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## Reflection P4

The core of this graduation project is the use of R-strategies. This is a currently relevant topic within the architectural field. Considering the transformation project, I put my own spin on how to approach these R-strategies in relation to the specifics of the project. Within the research the emphasis was on the interior building components. I created my own method to assess the components on their value and possibilities within every R-strategy. Based on this research, done by collecting information about similar situations and approaches, I made decisions for the design of the transformation of the building. This approach of R-strategies on Interior building components was also used to design with the other building components.

For most building components there are multiple R-strategies applicable. Although choosing the R-strategy that has the least impact on the use of energy, materials and creation of waste would be the environmentally most desirable, it is not always the most desirable choice considering the other aspects regarding the design. Therefore there is always a discussion about what is more valuable considering the purpose of the entire project.

The difficulty of this duality of R-strategies on the one hand, and the things like functionality, esthetics and spatiality on the other hand has been a challenge. I found out that I constantly leaned towards a simple solution, that mostly was the environmentally most desirable choice, without exploring the variety of options that are available that work as well and add more value to the project. The given feedback about this, made me explore more, without instantly making a choice, but keeping options open and creating a more integrated entity.

### Relation between graduation topic, master track and programme

The relation between the topic, R-strategies, and the Architecture master track with the studio Architectural engineering, lies mainly in the technicality of using existing building components in the design and transformation of the building. Going from A to B, from an existing building to a transformed building, is not only a matter of technical and constructive issues, but also covers the architectural aspects that go along with them.

### Interaction between research and design

The type of design project, transformation of an existing building, is the basis for the method of assessing existing building components and the amount of R-strategies in which the components were categorized. The design is based on the use of the existing building components and the research on how to assess them. Design choices were made based on the assessment and resulting possible R-strategies with their value and relation to sustainability. As mentioned before, the challenge, which was the main obstacle in the process for me, was to deal with the duality of R-strategies and the design preferences.

### Approach and methodology

The method of assessment, developed in the research, was very helpful in the design process, to assess other building components as well. The approach was to look at the entity, parts and individual components of the building and assess them with the R-strategies in mind. This was very helpful to discover the different possible uses for parts or elements. However, it has also felt like an infringement of design freedom. So the approach towards the design could have been with a way wider view on design possibilities, also outside the existing components.

### Value and scope of graduation project

The topic of waste reduction and the strategies to do so is getting more and more attention. Although this project is of course specifically focusing on one building and its components, the acquired knowledge is something that can be useful for other projects. The approach also developed a methodology to assess and design, which can be used on a larger scope than this building, transforming buildings or maybe outside the building environment itself. In the expression of the design the approach of R-strategies will be visible, which is something that can create awareness of the potential of the use of R-strategies.

### Looking ahead

To continue with the project, there are a few things that need some attention. To be able to show the potential of the proposed project, an estimation will be made that shows how the R-strategies influenced the design and how this led to a sustainable design and the comparison towards a transformation without applying R-strategies on the existing building components. By doing so, more data can be shown within the process diagram from the existing towards the new transformed building. Decisions have been made on the strategies and therefore the principles of how all these components are reassembled individually. How this integrates to the entity of the whole building is something that needs more attention to finalize the project.