Adaptation and Cultural Values

The relation between the way buildings change over time and cultural values associated to those buildings.

Research Plan - AR3A010
Graduation studio - New Heritage
TU Delft - Faculty of Architecture and the Built environment

18-12-2020

Marije de Ruijter - 4595394

Tutors - Lidwine Spoormans & Nicholas Clarke

1 Introduction

In the Netherlands there is currently a need for more housing, with a national shortage of about 300.000 dwellings (gebiedsontwikkeling.nu, 2020). This is not the first time that such a shortage is present in the Netherlands, as following the second world war there was a housing shortage as well. In an effort to reduce that shortage, expansion projects such as the Bijlmer were designed and built (BijlmerMuseum, 2014). As a result, currently about 30 percent of the housing market consists of housing built between 1965 and 1985 (CBS, 2020).

The initial expansion project in the Bijlmer consisted of high-rise apartment buildings with a lot of green space in between. Soon after completion problems arose in the newly created neighbourhood, such as a high amount of crime, and the project was deemed a failure (Verlaan, 2013). As a reaction to these buildings mid- and low-rise projects such as Hoptille were created in the Bijlmer. Hoptille consists of one mid-rise apartment building and multiple low-rise family houses. However, this project also had to deal with problems soon after completion (Bijlmer Museum, 2017).

Part of the problems are attributed to the types of inhabitants living in the building, which included students, formerly imprisoned criminals, and former psychiatric patients. Furthermore, the design of the building facilitated crime, for instance the corridor running through the entire building. This resulted in the building being renovated within a few years of completion. The layout of the building was changed, dividing the corridor and integrating the space into the houses (BijlmerMuseum, 2017). In 1994 the building was renovated again, during which the access to some houses was changed again.

These renovations have reduced some problems greatly, such as the amount of crime. However, issues, such as multiple technical problems, are still present. During an interview, two girls who live in the building stated, "The neighbourhood used to be a lot worse, it has improved because of renovations, but it could improve further." (Two female inhabitants of Hoptille, personal communication, October 6, 2020).

At the moment, the building is considered for demolishment, because of the present problems. However, by doing demolishing the building values, such as historical value, that are possibly associated to the building will be lost. Furthermore, demolishment will result in the embodied energy of the building being lost (Pereira Roders, 2007). Adapting the building instead of demolishing it could solve the present problems while preserving its value.

Problem Statement 2

As mentioned in the introduction Hoptille, and post war housing in general, could be adapted in order to improve and add to the current housing stock. This is especially needed, because of the current housing shortage and the Dutch government's ambition to build a million more homes by 2030 (Ministerie van Binnenlandse Zaken en Koninkrijksrelaties, 2020).

As any other form of architecture, the way housing is designed changes constantly. Therefore, the housing designed in the 80's reflects other design principles than housing that is built at the moment, this might result in a mismatch between the building and the users' wishes.

As a result, buildings undergo changes during their lifespan, as people make changes to the buildings to better suit their wishes (Brand, 1997a). These changes can be necessary, as the designed buildings don't always match with the functions that are needed or wanted by potential users (Gans, 1968). This was and still is the case with Hoptille, which is apparent in the problems the users experience in the building (Two women working with inhabitants of Hoptille, personal communication, October 6, 2020). According to Brand (1997b), the buildings that last the longest are buildings that are able to adapt to the user's needs over time, buildings that learn.

- How much does the building's design align with the current users' needs?
- How can the building be adapted to bring the design and desired function closer together?
- How to allow for a building to adapt in the future?

Just as buildings change over time, cultural values also change over time. At one point in time people prioritize different values, than at another. Currently, the priority is focused on economic and political values, while other present values are overlooked (Pereira Roders, 2007). In the future these priorities will shift again. According to Pereira Roders (2007) a shift towards ecological values is needed to be able to create more sustainable buildings, as this is not the priority now. Furthermore, the values associated to a building change depending on the stakeholders' perspectives, as a user values a building differently than an academic (Meurs, 2016).

The way heritage is approached is based on the prevalent cultural values, and changes if the priority shifts from one value to another. For instance, the same strategy used to be applied to each heritage project, while at the moment the most appropriate strategy is chosen based on the individual project (Meurs, 2016). In the future, the approach towards with heritage will continue to change. Moreover, buildings that are not considered to be heritage at the moment, such as Hoptille, might be considered to be so in the future (Pereira Roders, 2007). It is important to keep both the changing priorities as well as all the values associated to the building in mind, in order to not 'destroy' heritage.

- Which values are associated to the building at the moment?
- Which values could be associated to the building in the future?
- How to redesign a building while preserving or emphasizing the values associated to the building?

This project will focus on Hoptille, which, based on the initial research into the H-buurt in Amsterdam, seems to deal with big challenges. These challenges include technical challenges such as poor maintenance as well as social challenges such as crime and a lack of social interaction. The aim of the project is to redesign the mid-rise building in Hoptille, adding to and improving the current housing stock in a sustainable way.

In this redesign the two topics, change through time and cultural values, will be combined and applied to the building. In order to create a more adaptable building, which will allow for users to change the building to their wishes, as well as preserving the current values.

This project relates to the way people use buildings changes over time and the values people relate to buildings. At the moment there is already literature about these two topics seperately. For the first topic this includes 'How buildings learn' by S. Brand and 'People and Plans' by H.J. Gans. The second topic is discussed in 'Re-Architecture' by A.R. Pereira Roders and 'Heritage-based design' by P. Meurs.

3.1 Change over Time

Brand has written and spoken about the life of buildings and how they change over time. He states that buildings are often not designed with the needs of the users in mind, but in order to create a statement, as an unchanging "lasting monument" (Brand, 1997b). Therefore, the architects focus on the image of the building, which becomes "detached from reality" (Brand, 1997a). As a result, the 'reality' becomes forgotten, the architects don't pay enough attention to aspects as the function, comfort, and maintenance of the building. In Brand's opinion, architects should start by looking at the use and how the building can develop after completion.

After completion, the user will shape the buildings to best suit their needs and wishes (Brand, 1997a). However, the adapted state is not the end state, as buildings are continually changing. Some parts of the building change faster than others. Brand mentions six layers: site, structure, skin, services, space plan, and stuff. The last layers generally change faster, offering newness to the building. The first layers are generally more constant, offering stability (Brand, 1997b).

