Reflection

Diverging and converging paths

From the start of my graduation project I intended to create a seamless, almost organic, connection between my research and design. However this appeared to be a difficult task. First of all, right from the beginning I had detailed perceptions of what I was going to design. This preoccupation was obstruc-
tive in forming a clear argumentation about why the suggested intervention was needed. The argumentation was based on the opinion that the Leuvehaven was a disgrace to the city of Rotterdam. By making the first sketches and doing some study about the project area the first reasoning for an intervention did came up: the disconnection between the Meuse and the Rotte, the lack of quality in public space, and the absence of an attractive program. The reading and writing for the purpose of an article on waterfront development brought structure in the argumentation: the problems could be brought back to three issues: urban fabric, program and public space.

My initial hypothesis was that with restoring the connection between the Rotte and the Meuse the spatial network of the water could be improved, stimulating tourism and recreational boating, and giving reason and structure to the improvement of the public space. Therefore I wanted to apply Space Syntax at the water system of Rotterdam to prove that by restoring this connection enormous opportunities could come up. By applying Space Syntax to the water systems of Amsterdam and Hamburg and comparing it to Rotterdam I thought I could confirm my hypothesis by demonstrating that successful use of water is supported by a good water system. However, in spite of my expectations, the Space Syntax analysis did not produce the results I hoped for.

The mistake I made was to think in terms of a water system instead of an urban system. This mental leap immediately produced results. By applying Space Syntax and the Three-Step Analysis to the water city and the land city, the great spatial distinction between these cities could be identified, creating a clear assignment for Waterstad in Rotterdam. Again, I was brought at this idea by reading and writing for the purpose of an article, this time on the history of Waterstad. This research made clear to me that the position of Waterstad in the city was changed radically by the Wederopbouwplan. Therefore a fourth issue came in to the assignment: the position towards the historical city of Rotterdam and the rebuilding plans by Witteveen and Van Traa. The importance of this issue was confirmed with an interview I had with Bram Ladage, an urbanist at the urban planning department of Rotterdam, engaged in the planning of Waterstad. Until then my research and design were two separate lines. This was strengthened by the fact that I did not had an idea about how to analyze the public space and program. Once again the literature study gave me clues about how to analyze these issue, but change in perspective brought design and research together. From a retrospective the design and research do fit really well: in the end I think the relation between research and design in my project is almost seamless. However, in order to make the process seamless as well, the organic relation I had in mind does not match reality: it has to be a structured, scientific process. In order to get this structure in my research and design process my second mentor, Henco Bekkering, advised me to make a story board. This was also a change in perspective, in the sense that it made a non-linear process visually and mentally linear. It helped me a lot to structure my process.

Another difficulty I did face, was the issue of time and production management. I experienced that time management for a project that is supposed to take a year is a serious issue. At the start of the project my feel was that time did not seem to play a role, so there could be a lot of room for experimentation on research and analysis techniques; an excellent opportunity to learn new things. However there are two dangers in this attitude, namely that you can become unproductive, since you think you still have time, and you can become unstructured, a loose cannon. The second of the dangers is closely related to a scientific approach. The best experiments are those that are well planned on beforehand, meticulously monitored during the experiment, and critically reflected on afterwards. Planning, monitoring and reflecting are key ingredients of every scientific project, but they are also of vital importance in the production management of a design project, as it prevents the risk of doing useless research. Because of its graphical nature, the research embedded in design projects can be extremely time consuming. Without good production management a design project can be infinite (fig. 114). Luckily most of the work I did
and of which I thought at a certain point during the process it was useless, turned out to be useful later on. However, only at the very last stage of my project I did make a proper planning.

**Delta Interventions**

I used to have my doubts about my project being a true Delta Interventions project, for it is not involved in the big issues of flooding and delta scenarios. However I think that my findings on the spatial identity of the water city are a contribution to the idea of the studio and the research on water in the city. I suppose, to most people in the Rhine delta, living in a dangerous delta environment is not really an issue in their daily troubles. People do not depend directly on the natural environment for their living, and so they are not always aware of the changes and fluctuations in the environment, although some of them are influenced by human action. Some of the changes and fluctuations are harmless or controllable, others can be life threatening, such as flooding. Many of those environmental issues, such as the rising sea level, do have a spatial component. In my opinion spatial planning and design should be an integrated part of civil engineering and should make people more aware of their position in the natural system. In my project I have tried to give a spatial dimension to the engineering tasks of water management and reintroducing water: the combination of engineering and urban design.