floorplan and consists of four building layers; souterrain, ground floor, first floor and attic floor. It's surrounded with water, and can be accessed via a bridge. Underneath this bridge is an icehouse. On the northside of the complex are a railway line, and a high way. The railway is partially located on the former garden. On the south east side of the complex is a river, the Vliet. On the north west side of the garden is station Voorburg. On the south west side of the complex is a residential area built in the 1930's, and a bit further away another country house called Middenburg.





Image 10: Hofwijck (own image)



Image 11: View from the house (own image)



Image 12: Garden of Hofwijck (own image)

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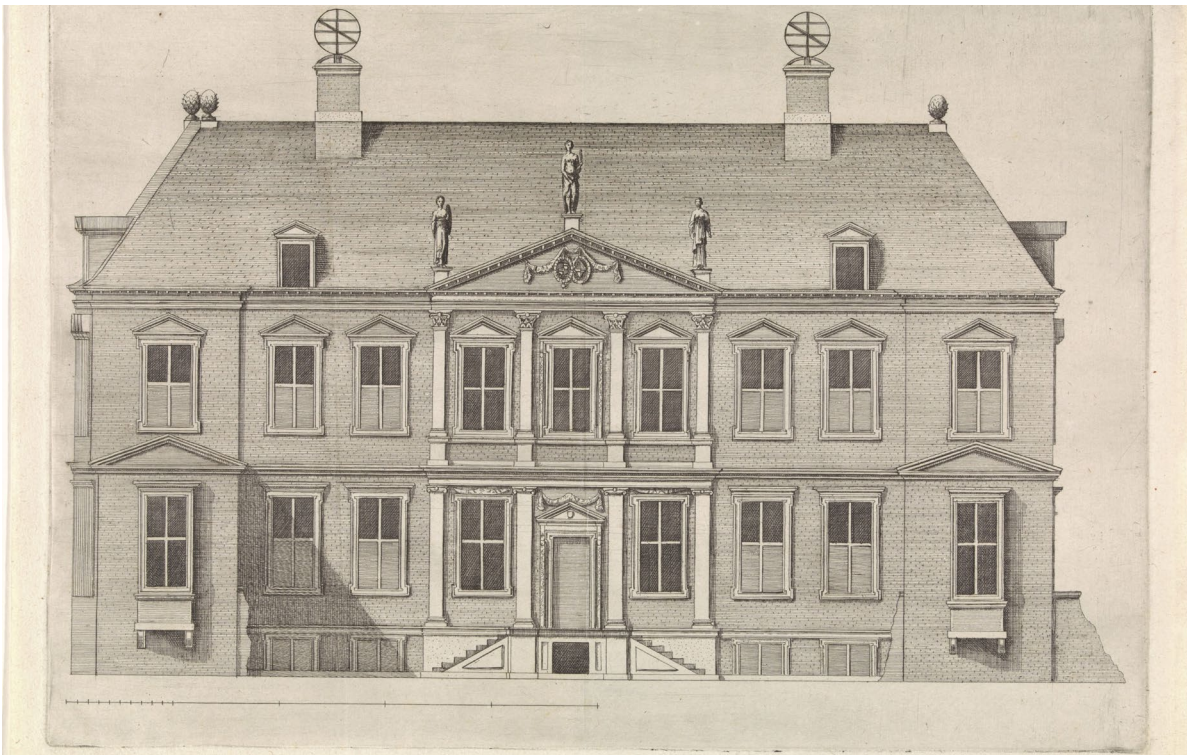


Image 13: Huygenhuis (Theodor Matham, Rijksmuseum)

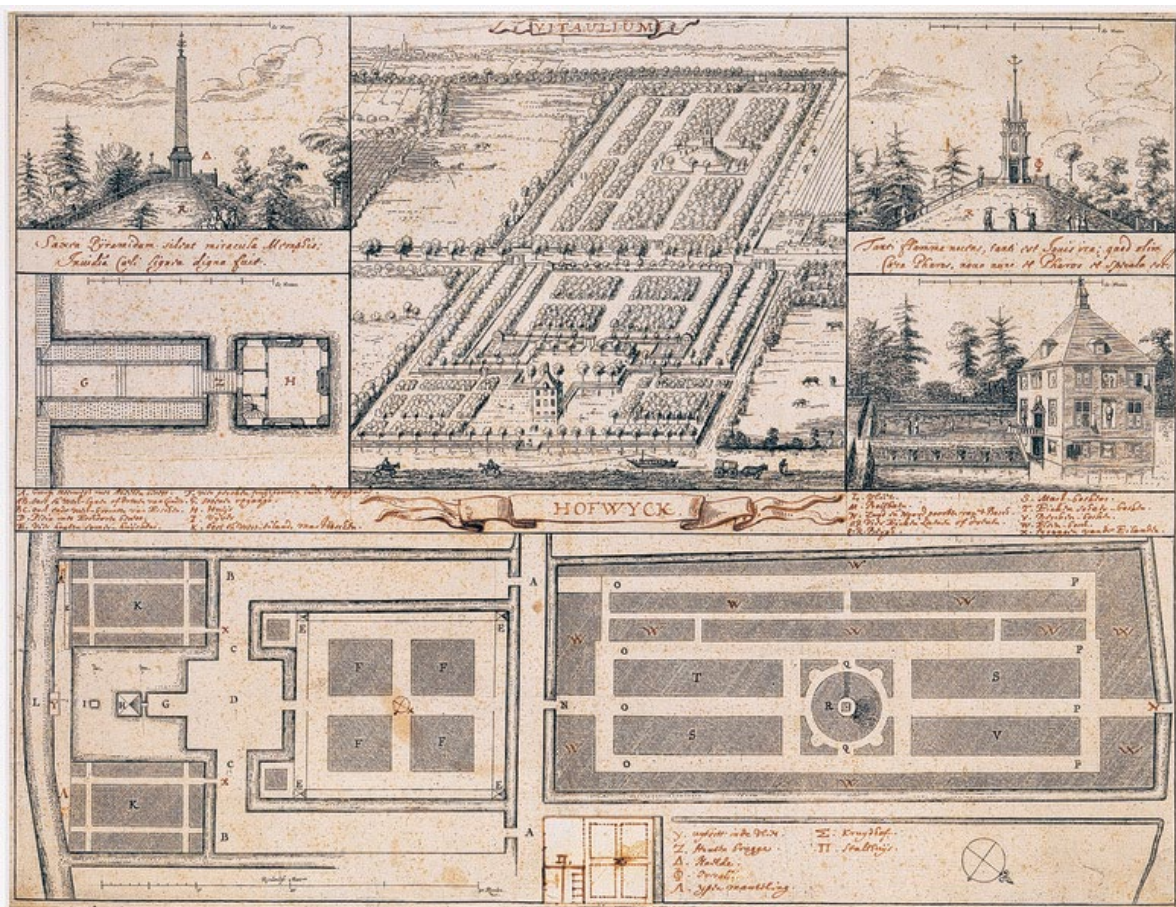

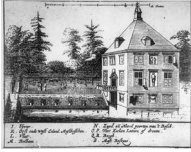










Image 14: Design drawing for Hofwijck (Collectie Duijvesteijn)