Brand concludes by stating that some buildings improve over time, while others don't. Buildings last by being loved and being adapted and refined and in turn "Age and adaptivity is what make a building come to be loved. The building learns from its occupants and they learn from it" (Brand, 1997b).

In 'The Potential Environment and the Effective Environment' Gans (1968) starts with describing that not all problems can be directly fixed by a change in the urban structure. Planners focus on the aspects they can manipulate, even though these aspects regularly can't impact the social problems. He continues by writing about the mismatch between the values of the designer and the values of the potential users. If this mismatch is too big, the plan will not be used in the way it was intended. Instead, it could be disregarded or altered by the users.

According to Gans designers should question what aspects impact the users and in what way and how the design can improve the lives of the users. "The facilities planned must be better in terms of the frames of both the planner and the users." (Gans, 1968, p.8)

He introduces the effective environment in contrast with the potential environment. The potential environment is how a project is designed. The effective environment refers to the eventual use of the environment. Therefore, the effective environment acts as a step between the physical environment and human behaviour.

3.2 Cultural Values

Pereira Roders focuses on the importance of taking ecological values in account. At the moment, resources are wasted by continuing to build new buildings, even though a lot of unoccupied buildings are available. Many of these unoccupied buildings contain resources that could be reused. However, these buildings are mainly demolished without reusing anything. "Problem is that often the arguments behind such massive demolitions are not at all sustained by lifespan consciousness (ecological values). They are said to be sustained by social values, but in reality they are either sustained in profit (economic values) or power (political values)" (Pereira Roders, 2007, p. 192).

She continues by stating that it is not possible to know which buildings will be valued in the future, as some buildings seen as valuable today weren't always considered valuable, for instance gothic buildings. This is because the values deemed important by society change over time. At the moment, society mainly focuses on economic and political values. A change of perception is needed, as well as more focus on ecological values, for the preservation of buildings.

> *"Otherwise, future generations will inherit an even more problematic environment and look back to the present generation with no less regret than how the current generation looks now back to the previous generations who allowed industry and development to deploy most natural environments of the world" (Pereira Roders, 2007, p. 192).*

Meurs (2016) sees value as the starting point for a design. The values that people emphasize change over time, and with that the way designers handle heritage. In the twentieth century interventions were generally designed to look modern and separate from the original. However, now a lot of possibilities are accepted and there is no standard intervention. Instead, each building is analysed to decide which approach fits the building the best.

One of the reasons why there are more possibilities when designing with heritage is the increased amount of heritage buildings. The monument list expands continuously, while monuments are rarely removed from the list. This also raises the question of what is heritage and how it differs from other buildings.

Meurs (2016) discusses three pairs of values, which can be used to analyse heritage (figure 2). First, he mentions age and design value. The best intervention for age value is to keep the building as close to the original as possible. But the value could also be in the concept, instead of the material, in which case bigger interventions could be possible. Secondly, he mentions expert and community value. Experts and community have different perspectives towards heritage, it is possible that these don't overlap or even contradict each other. Lastly, he mentions object and context value. Object value focusses on the building itself, while context focusses on a larger whole. If a building doesn't have object value, demolishing the building could still seriously impact context value.

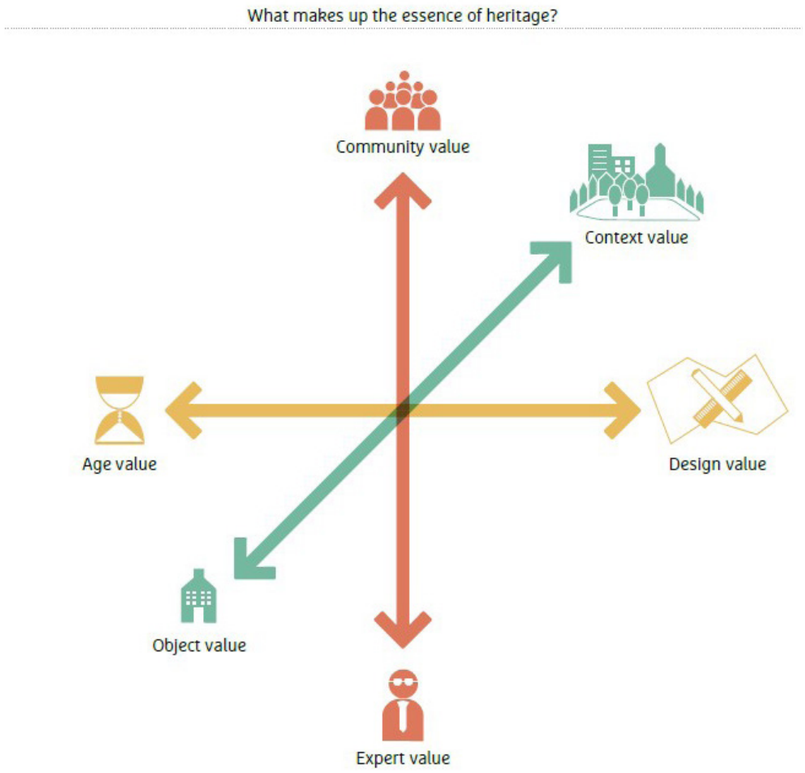

Figure 2: The dimensions of cultural value (From "Heritage-based Design,"by P. Meurs, 2016, p. 34)

3.3 Research

As mentioned on these two separate topics, of change through time and cultural values, research is already available. However, the combination of these topics has not been researched, even though they are relevant to each other, as the values impact the way buildings change and vice versa.

This project combines the two topics, investigating how these topics interact. During the project, the values that are assigned to the buildings are investigated as well as the changes made to the building. Furthermore, the values the makers and the users attribute to the building will be researched and compared, to better understand the differences and how to bring them closer.

The research will be applied to Hoptille in order to create a design where the mismatch between the design and the users' needs is minimal. This research can then be applied to other projects of 80's housing as well, as the research into the values and how to adapt these dwellings is still limited.

The research consists of various phases. The first quarter of the year is solely based on collective research. The second quarter the research is partly collective, but this collective research is more tailored to the personal design interests. In the second half of the year the research will be individual to best support the individual design process.

Because of this structure the research will transition from collective and general to individual and more specific to certain design topics, as shown in the image below (figure 3). Simultaneously the collective research acts as a base for the personal research and design process (figure 4).

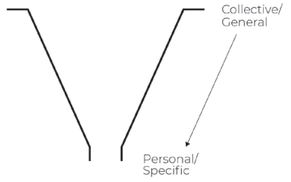

Figure 3: Transition from collective to individual research (own product).

