Reflection

On personal and professional levels, I greatly benefited from the research experience. I acquired valuable knowledge and insights during the course of conducting this research while parts of those experiences had been easy going and exciting, others I went through with much difficulties and frustrations. Because of the novelty of the project, lack of time and high ambitions the process turned out to be quite challenging. Perhaps the words of Martin Luther King Jr. are best suited to describe this journey; “If you can’t fly the run, if you can’t run then walk, if you can’t walk then crawl, but whatever you do you have to keep moving forward.” Albeit these words were uttered in a totally different context, I believe they hold a great relevance to my research journey. When I look back to the start of my research, I see the ambitions and expectations that I had for this journey. Because of my curiosity for learning more and more, I continued drowning in a sea of information for months. However, I enjoyed every second of learning, especially from all the people involved in this research and their valuable insights which lighted my way.

This research consisted of literature review, interviews and case studies that were related to the topic of this research. The research process required extensive preparation and planning for each stage of the study. It is most rewarding if the researcher already has a fairly good grasp of the subject area. The time-management was quite challenging. I faced challenges in terms of ensuring the progress of the study according to my timetable. Also as a non-Dutch student I found it quite challenging to formulate the questions. For this reason, in my interviews I used probe questions to clarify the questions. I have to admit that it took me a lot of time to make common ground and to do the transcriptions. In general, the research experience has contributed to the improvement of my personal skills.

Regarding the methodology, there were some challenges that I had to overcome. First of all, there is a lack of relevant literature and common ground to cover this field in the construction industry. For that reason, it takes a great effort to arrive at the definitions and principles of circular economy that could be used as the basis of this research. This lack of common ground was also present in the practical side of the research. Moreover, I often encountered the difficulty of depending too much on other authorities rather than my own primary materials or ideas. The advice is that one should argue relatively free and to use secondary data to support the arguments. At last The process was highly iterative and time-consuming. During the process of writing I adjusted my research questions and the whole research repetitively.

After setting up my research design I started conducting interviews with the experts in the field to better understand the principles of circular economy. This part was the least challenging part of this research process, since all the stakeholders were interested in the subject and agreed to participate in the
interviews. I am really grateful to all interviewees, and I enjoyed the fruitful discussions. Overall the process of research design was as I had planned, but more intensive that I had expected. It was the analysing part that pushed me through the buffers and even further. In this topic one should be careful not to lose oneself in the broad concept of circular economy. During the process it is crucial to keep the focus on the research area and have the research questions always in front. Overall finding the right balance in this topic is crucial, and one should consider not to lose the balance.

In addition to aforementioned methods, the case studies pave the way for discovering the facts by observation the circular economy in practice. All the case studies in this research have relations with the research area and studying the real life examples were fruitful for getting new insights about the practical implications of the circular economy and its influence on the construction industry. However, I have to admit that thought experiments are better approaches for exploring in this subject. This is because a lot of explorations can just lead to more confusion and one must stop the exploring sooner and start to think. It is therefore important to keep track of the process in order to avoid these kind of problems.

The research in this thesis is completely relevant to the design and construction management, since as the studies in this research show this new outlook influences all the stakeholders and processes in the construction industry. Therefore, it is crucial to study this subject more thoroughly to realize in what way the construction industry can shift from the current conservative, traditional system to a more liquid and adaptable industry with implementing the circular economy. However, it must be mentioned that the circular economy is a very broad subject and has links with all the other labs in the faculty of architecture and built environment and even beyond this faculty. It would be interesting if the students could work together on one model but with looking at different aspects. This will in turn result to better solutions for the problems in the research, since all the topics in the research are quite interrelated.

Through my interviews it became clear that the interest in the topic of circular economy is high with the parties involved in the construction practices. This necessity is based described by the famous architect, Thomas Rau, who argues “we moeten overstappen van vastgoed, naar losgoed.”. Therefore, I would recommend other students and researchers to explore the new horizons, since the demand for new practices and new business models are evident.