

Reflection

Introduction

This thesis is part of the wider discussion about circularity within real estate and construction management. Even though circularity is not the main topic of this study the implications directly impact the prospect of the circularity and sustainability of the construction sector in the Netherlands. Alongside this is, of course, the discussion of balancing values. This is even more important in the case of housing associations as choosing circularity means often having to lessen either their social or fiscal ambitions. Striking this balance is the main aim of this thesis and in this chapter the research will be reflected upon. First discussing the methodology, followed by the process and personal reflection on the process. Lastly a small part looking towards the defence of this thesis and the seven questions that need to be answered according to the graduation plan.

Method

This thesis is a qualitative study based on a literature analysis. The analysis was based on three different aspects: framework, the driving values in the three domains people, planet & profit and the use of the paradox perspective. The fundament of the theoretical framework lies in the analysis of what the baseline principles are within housing associations. Based upon that the three domains of people, planet and profit framework of Elkington (1998) was chosen. While further values within those domains were also backed by the recommendations of CES (2014) to not only define the values but also give indicators to those values as to be able to identify them within the case-studies. This part of the literature was also the basis for the first theoretical framework that would be used to analyse the case studies, as can be seen in the figure (1) beside. By depending upon a rather outdated basis for the framework as the 3P-framework has been a choice because of limitations. As more contemporary (e.g. the one of Carvajal et al. (2025)) usually expand upon the 3P framework. This might have influenced the outcome of this thesis as certain aspects of sustainable development and governance are not included. Nonetheless using the simplistic triple bottom line of Elkington (1998) made it adjustable to the inputs from the participants of the empirical part of this study. Lastly, in the literature review the paradox perspective was used, as to give insight during the expert panel what the consequences of disregarding a value can be when developing transformations. In hindsight, the use of paradox perspectives was less applicable than assumed at first. Housing associations in the cases covered in this study rarely show blind spots and have an understanding of the implications of each of the values that were part in this thesis.

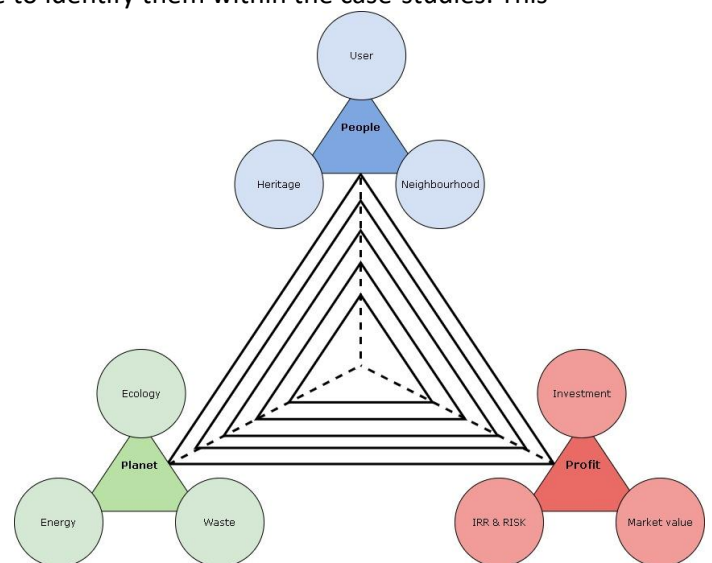


Figure 1: theoretical framework displaying the driving values for developing transformations using the 3P-framework of Elkington as basis; own work, 2025

The empirical part of this thesis consists of case studies based on interviews and an expert panel. The interviews were based on the theoretical framework of the literature and gave substance to the interviews. The interviews were bound to a case to contextualise the values. Choosing the case studies was challenging. This mostly had to do with finding comparable case studies. Since

transformations are unique and complex projects with a great scala of design solutions. Although conditions were set, finding case studies that met them and with a party that responded was impractical. The comparability of the case studies was therefore compromised. And still, of the eight possible case studies only four responded positively.