Figure 4: Research as base for the design process (own product).

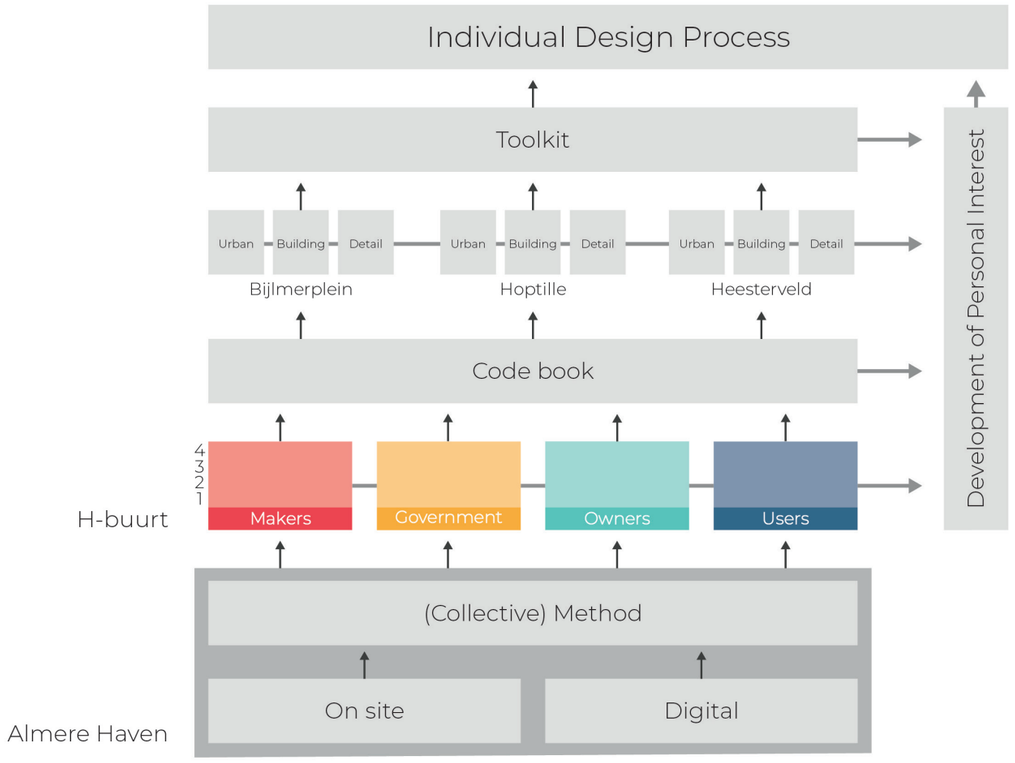

Figure 5: Research structure for the collective research (own product).

The first quarter of the projects consists solely of collective research, gathering information about the design location, the H-buurt. In specific the goal is to gain an understanding of the values that certain stakeholders attach to the neighbourhood as well as to which attributes in specific.

First a pilot research was done in Almere in order to learn which methods work best for which goals. For this pilot, the collective research was split into two groups, 'On site' and 'Digital'.

After the collective method was determined and the research moved to the H-buurt the group split into four subgroups, each focusing on a different stakeholder. Each group followed the same structure in four steps: first gathering general information, then gathering more in-depth information, all this information is then interpreted and compared, to then process the data. An overview of the collective research structure is shown on the previous page (figure 5).

The second quarter of the year still consists partly of collective research. First, in groups concepts and tools were designed and discussed with other groups. Each group focussed on a specific theme. As a result, multiple perspectives in regard to heritage were explored and tested. This choice of themes allowed for the individuals to tailor the collective research to the personal interests.

Building from the collective concepts each individual can further develop their own ideas with regard to the project and decide which approach suits the project the best. At the end of the quarter each individual will choose one or more design concepts to develop further in the second half year.

The research of this quarter will build upon the research from the first quarter. Personally, the individual research will most align with the users' and makers' perspectives researched in the first quarter. As the personal research ambitions include the difference between the design and the way the buildings and space are used.

The last phase, the third and fourth quarter of the year, will focus solely on individual research related to the individual design processes.

Even during the design phase, research is necessary. The design will be tested and reflected on based on the research done during the previous quarters as well as any additional research done during the design phase. This phase will be tailored directly to the personal interests. The figure 6 shows the relation between the research and the design process.

The last phase will start with more research done into topics of personal interest, being the way buildings change and cultural values. This research will include ethnographical research and literature reviews. This research will then be used to reflect upon the concept design, which will start the next designing phase. Creating an iterative process of research, design and reflection (figure 6).