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| <b>Timelayers</b> | <b>Stuff</b>                       | <b>Space plan</b>  | <b>Services</b>   |
|-------------------|------------------------------------|--|---|
| <1642             |                                    |  |   |
| 1642              |                                    | Simple square shaped floorplan, building consists of a souterrain, ground floor, first floor and attic                                     | Ijskelder under the entrance bridge, kitchen in the souterrain, chimney |
| 1687              |                                    | <p>Addition of new volume in front of the entrance</p>  |   |
| 1708              |                                    |  |   |
| 1750              | Interior paintings by Jacob Xavery |  |   |
| 1788              |                                    |  |   |
| 1840              |                                    |  |   |
| 1868              |                                    |  |   |
| 1914              |                                    | Added volume removed. Oldest floorplan restored.   |   |
| 1987              |                                    |  |   |
| 2003              |                                    |  |   |

| Skin   | Structure  | Site   |
|--|--|--|
|  |  | Ground: duinruggen   |
| <p>Brick walls. Slated roof. square window frames; 'kruiskozijnen'</p>  | <p>Brick walls, wooden floors ('moer en kinderbalken') and roof construction.</p>                                | <p>Formal garden, design based on the human body</p>   |
|  | <p>Construction of the new volume similar to the existing; brick walls, wooden floors and roof construction.</p> |  |
| <p>New, longer windows with french balconies and</p>                    |  | <p>French baroque garden elements</p>   |
|  |  | <p>'Overtuin' becomes part of the garden again. Several buildings added to the complex; tuinmanshuis, koetshuis, stal, kassen, koepel</p>  |
| <p>Changes in the 1687 addition</p>  |  |  |
| <p>White plaster, shutters</p>                                        |  | <p>Outbuildings transformed into factory buildings</p>   |
| <p>'New' roofing</p>    |  | <p>Construction of the railway that crosses the garden, which has therefore no longer it's original size</p>  |
| <p>Reconstruction brick walls. Slated roof. 'kruiskozijnen'</p>       | <p>1687 construction elements removed</p>  | <p>Plans for a reconstruction of the garden are made, but not executed. A 'poortgebouw' has been built.</p>  |
|  |  | <p>Elevation and widening of the railway. New garden design, based on the oldest plan but with a different infill, and including a 'grand canal'</p>   |
|   |  | <p>1642 design as much as possible restored</p>  |

No longer visible  
Still visible

## Adaptive reuse

During the centuries of existence of the estate Hofwijck, it long retained a function that remained close to the building's original destination; it was used as a residence for most of its existence, be it permanent or as a secondary residence. During this period the house was adapted frequently to the needs of its inhabitants, as seen in the matrix in the previous page's. Between 1840 and 1849, a second function was added, but the house was still used as a private home. Mostly the garden, and especially the eastern part of it, were changed in order to make it possible to have a factory for candles at the estate.

In 1914, the estate was sold to a group of people, united in the Vereniging Hofwijck, who wanted save the estate of the impending demolition. This marked the beginning of long period of restoration and changes at the estate. The most important reason for this group to buy the building was the fact that Christiaan and Constantijn Huygens had lived there, who had been of great importance in Dutch history.

The restoration started with several difficulties. Little money was available, and at first there was ambiguity about where to start; with the house or with the garden. Eventually the committee decided to start with the house. A restoration architect, Herman van der Kloot Meijburg, was commissioned (see images), and a plan was made. The house was restored to its original design, based on what was still left, and on several drawings, made among other by Constantijn Huygens himself. In order to make this restoration possible, it was necessary to demolish quite a lot

of additions and changes, as a result of which a large number of time layers can no longer be seen in the house at the moment. Remarkable is for example the fact that the extension of the house, has been demolished, while this extension partly dated back to the period when Constantijn lived in the building. According Van der Leer and Boers, this was because at the time, the restoration architect assumed that this extension was completely built in the 19th century. The restoration of the house was completed in 1927, and from 1928 the house can be visited as a museum. The groundfloor was shown as it looked like in the 17th century, whereas on the first floor was a more museal space with exhibition pieces. Nowadays the museum functions in a similar way, with the difference that the museum pieces are now more scattered throughout the building, and that the attic has also been opened up. Here the focus is now mainly on Christiaan Huygens, showing several of his inventions.

We can conclude that, during the restoration of the house and garden, the original design was considered the most valuable. As far as practicable, the entire complex has been restored to its original state. This is very much in line with the new function of the building; it functions as a museum about father and son Huygens. Nevertheless, it does mean that a lot of the timelayers aren't experientable or even visible any more. But, the complex does seem to tell very strongly one story; that of Christiaan and Constantijn Huygens. However even parts of the extension, and therefore of his story are no longer visible. This shows the risks of removing timelayers.



Image 15: Information about Hofwijck in the garden of the estate (own image)



Image 16: Information about Huygens in attic of the house (own image)



Image 17: Orchard in the garden (own image)



Image 18: House Hofwijck before the restorations (Leer en Boers, 2015)



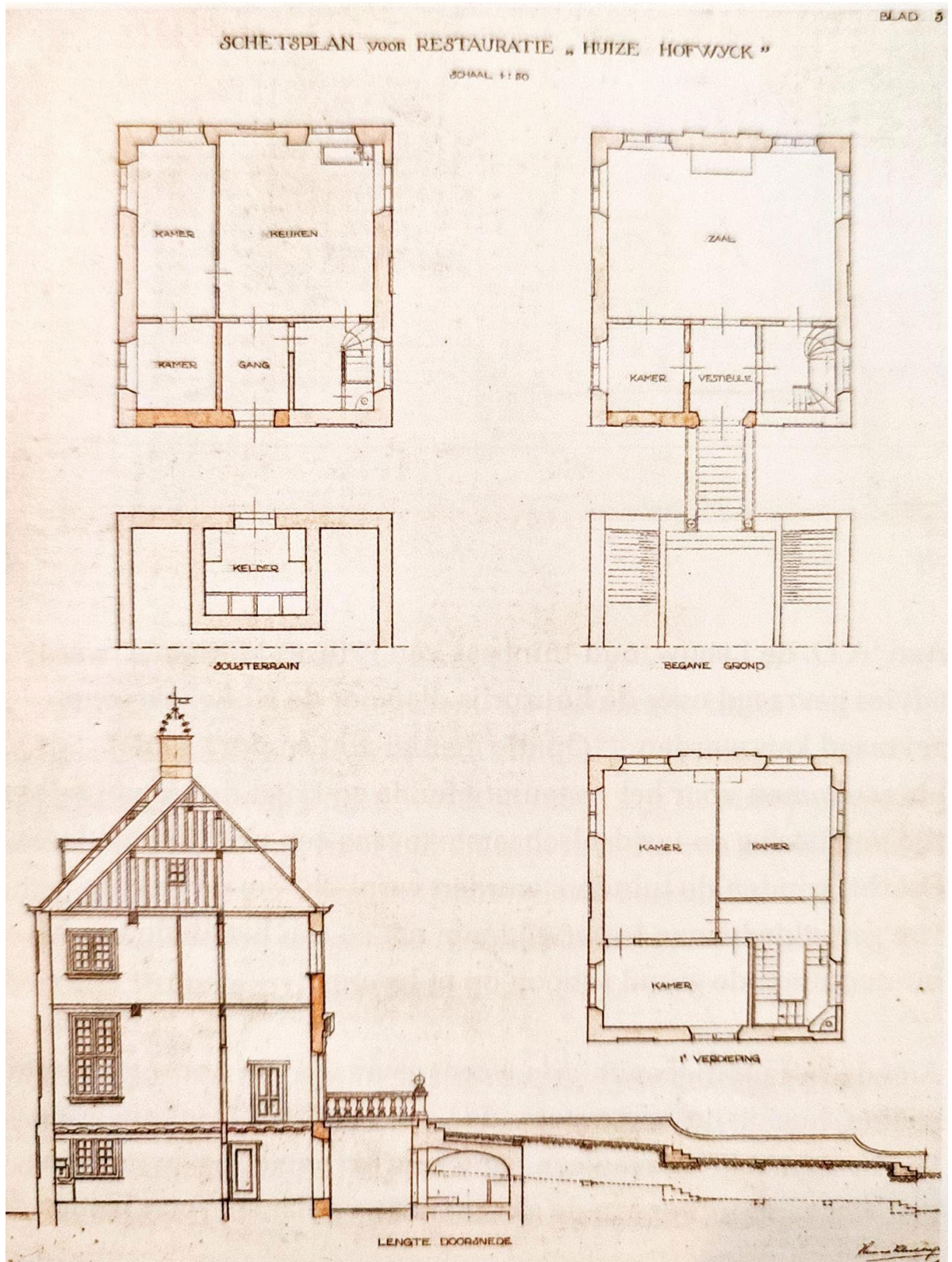


Image 19: Drawings for the restoration of the house (Leer en Boers, 2015)

## Case study 2: Oud-Amelisweerd

### Current situation

Oud-Amelisweerd is an estate located in Bunnik, near the city of Utrecht. The information about Oud-Amelisweerd in this paragraph is based on Albers and Pemmelaar (1983), Van der Woude (2000) and Klerks and Kluck (2010), the website of Oud-Amelisweerd and a location visit. The main house is built in 1770, after at least two previous houses at more or less the same location, of which the first one was destroyed in 1672. The house has a more or less rectangular shape; only part of the rear facade slightly recedes. The building has three floors, the ground floor, first floor and attic floor. The spaces on the ground are connected enfilade along the side and rear facades. The spaces at the first floor are connected both through a corridor as well as to each other. Besides the main house is on the estate also another building, the carriage house. This is somewhat lower, also with a more or less rectangular floor plan, and only two floors, the ground floor and the attic. Parts of the carriage house are older than the main house. Historically, the estate Oud-Amelisweerd has a strong relation with two others; Nieuw-Amelisweerd and Rhijnauwen. This is a result of the location of these three estates at the bend of the Rijn. The main sight lines in the surrounding parks are therefore connected.