The interviews were divided into for-profit and non-profit cases. Under the assumption that this will provide insight in the difference between the two parties in regards to transformations and thus give reason to further research the knowledge gap as described in the beginning of this thesis. The interviews were analysed and visualised. For the visualisation of the values mentions of indicators were used to quantify the findings. Herein lie three problems. First and foremost is the double bias at play. As the bias of the participant and the bias of the researcher together decide the valuation. Secondly because of the limited number of participants and cases a single participant will have significant influence on the findings. Both of these shortcomings were counteracted by the use of the expert panel. As the expert panel would test the findings of the case studies. But the last problem is the most significant. The indicators were only tested in the interviews upon presence and the significance given to them by the participants without taking into account the different interpretations of those indicators. E.g. affordability for a non-profit may have a different meaning than for a for-profit, even though both mention it and find it an important driving value when developing transformations. Because of this, there was no substantial difference between the findings of the for-profit and the non-profit on the whole. This was mostly counteracted with the use of a rich description of the interviews and thus contextualising the findings. Another countermeasure to this problem would have been the use of documentation of the cases, to mirror the interviews with the documents. Unfortunately, only the non-profit parties would provide sufficient documentation to substantiate the interviews. Reflecting on this, documentation would significantly enhance the viability of the findings from the interviews.

The last empirical part of this study is the use of an expert panel. The panel consisted of two previous non-profit party participants from the interviews and two independent consultants. The participants were shown the findings of the interviews with the use of statements which they could debate. These statements were based on the findings but could have been better adjusted to provide more relevant findings to the main research question. The choice of re-employing the participants from the interviews was made due to a combination of time limitations and a lack of interest from other housing associations. This most probably has impacted the outcome of the findings as their bias again influenced it. To balance this, the two independent consultants would also provide their insights. Most probably it would have been better to invite other experts from housing associations.

The findings of both the interviews and the expert panel changed the theoretical framework from the literature analysis. The interviews showcased certain missing values and indicators within the framework. These were tested within the expert panel to finalise the theoretical framework. Reflecting on this, it went considerably well. It gave way to an expended, but still clearly based upon, triple bottom line.

Process and personal reflections

Reflecting on the process I look back with a feeling of accomplishment. It is in my nature to look both widely and in detail to try to understand underlying processes and this was the crux of this thesis. It also provided the possibility to use my professional experience as a building cost consultant while broadening my horizon. The inclusion of the housing association was not personally motivated by the knowledge gap but by an intrinsic desire to understand how to combine practical applicability with idealism. The choice for transformations was based upon my idealism. As I have both a bias towards

preserving history and have inherited a certain level of frugality. Due to both aspects I have been a strong opponent of demolition.

It's in this way I came into contact with my first mentor Hilde. Together with her and Gerard the scope was defined, and they led me when developing the methodology. Especially Gerard helped me with breaking up the thesis and making it comprehensible for me, as in the beginning of this study I was overwhelmed by the assignment. The reason for this lies probably within my autism. Since with autism information is processed differently and, in this case, made it harder to comprehend and limit the scope. Herein both Gerard and study advisor Milka helped me to steer through this process.

Before starting the empirical research, I was uncertain on how to approach external parties. Together with the guidance of Skaal and Gerard this challenge too was tackled. Without the help of these external parties this research could not have taken place. I'm therefore also grateful of the following participating parties: De Alliantie Ontwikkeling, Rochdale, Leyten, B-right and Republiq.

Between the P2 and the P4 there were some other obstacles. It was sometimes hard to convey my ideas towards my mentors. This has to do with assumptions on both sides, resulting in miscommunication. But these were often cleared up with the help of the mentors during the counselling sessions in between the different stages of the thesis. Their help was mostly in helping to clarify the methodology and underlying ideas underneath. Helping to shape my chaotic thinking into a comprehensive structured whole. As well as assuring me when I was on the right track.

When working towards the finalisation of the thesis the findings impacted my understanding of value driven development. The findings have shown the complex nature of the development of transformations as well as the delicate balance housing associations need to make. It has increased my appreciation of housing associations and invigorates me to also better include in my professional career sustainable and social values.

Questions from the graduation manual 2024-2025

1. What is the relation between your graduation (project) topic, the studio topic (if applicable), your master track (A,U,BT,LA,MBE), and your master programme (MSc AUBS)?

The topic is about the transformation of buildings into housing for housing in the Netherlands, this relates to the theme of Circular Building Adaptation in that they overlap with the intend of decarbonizing the construction sector. It relates to the MBE master track in the sense that it is about influencing decision-making within housing associations in the Netherlands by promoting transformations. The relation to the master is made by the fact that the topic is about intervening in the built environment, to re-use existing buildings. This influences all the other tracks, e.g. the urban fabric becomes even more rigid if buildings are seen as permanent.

2. How did your research influence your design/recommendations and how did the design/recommendations influence your research?

As the recommendations are part of the conclusion the recommendations are mostly the result of the research. Of course there is a bias at play but these were not forced onto the recommendations. As is answered in question 6 of the reflection.

