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Heritage & Architecture | Revitalising Heritage: Hembrug

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Introduction

The graduation project and the topic that will be addressed in this reflection derives from the context of the Hembrug terrain, in which the architecture studio 'Revitalising Heritage' is situated.

Hembrug, a former military production site, is one of the largest redevelopments in the metropolitan area of Amsterdam. The terrain is located at the intersection of the North Sea Canal and 'Zijkanaal G' and functioned as the logistic heart of the Stelling van Amsterdam. The former military terrain consists of many buildings, including 50 monuments and historical green structures. After the Ministry of Defence and the factory Eurometaal left the site, the area became desolated and taken over by nature. Currently this area, full of potential, needs a new permanent use.

The goal of this project is to redevelop (an ensemble of) the Hembrug terrain. My chosen ensemble is Campus South, which is located at the south-west of the Hembrug terrain, near the water. Campus South consists of three buildings and the remains of one building. The expedition building, the heat treatment building, the washing hall and a former bicycle shed.

The challenge will be to find a solution that on the one hand preserves the characteristic atmosphere and on the other hand deals with sustainability and creating a well-designed environment for the new use. This led to my heritage position: preserve as much as possible and all interventions should be done with appreciation for the existing/ original. The approach consists of three starting points: demolish only parts of low value when necessary, the added interventions must be removable, and the existing will inspire the new interventions.

This paper reflects on the results of the graduation project so far (p4), on both the research and the design. The project will be discussed in four different scale levels: the studio Heritage & Architecture, the heritage project, the architecture profession and the society.

The studio Heritage & Architecture

During my bachelor study and my master track I always designed starting with a small analysis of the site and formulating a concept which would form the starting points for my design. This differs from the Heritage & Architecture studio, where you start with an elaborated analysis and archival research. The program, the design concept and the elaboration of the design result from the analyses of the original building and its context from the architectural, cultural-historical and technological point of view (De Jonge, n.d.); a context led research (see figure 1). So, the important findings form the starting points for the heritage project. This because the studio contains an important topic, heritage, which needs to be fully researched to understand the situation from which you will design.

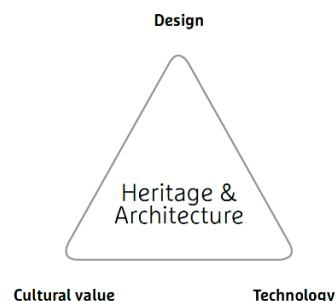


Figure 1: The three elements within the chair of Heritage & Architecture. (Kuipers & de Jonge, 2017).

Designing and dealing with existing buildings in the built environment is something very relevant, both in and outside the chair of Heritage. There are a lot of vacant buildings, including monuments ready to be transformed. The question that always will arise is how to deal with its history, its context and how to find a balance between what to preserve and what to add for the new function. This studio offered me the possibility to learn this.

Value assessment is therefore of importance. A specific tool used in the Heritage & Architecture chair to rank and prioritize values is the cultural value matrix

(see figure 2), in which the values are subdivided into different heritage value typologies. This tool is used to identify the different values, tangible and intangible, and order them. By using this tool during the research I got a better understanding of the ensemble and its values and it became clear that some elements of the ensemble cannot be seen on its own, but are somehow related with each other.

For the architectural point of view an analysis of the spatial idea of the buildings is made. Herefore the architectural elements (like light, shadow, materiality, colour and rhythm), that ensure the spatiality and atmosphere of the buildings are researched and mapped. This knowledge can serve to become aware of the spatial consequences of creating new interventions. For the technological point of view the structures, details, materials, damages and services are researched, to form a basic knowledge about the existing buildings. This knowledge can be used during designing.

BRAND +	RIEGI +	AGE value	HISTORICAL value	INTENTIONAL COMMEMORATIVE value	NON INTENDED COMMEMORATIVE value	USE value	NEWNESS value	(relative) ART value	RARITY value [+]	OTHER relevant values [+]
SURROUNDINGS / SETTING [+]										
SITE										
SKIN (exterior)										
STRUCTURE										
SPACE PLAN										
SURFACES (interior) [+]										
SERVICES										
STUFF										
SPRIT of PLACE [+]										

Figure 2: Cultural value matrix. (Kuipers & de Jonge, 2017).