Nowadays, the three estates together are publicly accessible as a walking area, and seem to function as a city park. The parks mainly consist of forests, planted in the first part of the 19th century.

### Background

From 1649 till 1725, Oud-Amelisweerd was owned by family Van Bueren. Afterwards, it was sold to Jacob Johan van Delen. After some time, his wife's niece inherited the estate. She was married to Gerard Godard baron Taets van Amerongen (1729-1804), who changed quite a lot in both the gardens and the house, as can be seen in the matrix.

An interesting fact in the history of Oud-Amelisweerd is that it was owned by Lodewijk Napoleon for a few years, from 1808 till 1810. King Lodewijk Napoleon had a city palace in Utrecht, and he had Oud-Amelisweerd, together with Nieuw-Amelisweerd as his country house. He decided to use Oud-Amelisweerd as his own house, and Nieuw-Amelisweerd for his men. Several plans for the estates were made, including a.o. a new channel, pond, public park, ice house, training facilities for his soldiers etc. However, none of these plans were executed, because the king spent most of his time at one of his other palaces, Het Loo.



Image 20: Garden of Oud-Amelisweerd (own image)



Image 21: Back facade of Oud-Amelisweerd (own image)



Image 22: Front facade and garden of Oud-Amelisweerd (own image)

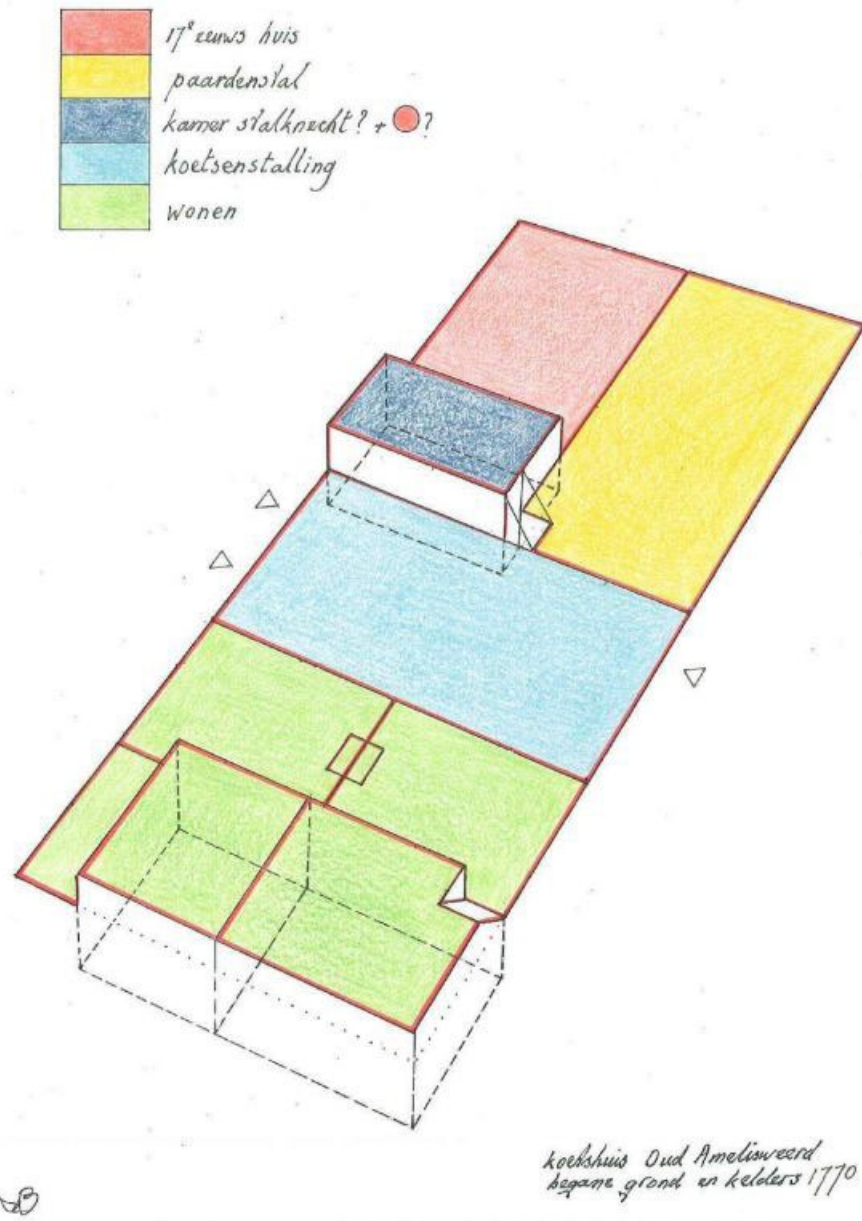

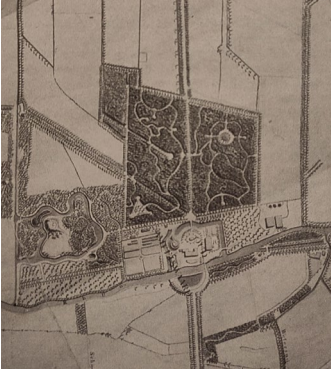


Image 23: Original set-up of the carriage house (Klerks and Kluck, 2010)

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| <b>Timelayers</b> | <b>Stuff</b>  | <b>Space plan</b>  | <b>Services</b>  |
|-------------------|---|--|--|
| <1672             |   |  |  |
| 1672              |   |  |  |
| 1761              |   |  |  |
| 1770              | Chinese wallpaper   | Square shaped building. Two layers + attic. New floorplan, spaces are enfilade switched along the back and sidewalls |  |
| 1776              | Will mentions the richness of the interior, with wallpapers, mirrors, and (fixed) paintings   |  |  |
| 1806              | Estate division (boedelscheiding) shows that the previous owner, Taets van Amersongen, had a lot of (important) paintings, 218 in total |  |  |
| 1810              |   |  |  |
| 1805?             |   |  |  |
| 1942              |   |  |  |
| 1976              |   |  |  |
| 1990-2012         | Conservation and restoration of the interior of the house, including especially the wallpapers  |  | New installations necessary for conservation of the interior of the building |

|              | Skin  | Structure  | Site   |
|--------------|---|--|--|
|              |   |  | <p>Speelhuys<br/>Location near river Berkel</p>  |
|              | <p>exterior: red brick walls</p>  | <p>Old building burns down. New, smaller house is rebuild. Small rectangular building, loadbearing brick walls</p> |  |
|              |   |  | <p>Changes in the garden design by Gerard Godart. Trapezoidal forest, with a central avenue surrounded with lime trees. Winding paths in the forests</p> |
|              | <p>exterior: red brick walls, sliding windows, tile roof</p>  | <p>(Almost) completely new house; brick walls, wooden roof construction,</p>                                       | <p>Bridge over the Rijn, besides the house</p>                         |
|              |   |  |  |
|              |   |  |  |
|              |   |  | <p>Design Alexandre Dufour for Lodewijk Napoleon (not executed) for changes in the lay-out of the park</p>   |
|              | <p>sliding windows replaced with empire windows</p>   |  |  |
|              |   |  | <p>Repair place for tanks behind the house</p>   |
|              |   |  | <p>Renovation and restoration in the carriage house, gable roof replaced with flat roof</p>  |
| <p>the e</p> | <p>Conservation of exterior skin, replacement and repair of rotten window frames and gutters</p>  | <p>Reconstruction of the gable roof in care in the main house underneath the added flat roof</p>                   | <p>Repair and conservation of carriage house</p>   |

No longer visible  
Still visible

## Adaptive reuse

After 1810, when Lodewijk Napoleon had to sell the Oud-Amelisweerd, the estate changed very little. Only the garden within the canal was changed to a landscape garden. The estate was sold to Paulus Willem Bosch van Drakestein, after it was very briefly owned by an adviser of Napoleon. Bosch van Drakestein was the mayor of the city of Utrecht at the time. He used the building as a second house, and after his death the estate remained family property. The municipality of Utrecht bought Oud-Amelisweerd in 1951, with as a main goal opening up the surrounding park for the inhabitants of the city. Until 1987 the house remained unhabited. After this year, the buildings on the estate lost their functions.