3. How do you assess the value of your way of working (your approach, your used methods, used methodology)?

See the paragraphs method prior in this chapter.

4. How do you assess the academic and societal value, scope and implication of your graduation project, including ethical aspects?

The academic value of this thesis is limited. This is due to the limited scope of this research. More research is needed to find greater overall findings. Nonetheless this research is important as it tries to fill a knowledge gap on how transformation projects are a part of housing associations in the Netherlands. Furthermore, the qualitative findings of this research expose the complex nature of transformations. As each project has different challenges and opportunities, it is hard to make an overarching policy to promote transformation from both a housing association and a government perspective.

The scope of this research was mostly set by the knowledge gap that this thesis is trying to fill. The scope was set together with the help of the mentors and was mostly limited by the time constraints that is the nature of master theses.

The implication of my graduation project is rather bleak in the case of transformations. It shows that transformations are becoming an ever more less feasible option for the realisation of new housing due to a combination of factors.

Ethical aspects

The research aim and the research outcome are in direct relation to each other. The methodology therefore is used for its intended purpose. Therefore there can be concluded that this research has internal validity. Although this can be concluded, this research has internal and external validity.

The protection of the participants was taken into account for this graduation project. Informed consent formed the basis of this in agreement with the HREC of the TU Delft. The participants were anonymised and findings that could either identify the participant or could damage the affiliated party were generalised, therefore ensuring their protection.

5. How do you assess the value of the transferability of your project results?

With transferability this thesis uses the definition of Lincoln and Guba (1985). This showcases that the findings of qualitative research can be used in different contexts and therefore in further research. They argue that transferability of qualitative research can only be secured with the use of a rich description of the findings. Meaning that enough details, cultural context and social interactions are described. These are as much as possible integrated in the findings. To protect the participants the findings were anonymised. Because of this some context that could identify the participant like sex and age are missing from the context. But overall, these things are not of a strong importance for the transferability of these findings, since the findings relate to transformations and are not dependent on the person.

The participants had their own personal view on the values. If certain values were missing, this thesis tries to provide an explanation. E.g. ecology was not mentioned as it was not part of the transformation case, or the values in the domain people were not strongly mentioned, as the participants are from the financial part of the housing association and have limited knowledge on the social side of transformation projects. Furthermore, citations were used to give a representation of the tone of the participants, when the words were not directly translatable to English the words were also displayed in their original language.

Therefore, the transferability of this thesis is deemed viable to be used in further research. As the findings are substantiated with details and context. Adding to this is the fact that if certain findings

are not substantiated or miss the conformation of a certain groups of participants this is noted. For example, in the case of the expert panel if the independent consultants did not partake on a certain discussion point this is noted in the findings.

6. How did bias influence the findings/recommendations of this research?

This thesis started with the assumption that there would probably be a set hierarchy of driving values and this would be the conclusion of this thesis. In practise as in the cases of Hillside and district U, the wildly different scale of the project, type of housing and target groups result in different values driving the project. This became again apparent during the expert panel. Here the expert repeatedly remarked on the notion that there is no hierarchy. In one project the building costs may be high, but the other values can offset these. Or, as was also mentioned by the expert panel, that there is also a clear difference between owned and yet to be procured stock. Nonetheless a rough hierarchy of driving values did come up for the housing associations.

Another assumption at the front-end of the research was that the market value was growing in importance. The findings brought to light that it, in contrast to the assumption, was actually declining in importance. Therefore, within the recommendations it is mentioned that the market value should become more important within assessing transformation projects. Herein bias did influence the recommendation, but it was also based on the findings of the expert panel that did mention the dangers of ignoring the market value.

7. How did autism influence the findings of this research?

As a person with an autism disorder, I noticed over the years that in comparison to neurotypical people I tend to do two things differently that may have influenced the findings and recommendations of my graduation project.

One is that I find it hard to apply the correct weight (if there is one) to the findings. It is hard for me to stay within the scope, for something that has peaked my interest will become the subject of attention. With qualitative research this becomes a problem as this will broaden the scope of the study and it becomes harder to give significance to apparent trends. Herein both mentors provided help into shaping it and narrowing the scope again.

The other aspect is trying to find connections where there may be none. Herein bias also plays a role. But it is my nature to try to connect findings with each other even if they may be only correlated. It is therefore possible that a certain personal narrative may have been woven into the findings. Naturally I try to counteract this, the main way this was done by seeking counsel with my mentors and the use of the expert panel.

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