REFLECTION

The past year I have delved into field of built heritage in the context of my graduation project at the Vacant Heritage studio. The graduation assignment - a redesign of the police station in Middelburg by J.F. Berghoef and a related research - meant a year of studying heritage values and redesign strategies. Now, at the end of the year, I will reflect on the relevance of my findings and the validity of the methods I used to find them.

RELATION BETWEEN RESEARCH AND DESIGN

At the start of the year, I formulated a research plan which aimed at understanding the view on architecture of Berghoef. By understanding his view, I could understand the value of the police station which would result in design intentions and limitations. I set the scope of the research narrow to allow in depth studying of a specific subject. In short, it was a set-up where the research would inform the design.

A couple weeks prior to the end of the first semester I had a thorough understanding of the work of Berghoef and some first ideas on the redesign of the police station. It was at this moment that, in line with the advice from my tutors Joana & Wido, I started questioning what outcomes of my research would also apply on 'not-Berghoef-buildings'. If my research proofed applicable to more than the buildings of one architect, this would increase the relevance.

In the following weeks I changed the set-up of the research significantly. By formulating an underlying question, I made the research into Berghoef and the redesign of his police station a case study. The police station became an example of 'modest valued' heritage. A type of heritage which is present throughout our country; unlisted buildings which do not seem that special at first but convey some heritage values. In the new set-up, the research no longer only informed the design, the design also informs the research. By studying redesign strategies and experimenting on how to redesign this police station; a combination between research and design answers the question: "How to redesign modest valued twentieth century heritage buildings in a way that does justice to their modest cultural value while still enabling a practical future use?"

Broadening the research meant I had to position myself not only in relation to redesigns of Berghoefs buildings but in relation to a larger and more general heritage assignment. I used my research paper to substantiate my view on this. The paper starts with an overview of the history of heritage management, which shows the trend of a widening scope of heritage and more progressive reuse strategies. As well as the importance of social engagement of the heritage sector. This trend, combined with probably the most comprehensive current day challenge, climate change mitigation, resulted in a vision that heritage must find ways to contribute to a more sustainable society. However, the largest sustainable opportunities lie with repurposing unlisted, modest valued buildings which are perhaps demolished if we can't find appreciation for them. Studying these buildings can reveal their heritage value, increase appreciation and thereby lead to less demolition.

By studying existing heritage strategies and experimenting with how to apply them on modest valued buildings the researched provided several insights: A value assessment can indicate the most valuable attributes of the building. These represent the most essential heritage values of the building and benefit from a more conservative approach. At the same time, less essential attributes can be treated more progressively to enable a new use.

Looking back, I appreciate my initial research set-up for its specificity. It enabled me to thoroughly study Berghoefs work and precisely determine in what attributes of the police station its heritage value lies. Nevertheless, it would have made the relation between research and design linear. The changed set-up allowed for a stronger integration between the research and the design and increased the relevance of the findings. Furthermore, it pushed me to take position in the large field of twentieth century heritage management, instead of in the niche of Berghoef buildings.

RESEARCH METHODS AND RELEVANCE

The first part of my research, the study into Berghoefs views on architecture, required a literature study which I've supplemented with some case studies. The used literature consisted of mostly primary sources. Berghoefs personal archive (Het Nieuwe Instituut, Rotterdam, Berghoef, J.F. (Johannes Fake)) contained much lecture material, letters and articles in which he expresses his thoughts on architecture. Another important source was the dissertation of Jennifer Bosch-Meyer (2016) on the work of Berghoef. I rate both sources as reliable. I studied four buildings as case study, to discover how Berghoefs theoretical views on architecture translate into material. The chosen cases (city hall Hengelo, city hall Aalsmeer, office ANWB The Haque and office health insurance Alkmaar) are comparable in function to the police station. For each I made the same set of analytical drawings, ensuring mutual comparability.

To study different redesign strategies, I used the same four buildings. All of them have been redesigned during their lifespan. Again, I made for each case study a similar set of analytical drawings to show the relation between the existing building and later additions. To compare the different redesign strategies, I placed them on a grid. The grid is based on literature on redesign strategies (Vandenbroucke & Janssen, 2020; Plevoets and Van Cleempoel, 2019; De Jonge 2021). The X-axis positions the resemblance of the redesign with the original building on a scale from copy to contrast. The Y-axis displays the extent of the redesign. The great advantage of this grid was the simplified overview it provided. It is a useful tool to discus and relate different strategies. At the same time, the simplification meant that some of the complexity and nuances in different strategies were unexposed. Only with a closer look I found out that the choice for resemblance or contrast is not just made for the new design as a whole, but may differ between various interventions within one redesign. By applying different tactics for different attributes, the redesign can emphasize the attributes which convey most of the buildings value.

The last step in the research were the design experiments. Designing is an activity which requires constant decision making. Not all these decisions are rationally substantiated as creativity and experience are factors within the design process. It makes designing an implicit activity (Van Dooren, 2014). By selecting the most essential design decisions and writing down my line of thought, I tried to make

explicit what led me to my decisions. Even though designing is a partially subjective process, I aimed for a certain level of objectivity by supporting my design decisions with a traceable logic. I could have further objectified this process, for example by relating it to the five elements of Van Dooren (2014).