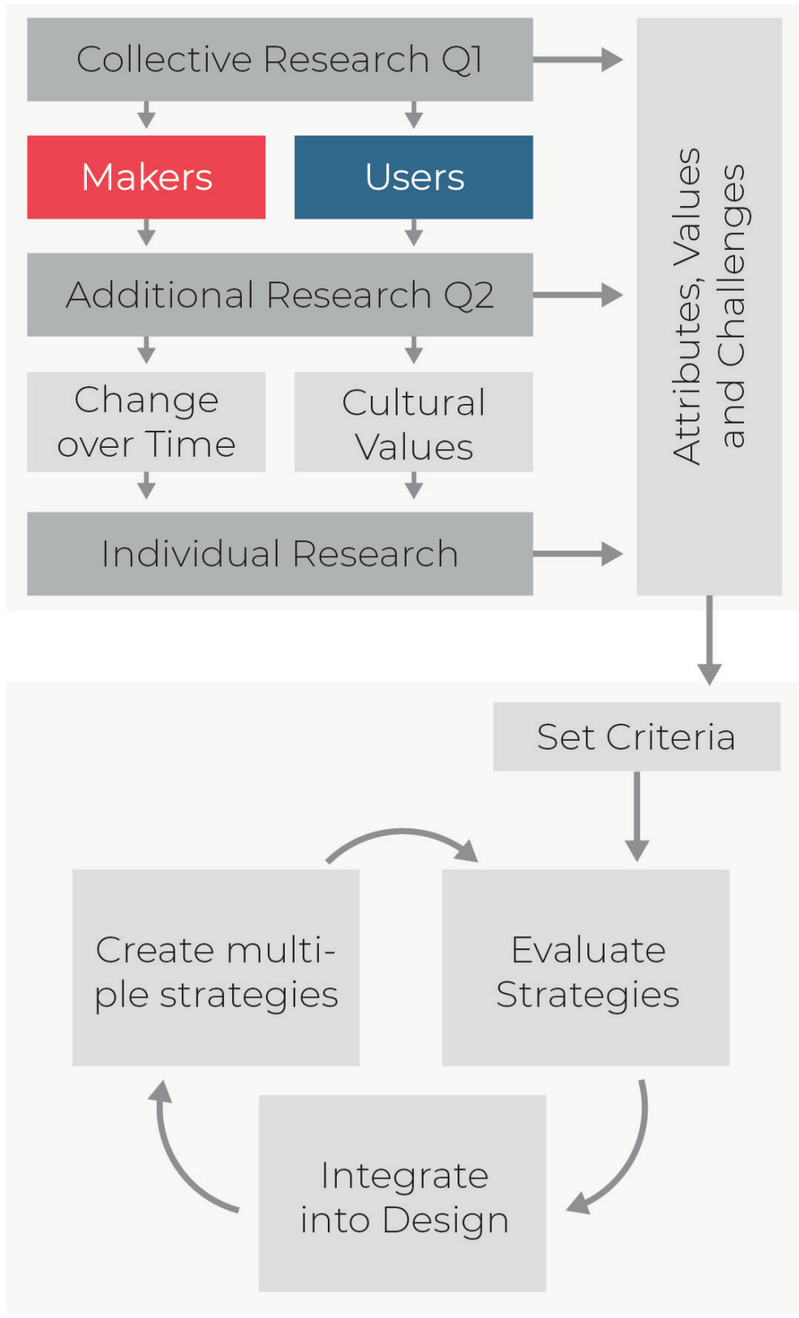

Figure 6: Research structure (own product).

5 Methodology

5.1 Collective Research

5.1.1 Almere-Haven

The pilot research in Almere Haven is used as an experiment, before diving into the research in the H-buurt. The research method tested in Almere created a frame of reference for H-buurt. For H-buurt, there will be more time and multiple stakeholders. This will influence the methods used.

For the media research, data was collected from Facebook, Instagram, Flickr, and books. This data was interpreted by extracting values and attributes. This was used to create visualizations like hotspot maps, mind maps and a Sankey diagram.

Especially the social media sources and the corresponding maps were quite useful, as they provide quantitative as well as qualitative information.

During street interviews for the on-site research, 4 techniques were used, which were later ranked according to usefulness for the research in H-buurt

1. Questionnaire: a set of questions guide the conversation, making the gathered information comparable.
2. Pictures: opinions about a set of photos were asked, enabling the gathering of information about multiple subjects.
3. Drawings: the interviewees drew and explained what they value the most in the area.
4. Open conversation: letting interviewees lead the conversation resulting in much but regularly irrelevant information.

By colour-coding the gathered data, values and attributes were extracted, similar as to the media research (figure 7).

5.1.2 H-buurt

The methods were then used for research in the H-buurt. The group divided into four subgroups, to each research the perspective of a stakeholder according the stakeholders defined by Howard (2003). The division was as followed: Users (Insiders/Outsiders), Owners, Academics/Makers, and Government. In this research plan, the users', and makers and academics' perspectives are most relevant to the individual project and are therefore highlighted.

The methods used by the groups differed slightly, focusing on different sources, in order to best research each perspective. However, to gain comparable results all groups used photo-elicitation (Harper, 2002), for which seven photos were selected and shown to all interviewees.

Three Guys (< 20 years)
Location: Bivak, near the high school

These three guys are high school students in Almere Haven. One of the guys lives in Almere Haven, and the other two guys live in another part of Almere. They feel that the **shops, corrosia building and the port are representative for Almere Haven**. Although, one guy who lives in the Almere Haven mentioned that he noticed **the empty shops are more common these days**. He and his friends didn't deny that they often go to Almere Center as more branded shops are available there. They also feel that the buildings in **Almere Haven are old fashioned except for Corrosia**. They explained that the **old buildings should be renovated** like the **building across the old police station** – which they described as **colourful and modern**. They feel comfortable and safe walking around Almere Haven except in the area where the **"Coffee Shop"** is located which they explained don't feel comfortable walking around that area.

Figure 7: Colour coding of the gathered data (own product).

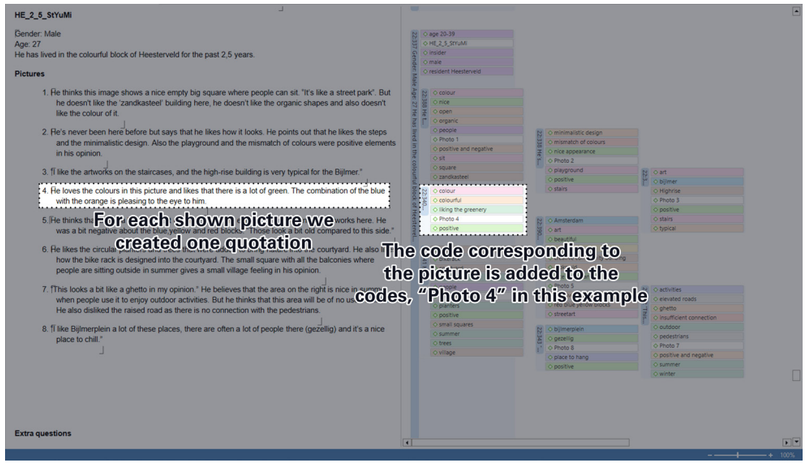

Figure 8: Using Atlas.it to code the gathered information (own product, adapted from Atlas.it).

The method for processing data was also equal for all groups. The program Atlas.it was used to 'code' the data, adding keywords to the interviewee's quotes (figure 8). An inductive strategy was used, the codes are not chosen beforehand but after the coding process. This ensures that the codes reflect the issues of importance from the interviewees, not the preconceived notions of the researchers (Hennink, Hutter, & Bailey, 2020a).

Makers and academics

Makers are the original architects, urban planners, and re-designers. Academics involved specialists from architectural heritage, urban and housing fields.

The interviewed makers and academics had a negative general opinion about Hoptille and the other researched neighbourhoods. They think the three researched areas, Bijlmerplein, Hoptille and Heesterveld, were too small to have an impact on the bigger problem of the Bijlmermeer. As a result, these areas are overshadowed and pulled down facing similar problems. These problems include poor building quality, poor public space quality and a lack of ground floor connection.