The heritage project

The restoration design for Campus South will be a public gathering place, in which Campus South is treated as a scenery. A once closed off terrain, will be revitalised in which the new program of cultural initiatives and entertainment strengthen the character of the ensemble, making the area accessible and a place to be for the public.

Campus South will be a place where people can come together and enjoy their time while relieving stress. Which will be created by designing a program of creative initiatives and entertainment, which will exist out of:

- a beer garden with terrace bar
- a film studio
- and an information point to welcome everyone to the Hembrug terrain.

The graduation project started with a group analysis of the Hembrug terrain, mainly focused on Campus South, and the surrounded area. The main research question was: "How did Campus South contribute to the functioning of the weapon factory?"

At first, why is 'Campus South' called 'Campus South'? Palmbout landscape architects made a strategy for the Hembrug site. They divided the terrain in ensembles. Campus South is part of the "Campus" ensemble and they gave it this name because the buildings form a collection with the spatial character of a 'campus' (Palmbout Urban Landscapes, 2011). Presumed they referred to the Latin word which means open field or area, so not to a university campus. However, our area is called 'Campus South', so it is divided into two parts. The Northern part has large buildings surrounded by green and the Southern part has smaller buildings surrounded by green and water. The Southern part also shows the former buildings which are now replaced by green lawns. The whole campus has a strong North-South orientation which makes it

logical to call the Southern part Campus South.

To conclude the main research question: Campus South is part of the Campus but distinguish itself from Campus North with different typologies and an open layout. Campus South contributed to the functioning of the weapon factory by being a connection between the inside and outside of Hembrug for the employees who entered and left the weapon factory and for the goods which entered and left the site via the expedition building.

Later during the research a research question for our own design was formulated. My personal research question is: "How did the pleasant and welcoming character of Campus South came into existence, and how can this character together with cultural initiatives contribute to creating a public gathering place?" My sub-questions were: "How to define a common space?" "What do people prefer for a common space, in order that they actually use it as intended?"

After the research phase, the individual design phase started, and a general design question was formulated. At first I was thinking about how to redesign Campus South so that it serves as a gathering place, with appreciation for the existing qualities. Later in the design I focused more on the restoration of the ensemble, because of my heritage approach in which I change little about the buildings. My design question became: "How far do you want to go with maintaining the existing situation, with restoration (repair) and what do you renew, when simultaneously preserving the characteristic atmosphere and creating a well- designed environment for the new use?" This led to doing more research, about how to deal with restoration. I watched a college about the work of Suzanne Fischer and her approach, did research on cleaning and repair, and searched for reference projects in which decay is central. The feedback from the tutors (architectural, cultural-historical and technological) also helped to closely

pinpoint the approach combined with spatial relations between old and new.

A dilemma encountered during the research was not to find some information, such as floorplans and sections of the original buildings. That's why assumptions sometimes had to be made. For example, about the foundation of the buildings.

Besides, doing research is not only reading books, but also visiting buildings. Buildings can be sensed by actively taking part. During the graduation studio I visited many buildings, to get a grip on aspects like function, materialisation, the contrast between old and new, lighting, acoustics, building technology and climate control. When going to different renovation projects I always had the questions: "what was the redesign strategy? What where the starting points of the architect? Which values are incorporated?" in mind, to get a better understanding of transforming heritage and forming my own heritage approach.

The design shows that Campus South can be transformed into a new function that gives an answer to both of my research and design questions. It gives answer to my research question by creating a lively environment with a beer garden and (film) studio, making the area a place to go for the public. In which the new program strengthens the character of the ensemble. My design question is answered by creating a restoration plan for the existing buildings of the ensemble. Taking the cultural values into account. This topic is related to the discussion about how to deal with preservation. However, there are different opinions about how to approach heritage. Therefore, my solution will be one of them and can give insight. More about this will be discussed in the next chapter.

The architecture profession

Within the architecture profession architects think differently about how to approach heritage. The approach of the graduation project as described on page 2, can serve as an example and will now be reflected.

This project starts with ruins of existing buildings, these buildings are the starting points of the design. The buildings form the basis of the transformation. They are of value, they are part of history, they tell a story and are full of memories.

Nevertheless, we as architects should not be afraid of change, and should not want to preserve everything. In my design I try to find a balance in this. In the movie 'Eat Pray Love' Julia Roberts expressed herself nicely about transformation, which gave me insight.