In the main house, two different approaches are taken in order to make the building suitable for a new function, based on the existing time layers. The spaces on the ground floor are almost completely restored. The restoration of these rooms was part of a (research) project of the SRAL (Stichting Restauratie Aterier Limburg). Nowadays, they are open for public. Several rare wallpapers can be found in these rooms, and therefore showing these wallpapers is nowadays the main goal for this part of the building. In the first room, information about the different wallpapers and the restoration project is combined with fragments of other wallpapers found in the building. These things together are shown in a specially designed piece of furniture, as can be seen on the images on the next pages.

The rooms on the first floor are now

furnished as exhibition spaces. The walls are covered with a special type of fabric, through which the building traces from several different timelayers are still somewhat visible, without disturbing the unity of the spaces or the experience of the exhibitions. In order to regulate the amount of light inside the house, which is necessary for a museum function nowadays, the existing shutters were adapted. They are equipped with automatic electric hinges that allow them to be opened and closed depending on the light requirement inside and the weather outside.

The carriage house besides the main house is currently used as a restaurant, shop and conference/meeting room. In 1976 the building was renovated, whereby the gutter ('zakgoot') was removed to create a larger usable space in the attic. The attic nowadays functions as the conference room.





Image 24: Information about the restoration in Oud-Amelisweerd (own image)



Image 25: Exhibition on the first floor of Oud-Amelisweerd (own image)

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Image 26: Interior of the carriage house (Website Oud-Amelisweerd)



Image 27: Interior of the carriage house (Website Oud-Amelisweerd)



Image 28: Exterior of the carriage house (Website Oud-Amelisweerd)

## Case study 3: Duin- en Kruidberg

### **Background**

The estate Duin- en Kruidberg is located in Santpoort-Noord, north of the city of Haarlem. The information about this building is based on Mobron (1997), the website of Duin- en Kruidberg and a location visit. The current estate consist of two older ones; Duin en Berg and Kruidberg. One of the first known owners of Duin en Berg was Hendrik Reijnst, a merchant, Amsterdam magistrate, director of the Dutch East India Company and official of the Amsterdam Exchange Bank. He bought a farmstead and built a country house at the location. The house was extended and changed several times. The house Duin en Berg was demolished in 1909, after the new house Duin- en Kruidberg was built.

Kruidberg also emerged as a country estate due to the rise of the wealthy burgher. Balthasar Coymans, alderman and sheriff of Haarlem and Heer van Streefkerk and Nieuw Lekkerland also bought a farmstead and replaced it with a countryhouse. Kruidberg had several well-known owners; among others Sophia Trip, member of a famous Amsterdam family and Willem III Stadtholder and later also King of England.

Since the middle of the 19th century, the two estates were combined by Adriaan baron van Hall. He built a new house

on the estate Duin en Berg, near the location of the current country house. Around 1895 Jacob Cremer bought the estates. After some years, he decided to demolished the existing building, and built a new country house. This building forms the basis of the current country house. The architect of the house was the Van Nieukerken team. They were specialised in a historicising style based on the Dutch Renaissance.

### **Current situation**

Nowadays the building consist of three main volumes. The first one is the historic house built in 1909. This building has a a very irregular structure, with different volumes and different heights. More or less in the middle of the building is a tower. The seconde volume is an extension underneath the forecourt. Northwest of the building is another, larger new wing with a green roof. More information about these extensions can be found in the matrix on the next pages and in the paragraph about the adaptive reuse of the estate.

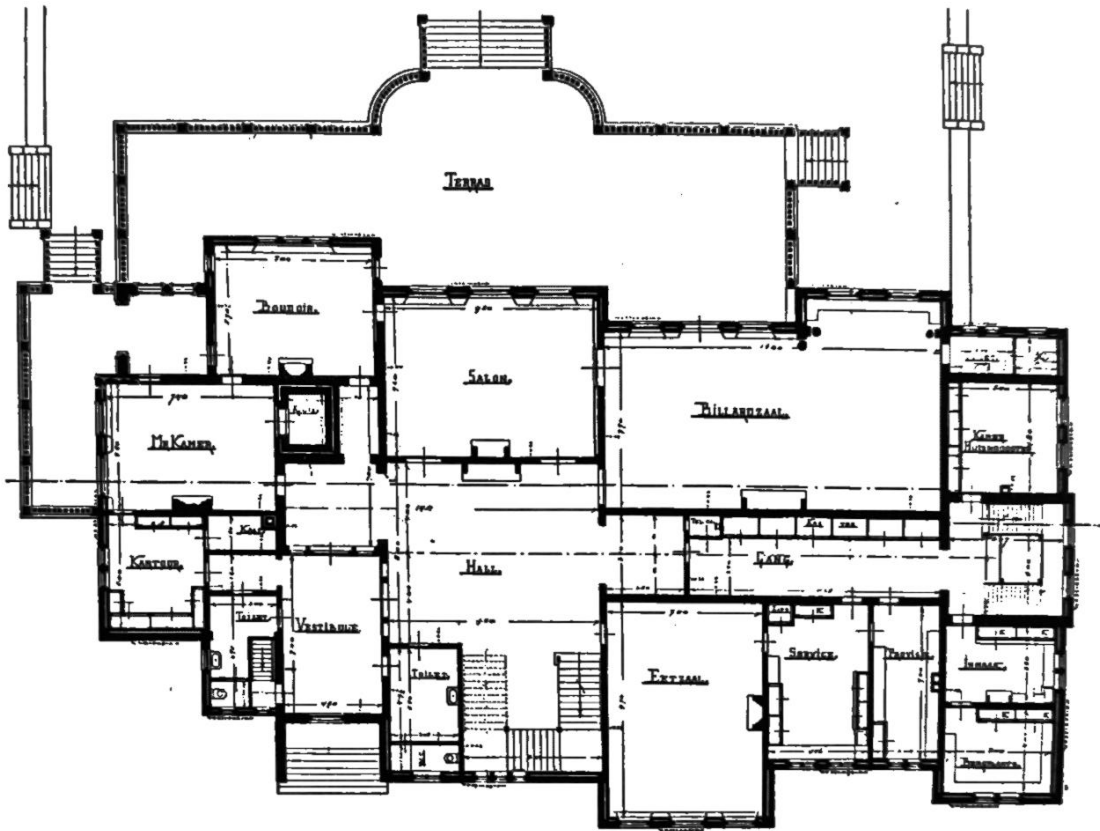


Image 29: Original floorplan of Duin- en Kruidberg (Mobron, 1993)



Image 30: Front facade Duin- en Kruidberg (Website Duin- en Kruidberg)

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Image 31: Old and new country house on the estate (Mobron, 1993)





Image 32: Overview of house Duin- en Kruidberg and the two added wings (Duin en Kruidberg)


