As graduates of the studio; Complex Projects, the assignment encompassed an aim to develop a design based on scenario-research on the area of Amsterdam Zuid-Oost. The aim was to eventually design an architectural entity in the year 2050 in Amsterdam Zuid-Oost which should be deduced from intensive research on possible scenario's in either the energy, mobility or health sector. Since my personal interest lay in the development of the energy transition and it's impact on the built environment my research has hence been primarily focused on the transition of both energy consumption and production. I, however, quickly discovered the disintegration between solutions for sustainable energy production and the development of the built environment. Batteries were to be placed in places, high and dry, in the yet uninhabited areas outside of the city and sustainable energy technologies were to be merely hidden in places (windparks and hydroenergy). Moreover when considering spatial developments, this separation between the energy storage and production space and the dutch habitat would be intensified due to an increased need for waterstorage due to climate change. Hence, conventional batteries, which need to be placed high and dry, would be at a great risk of being flooded, resulting in an even higher disintegration of spaces when considering the fact that energy storage highly needed and even more so in regard of the transition of energy towards sustainable energy resources.

My research hence included both research on current developments in regard of climate change, the energy transition and changes in demographics etc to assess possible changes in the demanded architectures. These results would then be used to deduce a conceptual approach for the possible spatial configuration of Amsterdam South East and it's related functions and programs.
My research resulted into a concept of designing a waterbattery as an architectural entity in an area with increased surface water capacity (in 2050). This was therefore a direct result of the graduation topic; energy in the studio complex projects. This project and its research could hence be considered complex due to the fact that many different variables had to be taken into account such as the technicalities of a waterbattery, the highly disintegrated area itself with its infrastructures (high way, railway), the disintegration between the functions and the contrast of the target groups reaching from office workers to the diversely cultured inhabitants of Amsterdam South East, with different demands and wishes. Although the project encompasses an urban scenario and hence a masterplan the final project is basically architectural and therefore relatable to the Master of Architecture.

The method of the research was primarily based on research of developments within different realms and its possible impact on the built environment. Though one might question the actual probability of the developments of the energy transition and its impact on the spatial configuration, this research and the resulting project do show the impact of such a possible transition or development and could hence be considered of great value for the Dutch government in order to know which measures to take, where to invest their money, or what possibilities to assess for the development of a more sustainable Amsterdam South East. Though the project might be considered extreme and hence unrealistic, it definitely seeks to trigger innovative developments within the sustainable architectural scope by seeking

Reflection

spatial quality in energy technologies. This project could hence be considered an example of an integrative solution for the sustainability quest. Hence, relevant for both the research department of hydrological-engineering in order to broaden their workfield and research the effectiveness of such a battery and its economic value. Moreover, the municipality of Amsterdam South East has been interested in understanding the potentials of the spatial configuration in their region. This project could therefore be shown in order to understand the impact on the social inclusion within the community of Amsterdam South East.

Additionally, since the project does contain a lot of water and hence water edges the question arised about the safety of this project and the impact on the ecology. Moreover, in terms of ethics, one might ask if this project would not be considered too big of a transformation and hence be considered a tabula rasa of the area resulting in identity loss of the area of Amsterdam South East. One should however keep in mind in this respect that this project is positioned in the year 2050 for which an extreme development has been taken into consideration in order for major challanges such as extreme weather conditions to be covered.

Although the different target groups have been taken into consideration in both the programmatic part and the physicality, such as the materialization, of the project, one might ask oneself if such target or sociological groups and her demands could be defined by generic preconceptions of cultural and sociological values. The project is however a clear embodiment of a universal architectural language; a response to and a representation of natural phenomena such as water cascade.

Conclusively, this project could be considered an extremely integrative approach for water and energy measures. An approach which could be considered as a reintroduction of integrative and inventive water measures for which the Dutch are famous. While the intervention might be considered costly, the benefits are multifarious (energy storage, water management, social cohesion).