For Hoptille in particular the makers and academics were negative about the original design including the interior corridor, which aimed to enhance social interaction, but resulted in creating more problems. Other problems include the mono-functionality of the area and a lack of ownership. They were more positive about the low-rise single-family houses, as they included community participation, resulting in more desirable housing with less problems.

Users (Insiders/Outsiders)

The users group focused on the perspective of the people who live or work in the H-buurt or visit the H-buurt for a different reason. Since a large number of people were interviewed for this research some of the data contradicted each other, as the opinions of separate interviewees could differ quite a lot. In order to create a clear overview of the data, the opinions were sorted into two matrices, one containing positive and the other negative opinions. For each aspect information like the number of times mentioned and a relevant quote was added, as seen in figure 9.

Overall, the interviewees mentioned aesthetical and social values the most. Political and historical values on the other hand weren't really mentioned. This could have been the result of the research method, as the interviews were kept as open as possible. An overview of the most mentioned values and attributes was created, as seen in figure 10.

Themes

The interpretation of all data led to a list of 17 themes, for each of which the opinions of the stakeholders were discussed and compared. The most relevant themes for this research are shown in figure 11. Green is used to indicate a low value, or dissatisfaction, while red is used to indicate a high value, or appreciation.

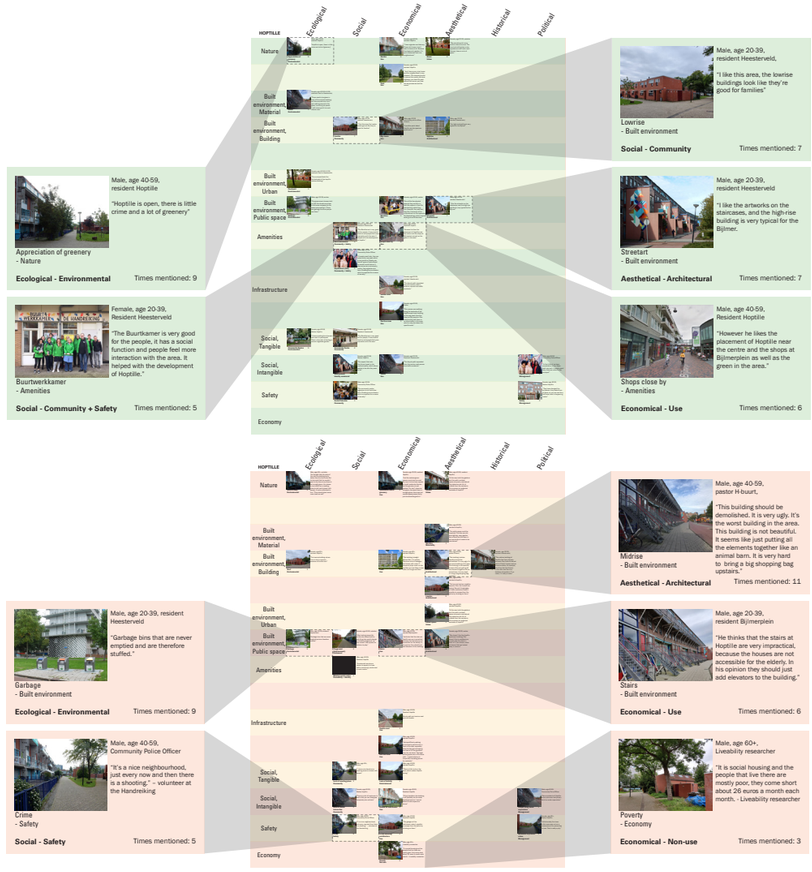

Figure 9: Values from users' perspective for Hoptille (own product)

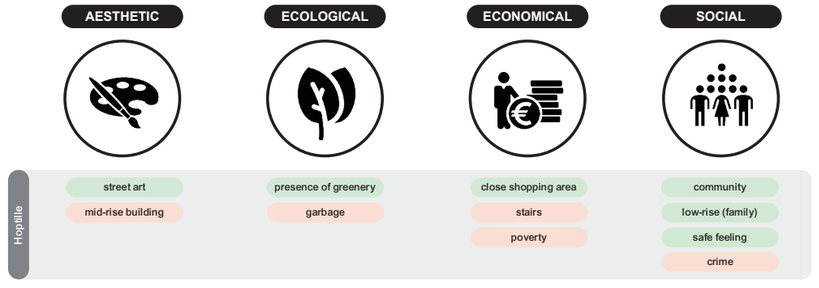

Figure 10: Overview most mentioned values from users' perspective for Hoptille (own product)