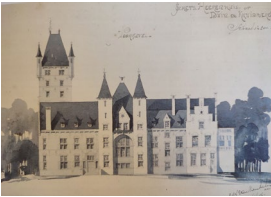

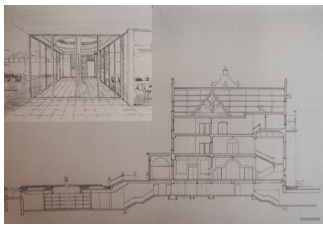


Image 33: Carriage house (Website Duin- en Kruidberg)

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| Timelayers | Stuff  | Space plan   | Services   |
|------------|--|--|--|
| <1845      |  |  |  |
| 1845       |  |  |  |
| 1909       | <p>A.o. marble statue of the first owner and marble relievo, dressoirs (designed by the architect), chairs chimneys and other furniture for many different room. Japanese art bought by the owner. Sandstone relief in the entrance hall. 'goudleer' and other types of wallpapers. Statues in natural stone in the garden.</p>  | <p>Large building with shared rooms and private rooms for the owners and all of their quests. Formal rooms on the beletage, <b>bed- and bathrooms on the first floor and staff rooms in the soutterain and attic</b></p>  | <p>House was equipped with progressive facilities such as a central heating system, hot running water, electric elevator and it's own water installations; many toilets and bathrooms in the quest rooms</p> |
| 1940       | Interior saved by family member of the owners  |  |  |
| 1945       |  | House used as educational institute for o.a. the red cross   |  |
| 1961       | New interior for the hotelrooms?   | House used as holiday location by the Algemene Bank Nederland  |  |
| 1975       |  |  |  |
| 1994       | Changes in the interior of the rooms at the first floor and attic; changed into 4- and 5-star hotel rooms; rooms on the ground floor still more or less original, partially restored, some changes in furniture and functions  |  |  |
| 2000       |  | New wing added to the building, contains extra hotel rooms   | Toilets and bathrooms for the new hotelrooms   |
| 2008       | Renovation of the hotel rooms; changes in the interior of the 1994 extension by Slangter Hulsken architects  |  |  |
| 2015       |  | Meeting and event rooms inside Koetshuis   |  |
|            |  | Addition of a spa in the new (2000) wing   | Spa facilities; sauna, steam bath, infra-red sauna, foot bath  |



|                           | Skin  | Structure  | Site   |
|---------------------------|---|--|--|
|                           |   |  | <p>Estates Duin en Berg and Kruidberg</p>  |
|                           |   |  | <p>Construction of icehouse for storage of food</p>    |
| <p>ing<br/>wn<br/>and</p> | <p>Brick walls with ornamentation in natural stones</p>           | <p>Load-bearing brick walls, wooden floor and roof construction</p>  | <p>Garden designed by the famous garden architect Leonard Springer in a combination of two styles; baroque and English landscape style. Symmetrical garden around the house, and more natural. Sever other houses for staff members in the surrounding area. Restoration of the icehouse</p> |
|                           |   |  |  |
|                           |   |  |    |
|                           |   |  |  |
|                           |   |  | <p>Park around the country house sold to Vereniging tot Behoud van Natuurmonumenten</p>  |
|                           | <p>Garden on top of the roof, brick wall on the waterside with hidden windows. Dome in the ceiling corresponds with garden design of Springer</p> | <p>Underground extension with concrete structure</p>  | <p>Garden in front of the house becomes roofgarden</p>   |
| <p>w</p>                  | <p>Green roof on top of the new wing</p>  | <p>new wing with concrete structure</p>  |  |
|                           |   |  |  |
|                           |   |  | <p>Koetshuis opened for the public</p>   |
|                           |   |  |  |

No longer visible  
Still visible

## Adaptive reuse

Theodoor Cremer died in 1923. After his death, his son lived in Duin en Kruidberg until 1940. During World War II, the house was used as a church and refectory by a neighbouring village. Later, it was used as a to billet German officers and part of the estate was used as a shooting range. The Cremer family didn't return to the house after the liberation, but were still the owners of the estate until 1961. During this period, the house was used for several different functions; at first it was used by the Canadian army. After they left, the Red Cross used the building as a training centre. Before the house was sold, the house was turned into a hotel. During this period, some changes were made in the building but they were still relatively small compared to the later changes.

The heirs of the estate sold the estate to the Nederlandsche Handel Maatschappij, the later ABN-Amro Bank. This organisation used the building as a holiday home for company staff. This was, at first, quite succesfull. But during the 1980's, and 1990's interest waned and running costs kept on rising. Therefore, the company holiday estate closed its doors.

In 1994 the destination of the building changed again. A competition was held and the commission for the renovation went to the Amsterdam architectural bureau Hofman. The bureau designed an extension for the building underneath the garden between the terrace and the lake in front of the building. This made the extension almost invisible, so that the character of the existing building and the environment is preserved. Inside this extension, meeting rooms were created. The rooms on the first and second floor

of the existing building were changed into 4 and 5 start hotel rooms.

In the year 2000, a second addition has been done besides the existing building. Around 50 hotel rooms have been accommodated in this expansion. Furthermore, the 'koetshuis' has recently (2015) been opened to the public. The building is being used for meetings and events. Originally, parts of this building were used by the Cremer family during the winter, since it was difficult (and expensive) to heat the main house to a comfortable temperature.

The surrounding park is largely part of Nationaal Park Zuid-Kennemerland and open for public.

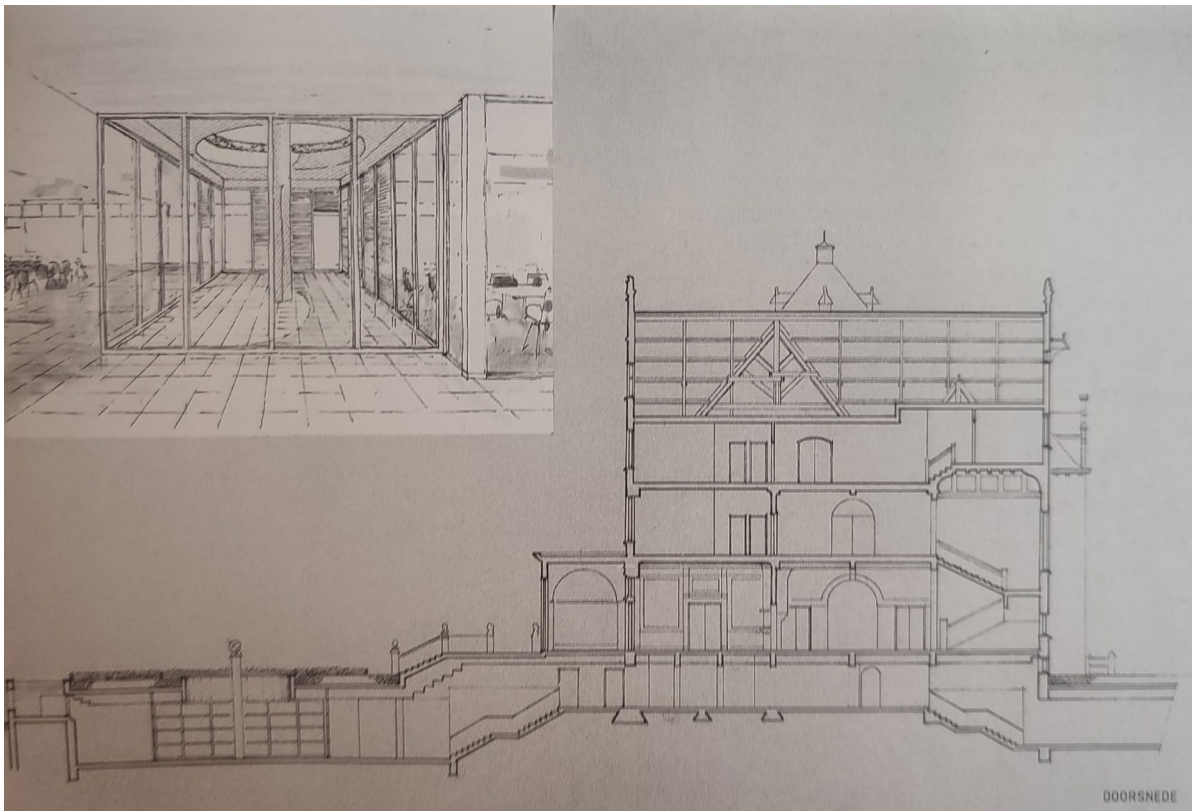


Image 34: Section for the first extension of the house (Mobron, 1993)



Image 35: Interior of one of the meeting rooms in the house (Website Duin- en Kruidberg)

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Image 36: Interior of the carriage house (Website Duin- en Kruidberg)



Image 37: Interior of the carriage house (Website Duin- en Kruidberg)



Image 38: Hotel room in the latest extension (Website Duin- en Kruidberg)



Image 39: Conference room in the first extension (Website Duin- en Kruidberg)

## Chapter 3: Scenario's

In this chapter, the strategies that were used for the adaptive reuse in the casestudies are applied to Huis 't Velde. They are summarized in three point, illustrated with schematic drawings. Applying the strategies will be helpfull for understanding the impact of these strategies even better, but is most of all an important step in finding the answer to the main question of this research, *'How can the architect integrate the stories behind the layers of time in Huis 't Velde in the adaptive redesign process in order to make these stories experienceable for future users?'*.