"THEN I LOOKED AROUND IN THIS PLACE, AT THE CHAOS IT'S ENDURED. THE WAY IT'S BEEN ADAPTED, BURNED, PILLAGED, AND FOUND A WAY TO BUILD ITSELF BACK UP AGAIN. AND I WAS REASSURED. MAYBE MY LIFE HASN'T BEEN SO CHAOTIC, IT'S JUST THE WORLD THAT IS AND THE ONLY REAL TRAP IS GETTING ATTACHED TO ANY OF IT. RUIN IS A GIFT. RUIN IS THE ROAD TO TRANSFORMATION. EVEN IN THIS ETERNAL CITY, AUGUSTEUM SHOWED ME THAT WE MUST ALWAYS BE PREPARED FOR ENDLESS WAVES OF TRANSFORMATION."

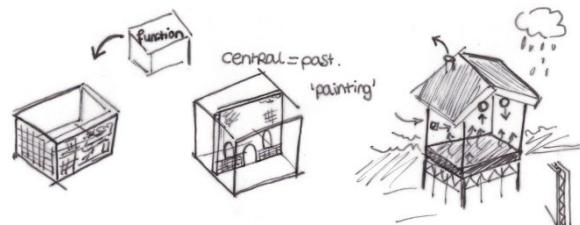
Text about the Augsteum, Rome.
(Gardner & Murphy, 2010).

This means that there is room for change, that we should not hold on too much to what is already there. Which means that you sometimes 'need' to lose elements of the existing buildings. After downfall there is the possibility of growth/ improvement. In this design the ruins are a road to transformation. A restoration plan is created for Campus South, where to preserve, restore and where there is room for renewal.

The buildings are given a new function, taking 'the endless waves of transformation' into account: future functions of the building. The added

interventions are all demountable (see figure 3a).

Central to this is the past, the basis of what is already there and that what is being preserved (see figure 3b). For example the preserved interior walls of the beer garden, these walls tell the story of the origin and the transformations; 'the chaos it's endured'. These walls will be treated as a piece of art. The decay of the buildings furthermore make room for renewal. Apart of the basis of the past, a groundwork is laid for future transformations of the buildings (see figure 3c). This means that the buildings are made as sustainable as possible and to prevent further sinking the ground floors are renewed. To conclude, the existing buildings are preserved and where necessary prepared for the future, within which there is room for future transformations.



a b c
Figure 3a,b,c: Approach. (Own illustration).

Changing the original program from civil production into a restaurant and from a washing hall into a (film) studio, leads to quite a transformation. The main paradox is to preserve the values and characteristic atmosphere of the buildings and the ensemble and at the same time designing a comfortable residential area, thinking of safety, repair and hygiene. The key is finding a balance where to preserve, where to restore and what to renew, in order to make the building liveable and suitable for the new function and at the same time preserve the building with its historical memories as much as possible. Consequently a restoration plan is created (see figure 4).