The chosen approach of identifying the possible heritage value of a building, identifying the most characteristic attributes, preserving these and allowing significant changes elsewhere is a method which can be applied in other projects as well. It is an approach which treats heritage preservation and meeting new demands as equally important. Therefore I think it is suitable in other situations as long as the building can be considered to have a modest heritage value* and there is a possible new use.

In my graduation project, the most characteristic attributes were identified by studying the reason the building has a heritage value, namely the architect. The architect's vision was studied by a literature research, supplemented with a case study research which aimed to find out how his vision materializes. Due to this focus on materiality the step towards recognizing which material attributes represent the most heritage value was small.

*To distinguish 'modest valued' buildings, I formulated three criteria. Their cultural significance must not be officially recognized, meaning that they are not listed. Second, they convey at least one of the primary heritage values as described by Silva & Roders (2012, p.6) or 'deelwaarden' as defined in 'Richtlijnen bouwhistorisch onderzoek' (Rijksdienst voor Cultureel Erfgoed, 2009). Lastly their cultural significance is not irreplaceable or indispensable, which would make a listing desirable (art. 3.7 lid 1 Erfgoedwet 2021).

RELATION BETWEEN TOPIC, STUDIO AND MASTER PROGRAM
Twentieth century heritage buildings pose many questions to professionals in the building practice regarding the conservation of twentieth century building materials and techniques. Since the increased appreciation of young heritage started, much research has been done in this field. At this moment the National Office for Cultural Heritage (Rijksdienst voor Cultureel Erfgoed) together with museums, universities and research institutes has set up a program to further increase knowledge on twentieth century heritage and conservation. The 'Moderne bouwmaterialen en hun toepassing 1940-1990' (Modern building materials and their application 1940-1990) program focusses on history, application and properties of materials and their cultural/historical significance. (Rijksdienst voor Cultureel Erfgoed, 2021a).

Knowledge gained in the Touch & Feel research line contributes mainly to this last aspect of the RCE program, by studying material aspects of a selection of police stations built in the twentieth century. By focussing on the materiality of buildings and the essential values these material attributes represent, possibilities for adaptive reuse can be identified.
The Touch & Feel research line is part of the Vacant Heritage studio at the TU Delft which studies the role of vacant heritage for a more sustainable future.

In my graduation project I focussed on the material attributes of 'modest valued' heritage. I advocated that thorough studying of our existing building stock can increase the appreciation of these modestly valued buildings. Redesigning them leads to preservation of heritage value and prevents demolition. By handling this broad understanding of the term 'built heritage' I aim to apply sustainable heritage redesign strategies on buildings which traditionally are not considered heritage. Thereby aiming to utilize the sustainable potential of our existing building stock.

RELATIONSHIP BETWEEN THE GRADUATION PROJECT AND THE WIDER SOCIAL, PROFESSIONAL AND SCIENTIFIC FRAMEWORK
The police station in Middelburg will become vacant in the near future. The graduation project, a redesign of the station, therefore contributes to a topical heritage assignment. It should be carefully approached as the building is part of a protected city scape. Since the police is a governmental organization, it is aware of its exemplary role regarding sustainability and socially responsible real estate management. Therefore, even though the police divests the building, it is committed to enable reuse instead of demolition.

Furthermore, the research contributes to a further understanding of the oeuvre of Berghoef and his ideas, which influenced Dutch architecture especially seen his function as professor at the Technical University in Delft. The research summarizes Berghoefs views on architecture in five themes and explains how these themes are translated into material. As many buildings of his hand will soon reach the end of their lifespan, this information can be used to identify the heritage value of these buildings and their most valuable attributes.

ETHICAL ISSUES AND DILEMMAS
The aim of my research and design was to find ways to redesign 'modest valued' twentieth century heritage buildings. It resulted in a plea to study our existing building stock as this creates an increased appreciation of the existing. This increased appreciation should lead to less demolition which is beneficial for mitigating climate change. Additionally, I concluded that by studying the existing buildings, the attributes or characteristics in which its value is most present can be identified and preserved. Whereas less valued attributes should not be spared in favor of necessary changes which accommodate new use.

It is an approach which strongly relies on inspiration from the past. This entails the risk of counteracting innovation. As society constantly changes, our needs and demands from buildings also change. An approach which focusses on preserving past values is less likely to completely serve new demands. Even if the designer is aware of this risk, the limitations given by a 'tabula scripta' make it more difficult to tailor a building to the needs of its user.

The lower heritage value of modest valued buildings enables the mitigation of this issue.
As its cultural significance is modest, a progressive approach can be undertaken without the loss of a lot of cultural value. Thus, it can combine heritage preservation with meeting new demands. Nevertheless, it must be stressed that the designer should not shy from necessary interventions. In the end the buildings usability determines its lifespan.

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