The scenario's will make clear what does, or does not work in the estate in Warnsveld. These findings can be used in the design, and all the different possibilities will give inspiration for the designer, and frame of reference of what is possible, transformation framework.

To be extended with literature

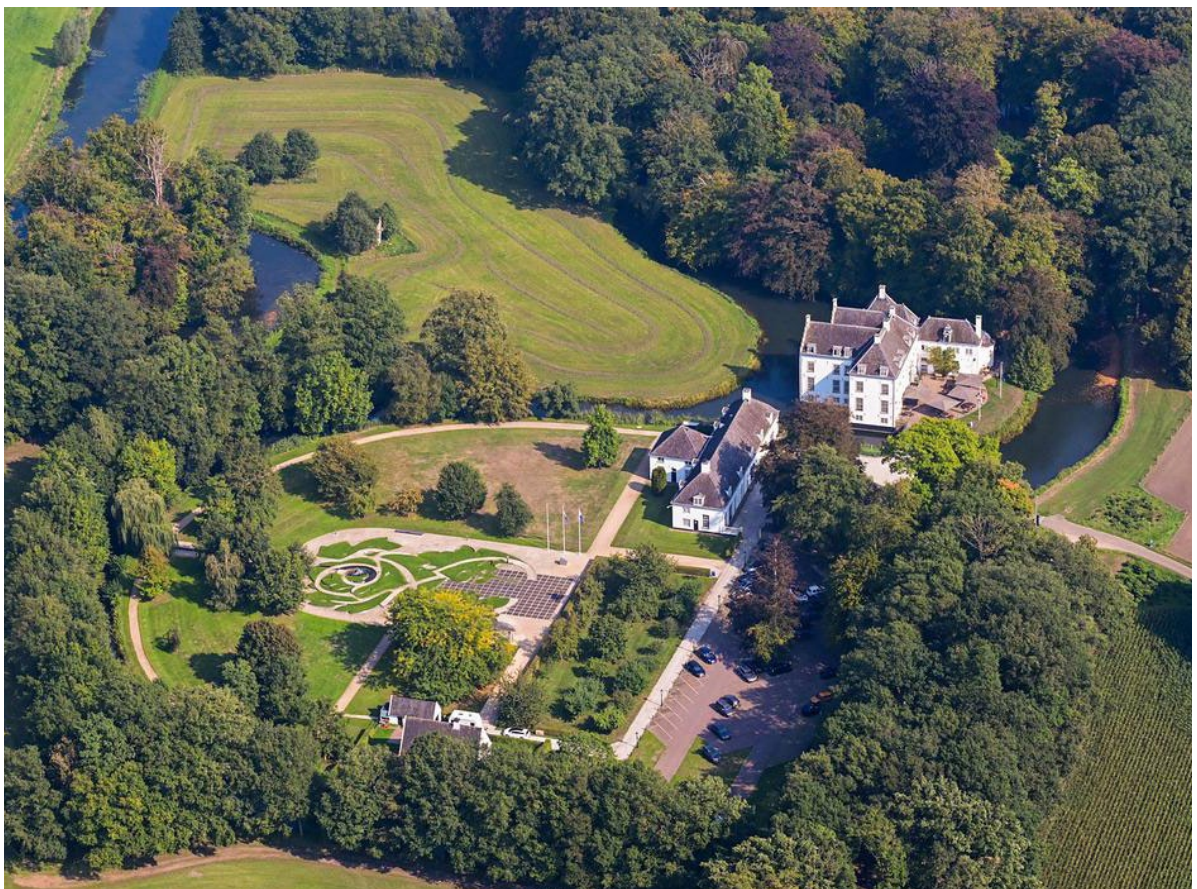


Image 40: Overview of the estate Huis 't Velde (Maarten van de Biezen)

## Scenario 1: based on Hofwijck

Very important in the way the adaptive reuse in Hofwijck took place was the fact that there is focussed on a specific timeperiod. In case of 't Velde, it would be the most logical decision to focus on the time of Arnold Joost van Keppel around the year 1700, for two reasons. On the first place, this would be quite an interesting story to tell, with his relations with Willem III and De Voorst. The second reason is that Van Keppel had a lot of impact on the layout of 't Velde. It would also be relatively easy to find out what the house looked like at the time.

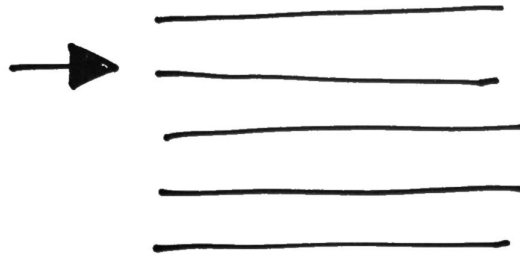
A reconstruction to the year 1700 would mean a couple of things for the house. In the first place, the white paint should be removed, making the brick visible again. The tower in front of the house should be reconstructed, and the slope around the forecourt should be replaced with a wall. Also the interior should be changed; among others the entrance hall should be removed, and the same applies to the meeting roofs on the attic floor. The carriage and dove cote should be demolished. Also the house at the westside of the estate should removed.

The garden should be changed quite a lot as well; the landscape garden should be replaced with an formal garden. A vegetable garden should be made, together with a orchard. The avenues around the estate should be reconstructed where they are no

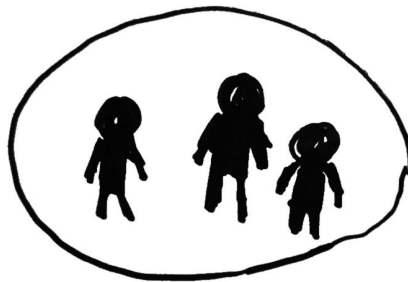
longer present, and the canals around the house should get an rectangular shape again.



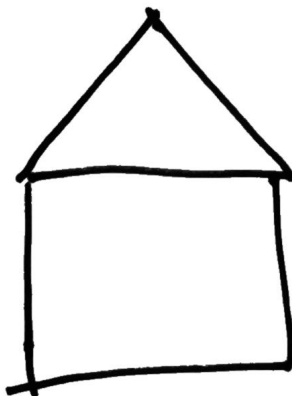
Strategy:



Focus on a specific, important  
timelayer, others removed or  
hidden



Focus on use and users in the  
past



No visible new additions,  
reconstruction of the past

Brickwork walls

Rectangular forecourt





Visible construction traces in the brick walls

Reconstruction of the towers around the house

Reconstruction of the canals around the house in straight lines

Sightlines along the house connected to De Voorst, the forest in front of the house and the garden

## Scenario 2: based on Oud-Amelisweerd

A scenario based on the approach taken in Oud-Amelisweerd would have less impact than the one based on Hofwijck. But it is also more difficult to find out how this scenario would turn out, since the older time layers aren't as visible in 't Velde as in Oud-Amelisweerd. This is because 't Velde changed a lot more than Oud-Amelisweerd, as became clear in the matrices in the previous chapters.