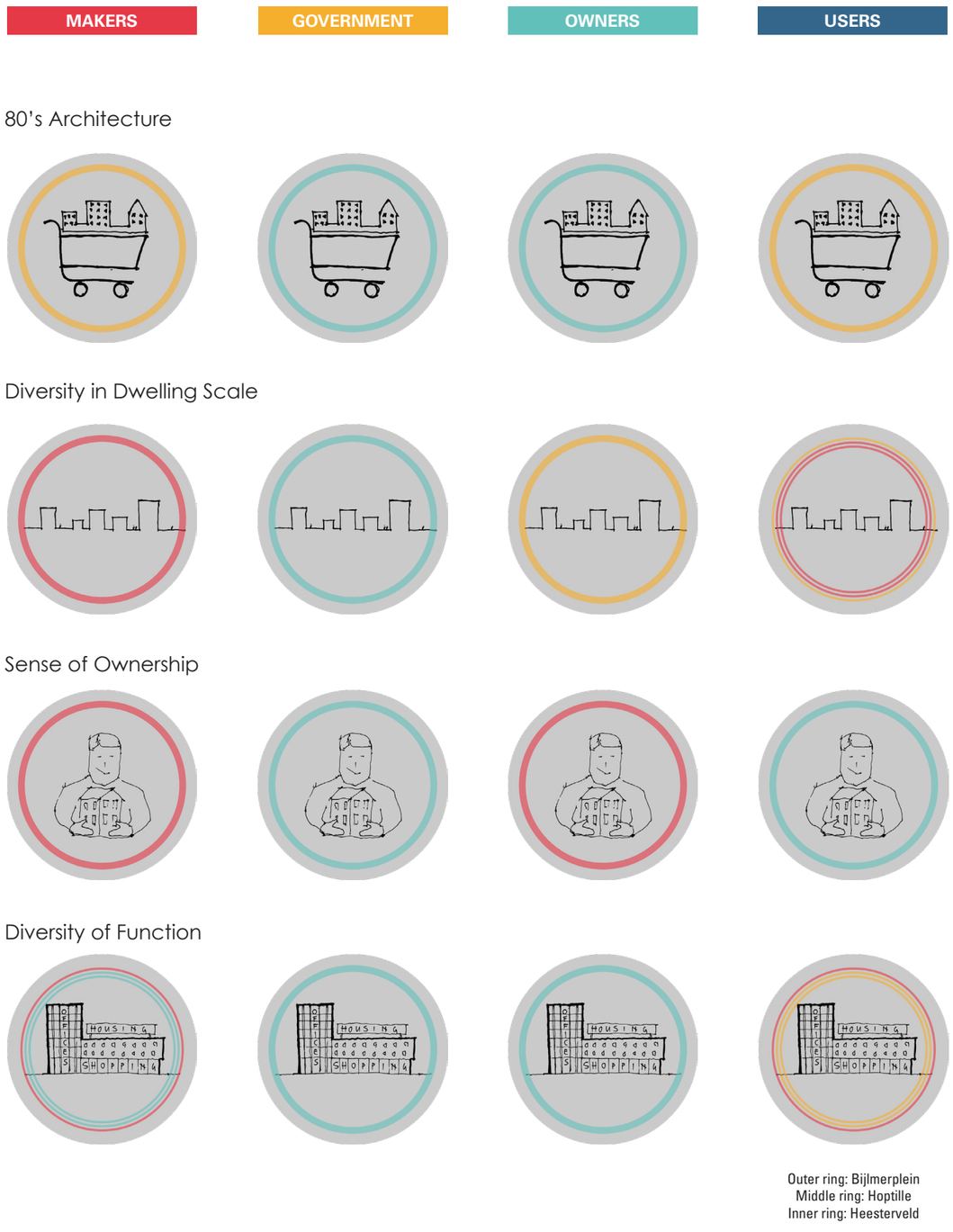

Figure 11: Overview themes (own product)

5.2 Individual Research

After the collective research into the complete H-buurt the focus shifts towards more individual research. While the collective research was broader this research focusses on the two main topics of the project, change over time and cultural values. Building on the collective research, the users' and makers' perspectives, in particular the differences between those, will be researched further. Furthermore, the difference between the way the buildings were designed to be used and the actual use of the building at the moment will be researched. The figure below(figure 12) shows an overview of the methods which will be used for the individual research.

To get a better understanding of the makers' perspective literature about design principles that the architects applied to the buildings will be looked into. Literature research can be a valuable source of information, because of the availability of a wide range of sources (Lucas, 2016). During the project multiple sources will be researched, including sources from the period the buildings were built.

Furthermore, the buildings themselves will be analysed as well as the different stages the buildings went through, to understand the way the building has already changed. This in combination with the literature will offer insight into why the buildings were designed the way they were and how this relates to the needs of the current users. The building analysis can be split into three processes. First an informative, then deductive, and lastly an abstracting stage (Meyer, 2002). During the first phase the goal is to create objective visualizations of the development of the object. The second phase focuses on interpreting how this object came to be this way. The final phase consists of prioritizing aspects, establishing themes, and creating diagrams.

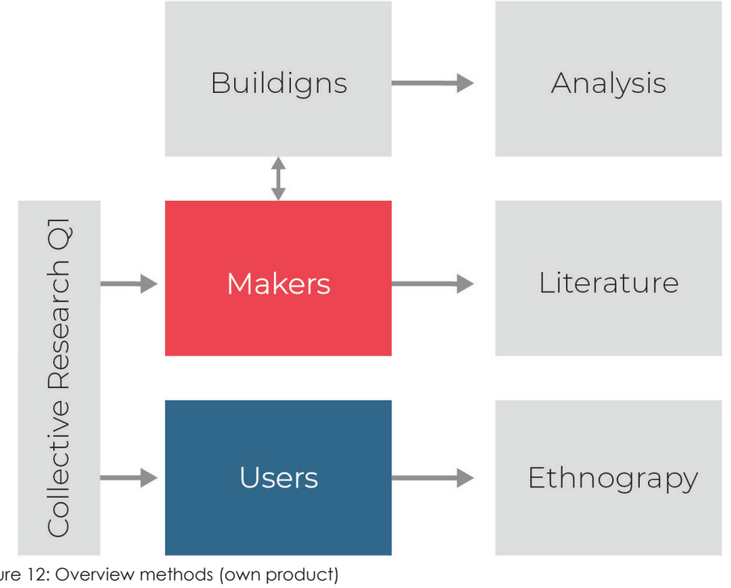

Figure 12: Overview methods (own product)

To gain more knowledge about the users' perspective, the values they associate to the building and the way they use the building, ethnographical research will be done. For this research, the REAP methodology will be used. This methodology works with a relatively short time frame, which is optimal for design projects (Low, 2002). Using the REAP methodology, a few methods are selected, in order to gather data from diverse sources. Some of these methods have been used during the collective research, such as transect walk, individual interviews, and expert interviews, which will be used as a base.

During the individual research, the aim is to hold a few more in-depth interviews with residents of Hoptille. In particular about the mid-rise building, the building's interior, and the way the residents use the building. The interviews from the first quarter focused mainly on the urban scale and less on specific values indoors. Therefore, further interviews could add to the data that was gathered collectively.

Simultaneous to the interviews, the method of mapping, both behavioural and physical traces mapping, will be used to research the use of the building. Behavioural mapping consists of recording the actions of people using a certain area. Physical traces mapping refers to recording traces of activity, such as litter or erosion (Low, 2002).
However, because of current circumstances regarding the covid pandemic, it is unsure whether this ethnographical research is possible and helpful. As it is likely that people won't be willing to meet, and people will use the environment differently than before and probably after the pandemic. If these research methods proof to be irrelevant, the focus will shift towards case-studies of similar projects.

When using ethnography as a research method, ethical issues arise. Especially in the case of interviews, where the interviewees give direct information about their opinions as well as general information about themselves. The ethical issues relate to confidentiality and anonymity (Hennink, Hutter, & Bailey, 2020b). The interviewer needs permission to use this data, and has to inform the interviewee what the data will be used for, as well as ensure that the data remains anonymous during and after the project.

5.3 Research by design

During the design process, research by design will be conducted. Multiple methods of research by design can be used, the methods differ based on variables in the design and research, for instance the chosen way of testing the designs (van der Voordt & de Jong, 2002). During this project, a combination of prototype design and scenario design will be used.