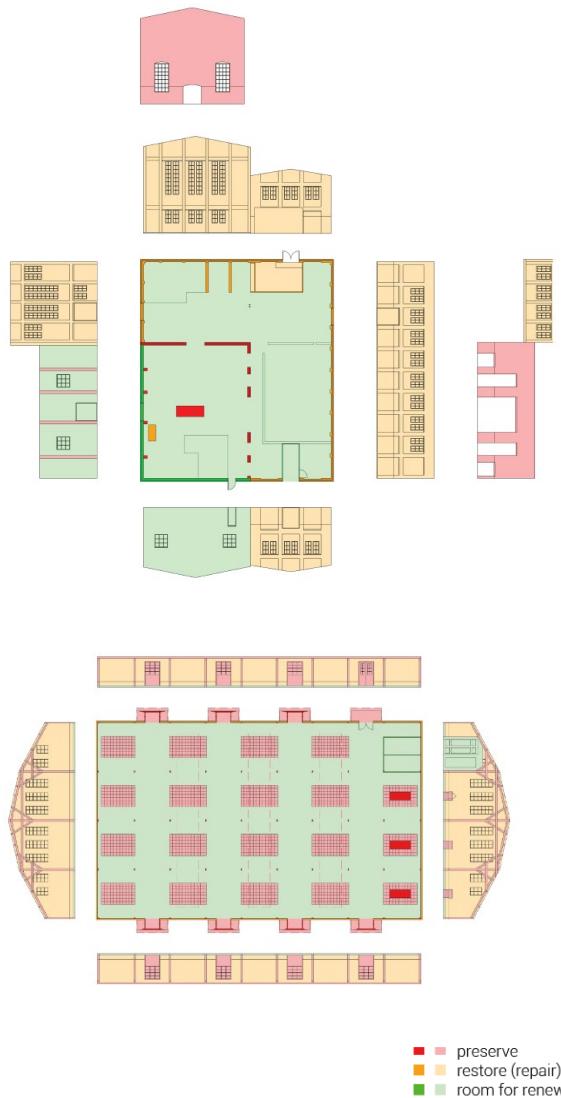


Figure 4: Restoration plan of former heat treatment building (top) and washing hall. (Own illustration).

Coming back on the dilemma between preserving the existing and hygiene; wanting to preserve the interior walls in the current state within a public function may not be the right combination. The question arose whether it was possible to control the behavior of the people a little bit? This for example to make clear that they are not allowed to touch the walls, just like in museums it is clear that you can't touch the art. This turned out to be possible through 'nudging', and will be applied by means of raised floor parts along the interior walls.

Mechanical attachments are chosen, like screws and no use of glue, because of the starting point of creating removable

additions. These additions will be made out of steel and wood, and for the washing hall demountable 'Brakel' wall systems will be used. Steel is as well inspired by the past, because some parts of the heat treatment building, the expedition building and the former bicycle shed are made out of steel. By using wood, different textures and a new colour palette for the additions, the new and the old will be made visible. Which is also inspired by the past in case of the heat treatment building, which is built in three phases that is still visible.

Society

One of the contemporary social issues is increasing social pressure. Too much is expected from people. To succeed in society, everyone must meet the same standards. But, not everyone succeeds, because everyone works differently.

Newspaper articles about burn-outs are passing by more often. Today's society experiences a lot of stress and work pressure, to which social media also contributes. Your life and resume must be perfection. This issue will be addressed in the design.

The once closed of Hembrug terrain is now open to the public. The Campus South ensemble is by that of importance for relaxation for both residents of the area and visitors, and will be a public gathering place. The new functions of the buildings of Campus South should make the Hembrug terrain a lively area and attractive to come visit. To address the social issue a spatial design/experience which provides a moment without stress and pressure is created. Hereby cultural interventions and entertainment work as a connecting factor. Culture unwinds and brings people together.

Sustainability and alternative energy resources are a current topic that is of importance to integrate in architecture. Campus South will therefore be circular in not only materials but in the use of future-proof resources as well, such as hydrogen.

Another dilemma manifests itself in designing a comfortable indoor climate versus preserving the values of the building. The buildings on the Hembrug terrain were originally built from a functional point of view, the buildings are therefore not insulated. For the heat treatment building is therefore chosen to insulate the cavity, which is not very wide. A consequence of this decision is that the floor and roof must be well insulated and that there still is a higher energy burden in order to create a comfortable indoor climate, then when they would be chosen to insulate the building

from the inside and lose the brick and tile patterns.

Furthermore, this project is dealing with the reuse of existing buildings, which is a relevant subject for me as a future architect, because transformation is an important theme in today's architecture. A lot of existing buildings do not meet current requirements or are left vacant. The project is related to the question how an architect should deal with cultural-historical values and the discussion about preservation. A adequate statement of Koolhaas, at the AIA convention in 2016, to this subject is: "A preservation project is an homage to earlier cultures and mentalities to which you can add a new dimension, a new function, a new beauty or appeal" (Budds, 2016). In doing so the architect must think extra carefully what to preserve from, or add to this. Value assessment is therefore very important.

To support this subject, and the personal heritage approach, a restoration plan has been created in which high values are used as starting points. Therefore, this project can provide insight in how to create a restoration plan and how to deal with decay and historical memories.

The contribution of the graduation project is that current topics, as social pressure and sustainability can be well integrated in complex heritage dilemmas.

Only a part of the ensemble is worked out to a certain level, which offers possibilities and starting points for follow up studies. As well as for the sub questions about the public gathering place that have not been fully answered.

Sources

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