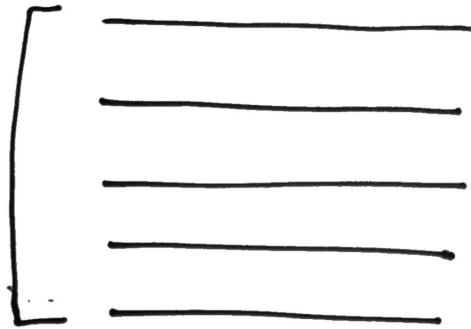
In order to be able to show the older time layers in the interior, a lot of research should be done by color researchers and specialists in historic interiors. Possibly some of these older time layers, including wallpapers and colors could be restored. This could make it possible to open the rooms at the beletage, and maybe also the first floor for visitors as a museum house. The souterrain, first floor and attic could get a new function, possibly an exhibition space or event place.

The annexes could get a new function, for example the carriage house could maybe be used as a restaurant or shop. In order to make this possible, it would be necessary and in line with the approach to bring back some of the larger spaces that were in the building before the changes in 1962. This would make them useful for some other functions, and would make the older time layers visible.

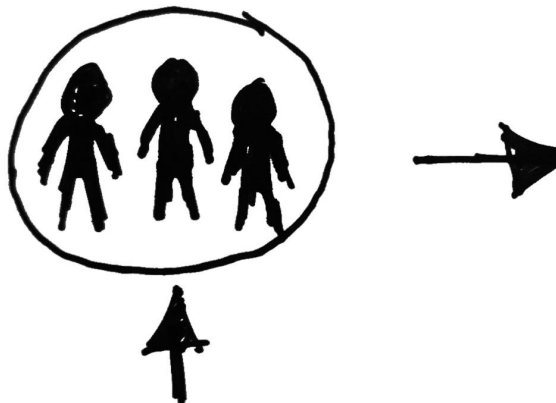
For the garden, this approach would

mean that some conservation work should be done to show the different designs.

Strategy:



Conservation of all timelayers, but focus on restoration of the oldests



Past function and use is shown and a new function is added



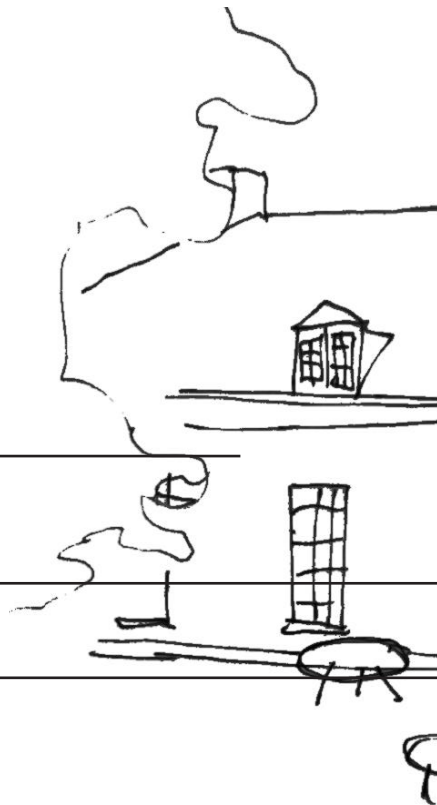
Small new addition in the interior, subordinate to the existing



Restored floorplan in the carriage house, creates larger spaces

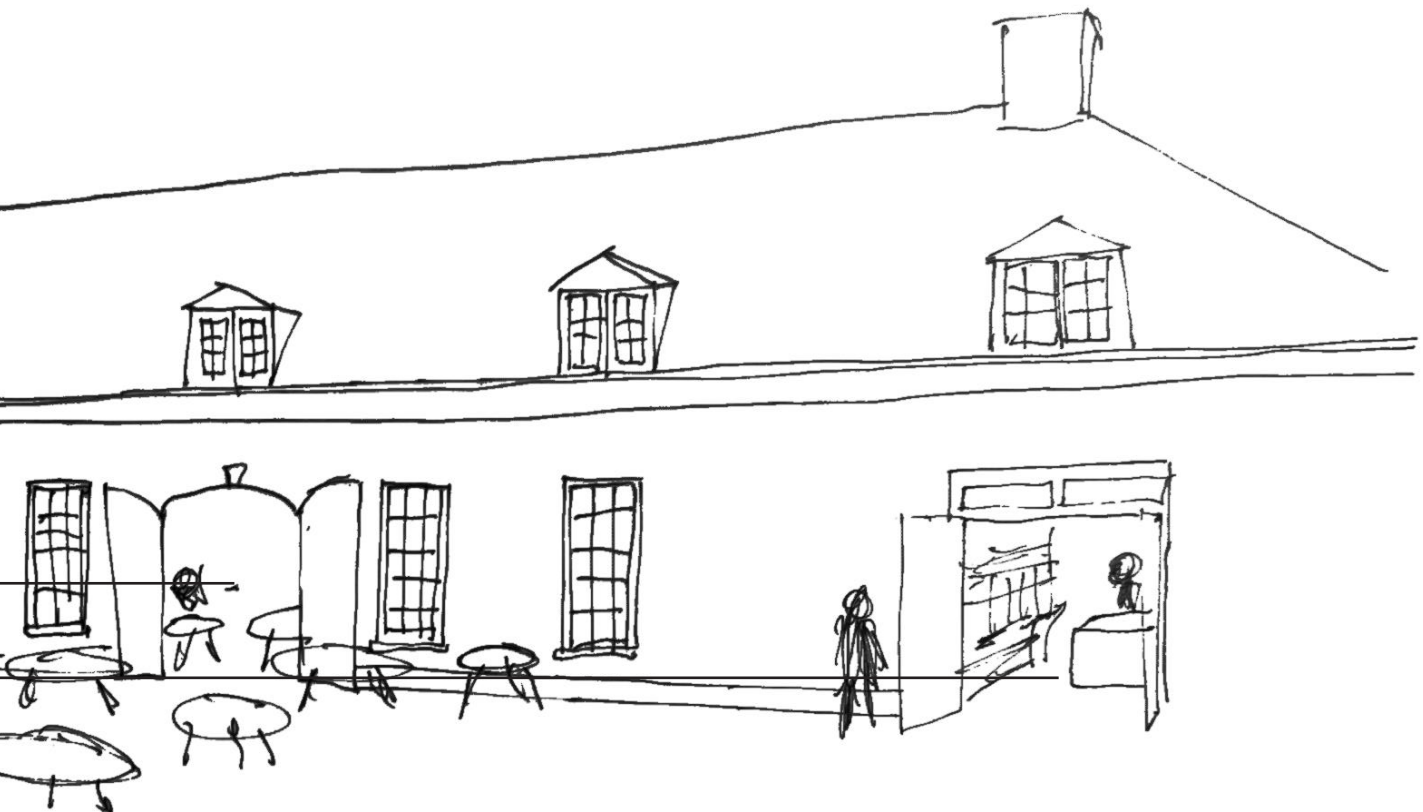
Restaurant with terrace

Shop with locally produced articles



Original colors, based  
on color research

Restored wallpapers



## Scenario 3: based on Duin en Kruidberg

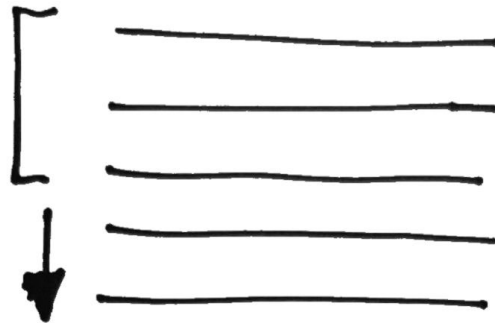
A scenario based on Duin en Kruidberg gives a lot more opportunities for extending the building complex. On the other hand, it's a little less realistic to use the strategy of this building for 't Velde because the house Duin en Kruidberg is a lot newer.