Prototype design consists of an iterative process of designing, testing, and re-designing. During each round of testing the design is evaluated, so that during the next round of designing the design can be altered and improved.

Scenario design refers to creating multiple designs for one project simultaneously. The consequences of each design are then evaluated and compared to each other. By doing so the design that suits the project requirements best can be chosen and developed further.

These two methods will be combined, to create an iterative process of experimenting and evaluating based on set requirements. Multiple strategies are created based on separate focus points. After evaluation, one of these strategies is chosen or multiple strategies are combined to continue with in the design process.

For example, strategies for socio-spatial focus include creating more physical connections and adding spatial diversity. After initial evaluation, these two were combined, to create a new strategy which was further developed and evaluated (figure 13).

In order to evaluate the design, requirements have to be set, for which previous research is needed (van der Voordt & de Jong, 2002). For this the collective and individual research will be used. For the initial evaluations, aspects relating to social, spatial, and historical value were used as requirements. However, as the individual research will continue during the design phase, the requirements will change throughout the process. The requirements will also differ based on the stage of the design, as the scale and focus of the research shifts throughout the design process.

In order to create clear overviews, spider diagrams will be used to visualize the evaluations, as visible in figure 14. The strategies are given a rating for the improvement or decline for each requirement. A diagram is created for the impact per attribute of that strategy, giving the opportunity to weigh the importance of each attribute. At the same time, a diagram can be created for the impact of the strategy in total, facilitating comparisons between different strategies.

Figure 13: Combined strategy of creating connections and adding diversity(own product)

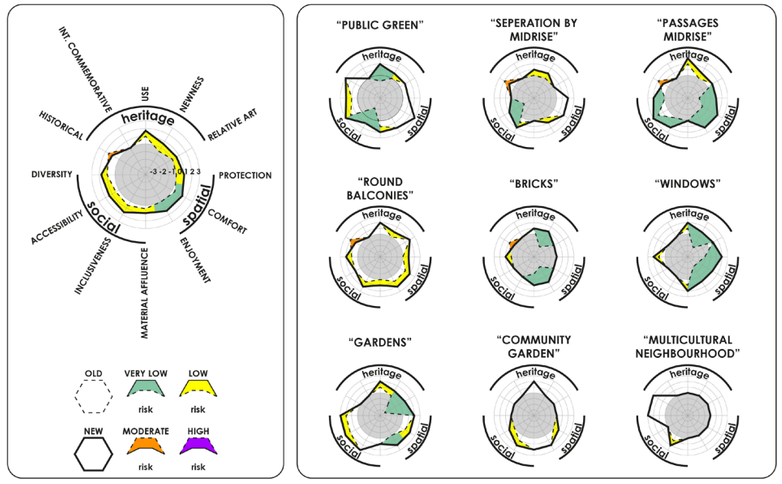

Figure 14: Evaluation of strategy using spider diagrams (own product)

6.1 Social relevance

The adaption of housing built in the 80's offers an opportunity in regard to the current housing shortage. However, the buildings need technical upgrades, as they currently deal with multiple technical problems (Two women working with inhabitants of Hoptille, personal communication, October 6, 2020). Demolishing these buildings will result in the loss of the embodied energy of the building. By creating a design to adapt these houses this energy is preserved, improving the quality of the housing in a sustainable way (Pereira Roders, 2007). The designed strategy could then be applied to similar projects, improving the overall housing stock.

Simultaneously these buildings can hold a lot of value for its users. Demolishing buildings, instead of letting the buildings change over time, will remove those values. Moreover, it is important to research what values residents attach to the built environment since the values of experts generally differ from the values of the community (Meurs, 2016). This also became apparent during the collective research, as each stakeholder subgroup came to different conclusions. As a result, the users' values could be overlooked, as other values are prioritized. Acknowledging the users' perspective is crucial, as the buildings that are loved are the buildings that last and are adapted over time (Brand, 1997b). This project will offer insights in how these values could be researched and integrated in the design.

6.2 Academic relevance

As mentioned, the combination between the cultural values and the way buildings change over time is not yet researched, even though research about the topics separately is available. Researching how these topics relate and add to each other, will therefor add to the existing knowledge. This new knowledge will then be applied to the design project in Hoptille, creating a reference case for how to implement these topics in similar projects.

This research also contributes to research into 80's architecture. Since these buildings are relatively young, not a lot of research exist on the values attributed to the buildings. The design principles applied to the building as well as adaptions to the building might have a historical value, which is not acknowledged yet. As it is possible that the building will become valuable in the future, even if it is not considered valuable at the moment (Pereira Roders, 2007). As well as researching the values users attach to the building, as mentioned earlier, this project will research other present cultural values, such as historical value. By doing so, the project will offer insight in usable methods for researching values attached to the built environment and how to design with these values in mind, to preserve them or even to emphasize them.

7 Bibliography

BijlmerMuseum. (2014, February 9). Grondslagen van de Bijlmer. Retrieved 29 November 2020, from https://bijlmermuseum.com/de-grondslagen-van-de-bijlmer/

BijlmerMuseum. (2017, July 8). Heesterveld en Hoptille. Retrieved 30 November 2020, from https://bijlmermuseum.com/heesterveld-en-hoptille/

Brand, S. (narrator). (1997a). Part 1: Flow [TV show]. In J. Muncie (producer). How Buildings Learn. London, United Kingdom: BBC. Retrieved from https://www.youtube.com/watch?v=AvEqfg2sIH0

Brand, S. (narrator). (1997b). Part 5: Shearing Layers [TV show]. In J. Muncie (producer). How Buildings Learn. London, United Kingdom: BBC. Retrieved from https://www.youtube.com/watch?v=HTSbtM12I-Zw

CBS. (2020). Voorraad woningen [Dataset]. Retrieved from https://opendata.cbs.nl/statline/#/CBS/nl/dataset/82550NED/table?fromstatweb

Gans, H. J. (1968). The potential Environment and the Effective Environment. In People and Plans: Essays on Urban Problems and Solutions (pp. 4–11). New York, N.Y.: Basic Books.

gebiedsontwikkeling.nu. (2020, May 11). Hoogleraar Boelhouwer: tijdelijke woningen nodig tegen woningnood. Retrieved 29 November 2020, from https://www.gebiedsontwikkeling.nu/artikelen /hoogleraar-boelhouwer-tijdelijke-woningen-nodig-tegen-woningnood/

Harper, D. (2002). Talking about pictures: A case for photo elicitation. Visual studies, 17(1), 13-26.