In the house, the existing time layers could be kept, especially the ones that add something to the status or the usability of the building. The building could get a new function as, for example, a hotel with meeting/conference/event rooms on the beletage or the first floor. An extension could be made underneath the forecourt, to create extra conference/meeting rooms. Additionally, another extension could be made in the garden or maybe even underneath the canal around the house. This extension could make it possible to create extra hotelrooms, or add other functions to the hotel such as the spa in Duin en Kruidberg.

The carriage house could be used as a restaurant for the guests of the hotel, or could contain some more hotel rooms.



Strategy:



Existing timelayers are mostly kept, new layers are being added



Continuation of use, and new functions added



Relatively large new additions to the exterior, more or less subordinate to the existing

Existing timelayers in the house are kept

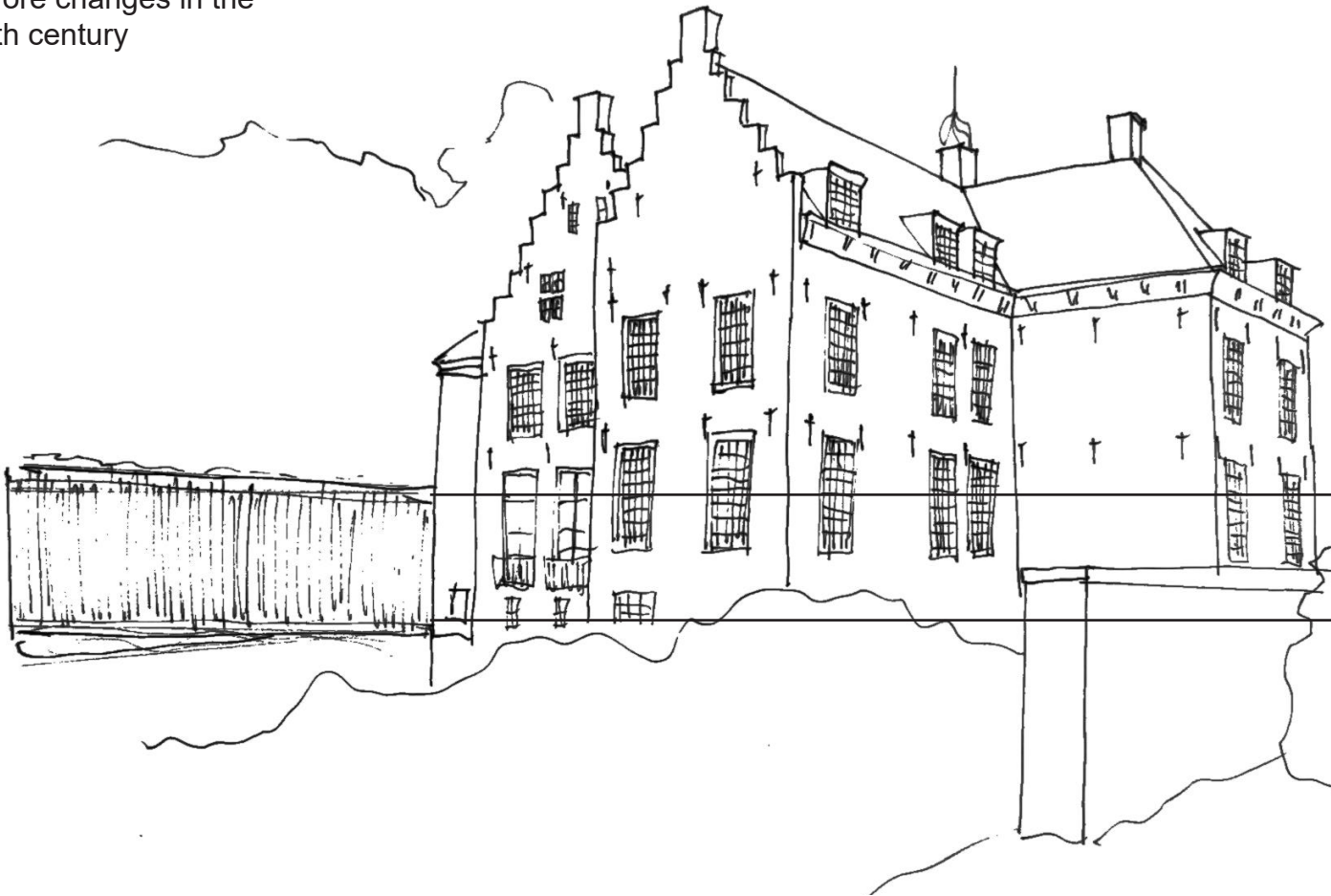
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Extension underneath the forecourt

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Shape of extension based on the original size of the forecourt before changes in the 19th century

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New extension besides the house, subordinate to the existing

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Materialisation of the extension based on it's location in the garden; wooden walls and green roof

## Conclusions

### Huis 't Velde

The first chapter has shown the development of the estate Huis 't Velde in general, and in particular of the manor on this estate. We can conclude several things based on the description and accompanying matrix. In the first place, that the estate has quite a long history and a lot of timelayers. Especially during the 17th century, the house changed a lot. It developed from a small building in quite a large house. In the following centuries, smaller changes took place in among others the interior and garden. In the first half of the 19th century the exterior finishing of the house and the layout of the garden were changed to the prevailing architectural ideas. After 1962, the house was no longer private property, and was restored and changed for the new users.

### Case studies

In the second chapter, three case studies were described. In each case study, a different approach was taken, but also some similarities became clear. For the analysis of the case studies, a matrix was used. These matrices will be discussed in more detail later, including their usability in the wider field of heritage and architecture.

A similarity between all case study's is the fact that the adaptive reuse process wasn't just something that happened on

a single moment or in a single years. It becomes quite clear that in all cases, it was a longer process of changing functions and adapting the building again and again to the need of the users or owners. This will also be the case in Warnsveld, and it's good to keep this in mind while making a design. The design won't be a final solution, but should also be changeable.

Furthermore, it becomes clear that in all cases, there is a strong similarity between the (changes in) function of the buildings and the way in which is dealt with the timelayers. This makes clear that it is of great importance to choose a fitting function for the Huis 't Velde and a function that fits to the timelayers that are present, and which makes is possible to show the story of these timelayers.

The approach taken in the adaptive reuse process in Hofwijck can be summarized on the basis of three main points, that were visualised in chapter 3. There was a strong focus on 1 timelayer, namely the oldest fase, the period that the house was owned by Huygens. The house is currently being used as a museum, as a result of which there is a strong focus on the past users and uses, especially the Huygens family. The house does not have a new function besides it's use as a museum. No new additions have been made to the house; it has been

reconstructed completely.

In Oud-Amelisweerd, conservation was the most important part of the adaptive reuse process, supplemented with restoration. As much as possible, all timelayers were kept. Instead of focussing on one timelayer, the changes are shown. Whereas on the groundfloor the focus is more on the past, the first floor has a new function as a exhibition space for contemporary art. To make this possible, some new addition were done in the interior of the house, such as the wall covering on the first floor.

In Duin en Kruidberg, most of the existing time layers are kept, but quite a lot of new things are added. Something similar can be said about the functions. Although the functions are in line with the original use, a lot of things have been added. Some relatively large new volumes were added, which are subordinate to the main house.

### **Matrices**

The matrices turned out to be a useful way to create an visual overview of the time layers present in Huis 't Velde and the 3 case studies. They could be a good addition to existing tools within the field of Heritage and Architecture. The matrices could be particularly useful for the designers as an translation of building archeaological research, preferably done by an external expert, into a starting point or base for the design process. Additionally, it could be used to evaluate a design, similar to the case studies in this research.

Nevertheless, there are also some points in which the matrix could potentially be improved, based on the first experiences in using them. 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 estate, and therefore for the time layers. But, the matrices didn't provide a logical place to include these owners, although this could be valuable. In this study, this was overcome by including information about the owners in accompanying texts. But it would be good to experiment with including them in the scheme as well.

Furthermore, also the changes in the 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. It might even be possible to make a separate scheme for the park, apart from the one for buildings. This could also be a point for further research.

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 left about it.

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Hofwijk (<https://www.hofwijck.nl/>)

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Gelders Archief

Kaartenkamer TU Delft

RCE Beeldbank

Rijksmuseum

Collectie Duijvestein