Hennink, M., Hutter, I., & Bailey, A. (2020a). Data Preparation and Developing Codes. In Qualitative research methods (p. 207-234). Thousand Oaks, Canada: SAGE Publications Limited.

Hennink, M., Hutter, I., & Bailey, A. (2020b). In-Depth Interviews. In Qualitative research methods (p. 108-132). Thousand Oaks, Canada: SAGE Publications Limited.

Howard, P. (2003). Selling Heritage. In Heritage: management, interpretation, identity (p. 102-146). Continuum.

Low, S. M. (2002). Anthropological-Ethnographic Methods for the Assessment of Cultural Values in Heritage Conservation. In M. de la Torre (Ed.), Assessing the Values of Cultural Heritage: Research Report (pp. 31–50). Los Angeles, CA: Getty Conservation Institute.

Lucas, R. (2016). Research Methods for Architecture. London, United Kingdom: Laurence King Publishing.

Meurs, P. (2016). Heritage-based design. Delft, Netherlands: TU Delft.

Meyer, H. (2002). Plan Analysis. In T. M. de Jong & D. J. M. van der Voordt (Eds.), Ways to Study and Research Urban, Architectural and Technical Design (pp. 125–136). Delft, The Netherlands: DUP Science.

Ministerie van Binnenlandse Zaken en Koninkrijksrelaties. (2020, December 4). Toespraak minister Ollongren bij ministeriële bijeenkomst over het New Leipzig Charter en de Europese Agenda Stad. Retrieved 11 December 2020, from https://www.rijksoverheid.nl/documenten/toespraken/2020/11/30/toespraak-minister-ollongren-bij-ministeriele-bijeenkomst-over-het-new-leipzig-charter-en-de-europese-agenda-stad

Pereira Roders, A. R. (2007). Re-architecture: lifespan rehabilitation of built heritage - basis. Technische Universiteit Eindhoven. https://doi.org/10.6100/IR751759

van der Voordt, T., & de Jong, T. (2002). Types of Study by Design. In T. M. de Jong & D. J. M. van der Voordt (Eds.), Ways to Study and Research Urban, Architectural and Technical Design (pp. 455–458). Delft, The Netherlands: DUP Science.

Verlaan, T. (2013, May 20). Bijlmer: a Reputation Blown to Smithereens? Retrieved 30 November 2020, from https://failedarchitecture.com/amsterdam-bijlmermeer-a-reputation-blown-to-smithereens/

Images

Figure 1, front page
Stadsarchief Amsterdam (n.d.)Hoptille [Photo] from *Archief van de Gemeentelijke Dienst Volkshuisvesting: foto's B-serie*. Retrieved on 16 December 2020 from https://archief.amsterdam/beeldbank/detail/a1edd979-8cfa-5d44-5b54-5e068e192b1f

Figure 2, p. 7
P. Meurs (2016) The dimensions of cultural value [Illustration] in *Heritage-based Design* (p. 34).

Interviews

conducted with users of Hoptille on October 6, 2020, including:
Two women doing social work with inhabitants of Hoptille
Two girls who live in Hoptille

Self Assessment

The research plan is a product created for the course 'AR3A010 Research Plan' and is connected to the graduation studios. During the course multiple lectures, how-to sessions, masterclasses, and personal tutoring sessions were given.

It seemed as if the course was divided into two parts, the first consisting of the lectures, how-to sessions, and the masterclasses and consisting of the tutoring sessions and work on the research plan itself. As a result, work on the research plan started late in the process, and a lot of the research plan still had to be determined and concretely defined.

The amount of collective research in the beginning of the year probably added to this division. The first ten weeks were spent on collective research, so little focus was on the development of the individual research and personal interests. Only towards the end of these ten weeks, did this focus start to shift and started the process of defining a problem statement. Because of this, the research plan was not defined enough when the individual process started. While some flexibility in the research plan is helpful, to be able to adapt based on the process itself, the next steps to take were unclear and more grip on the research topic was needed.

Even though the lectures seemed to be in a different phase from the work on the actual research plan, the lectures did provide inspiration early on in the process.

First of all, they refreshed the knowledge about the many different methods that can be used in the research, as well as providing new methods that could be used. Especially the lecture by Havik and the how-to session by Hein, Lee, and Baciu added to this source of possible methods.

Simultaneously, the lecture by Havik, helped give direction to the topic of the project, even though the topic was not concretely defined yet. By giving an overview of the broad scope of research possibilities.

Furthermore, the how-to session by Havik and Stanicic gave concrete information of how to structure the research. Ordering the research in this way gives an idea of how to continue in the research process. Especially the visualization of the structure was helpful. Havik (2012) discusses using a diagram to create a clear overview of the research. This overview can help in further structuring the research as well as defining why certain steps are taken, and if steps are necessary or could be left out.

Lastly, the 'what if' masterclass by Hein and Baciu was helpful, as it gave inspiration for how to look at the past. In the masterclass a few projects of the past were looked at and discussed how they achieved. Furthermore, it was discussed if aspects of the projects could be applied as a strategy to new situations and what effects this could have. A similar method will be used in this research project.

All in all, the course taught me the helpfulness of having a research plan, as it creates a clear guide of how to act and which next steps to take. In the future, I aim to start defining the research plan, and specifically the problem statement, earlier on to create more grip for the project.

Havik, K. (2012). Bridging: The Spatial Construction of Knowledge in Architectural Research. FOOTPRINT Architectural Journal, 59–68. https://doi.org/10.7480/footprint.6.1-2.749

Havik, K. (2020, October 3). Lecture 1: Methods of Analysis [Video file]. Retrieved from https://brightspace.tudelft.nl/d2l/le/content/278709/viewContent/1955355/View

Hein, C., & Baciu, D. (2020, November 23). Masterclass 3: 'What-if..' workshop: Sustainability: Future designs of the past [Video file]. Retrieved from https://brightspace.tudelft.nl/d2l/le/content/278709/viewContent/1997503/View

Hein, C., Lee, R., & Baciu, D. (2020, October 24). How-To Tutorial 2: History [Video file]. Retrieved from https://brightspace.tudelft.nl/d2l/le/content/278709/viewContent/1974936/View

Stanicic, A., & Havik, K. (2020, October 10). How-To Tutorial 1: Methods [Video file]. Retrieved from https://brightspace.tudelft.nl/d2l/le/content/278709/viewContent/1962865/View