

Reflection P4

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At P4 and P5 a reflection must be included as a distinct part of the thesis (a separate chapter) or as a separate document. In this reflection the student uses a short substantiated explanation to account for the results of the research and design in the graduation phase (product, process, planning). The aim of the reflection is to look back and see if your approach worked, to understand the “how and why”, and subsequently to learn from this. The choice of method (how) and argumentation (why) which preceded the research was a part of your study plan – the reflection must contain an answer to the question of how and why the approach did or did not work, and to what extent.

Approach

How and why my approach for the research did or did not work

For my research the plan initially was to do literature studies and case studies. The literature studies would be about kinetic designing and about the environment of the coastal area. The case studies would be all about kinetic small structures. These chosen methods were basically standard and straight forward.

While I was doing the research I had no idea where I was heading, I basically looked up definitions on kinetics and was trying to look up as many kinetic structures as I could. But then I found some really clear definitions on kinetics, dividing different structure in separate ways, from that point everything came together and I had a very clear link between the literature studies and the cases.

So at that point it was quite clear the approach for the research did actually work.

Aspects

Depending on the research and design, reflection on a number of the following aspects should be included (you may choose in which order). The reflection should be in the form of a text, with diagrams and sketches for purposes of illustration and clarification.

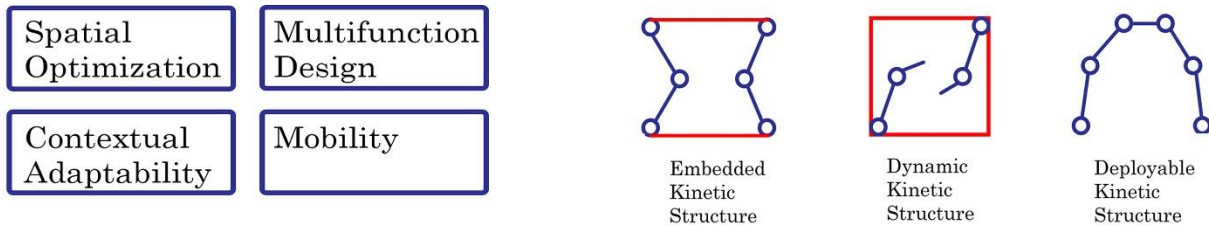
- Aspect 1 The relationship between research and design*
- Aspect 2 The relationship between the theme of the graduation lab and the subject/case study chosen by the student within this framework (location/object)*
- Aspect 3 The relationship between the methodical line of approach of the graduation lab and the method chosen by the student in this framework*
- Aspect 4 The relationship between the project and the wider social context*

The relationship between research and design

As part of the Architectural Engineering graduation studio students are required to write a technical research paper. The subject of the research is chosen by the student based on a personal fascination. Students can also choose between six different locations, which are also given by the graduation studio. The final research results are a starting point for an architectural design.

Within the Architectural Engineering graduation studio several locations are given so most students have worked in groups to do research on the environments. In this way research on the locations were more deeply and thorough, especially on the coastal area who got help from people working at Rijkswaterstaat.

At the end of the research period a preliminary design has to be made to show which way is headed in the design period. During my research I found some pretty clear definitions on my subject, kinetic design. These definitions showed a division between the several purposes of kinetic design and several structures used to make a kinetic design.



These divisions could all be linked to the case studies that were done and they helped explain the choices I made for my preliminary design, because I incorporated all purposes and even all structures. Because of this a very clear link between my research and all the aspects of the design could be seen.

Because I normally always stick with my first design, I wanted to step away from it at first, but all the designs that followed afterwards weren't as interesting as the first design. So in the end I continued with the first design and in hindsight I'm really happy about that.

Too be perfectly honest, I don't think it's really hard to have a big relationship between research and design in this case. If your research is done on kinetic design it's quite clear some aspects will return in the design and that's why I tried to incorporate as much aspects possible to really create a large connection between research and design.

The relationship between the theme of the graduation lab and the subject/case study chosen

The intention of the Architectural Engineering graduation studio is slightly different from other architectural studios. Like all other studios the Architectural Engineering studio starts with a research semester prior to a design semester, the results of the research should provide the starting points of the design. Where most studios provide their students with an architecture themed research the Architectural Engineering studio asks its students to come up with a technical fascination as a subject for their research prior to the design phase.

So in the course of Architectural Engineering the subjects and cases are already given and a choice has to be made on the case. The fascination which has to be chosen in one of the first weeks will have to be a part of the solution for the given case.

In this case, kinetic design has a strong relationship to the problems on the coastal area.

The relationship between the methodical line of approach of the graduation lab and the method chosen

In this case the methodical line of approach is directly followed. For the first half research was done by literature studies and case studies. In the end this turned out to be a really good way to do research and it shaped all the basics for a first design, which has always been the initial plan of the graduation lab. The second part of the studio was the design period based on all the research done.

In the end the methodical line of approach of the graduation lab was directly followed as it was intended and this worked out really well.

The relationship between the project and the wider social context

In other architecture graduation studios and link to wider social context would probably be seen more clearly, because they will make up their own subjects and cases. In this case the coastal area was chosen, focusing on the problems of that coastal area only. In this way the relationship between the project and the coast itself is really strong and clear, but it should be hard to place this particular project in an even wider social context outside the coastal area.

One particular case can be mentioned though, in the end buildings folding methods seemed unnecessary and that's why the principle became that the building had to be storm resistant. So the building could be placed in hurricane areas like Central America, so buildings don't get destroyed they are now.

The research part of my project actually can be linked to all kinetic structure, dynamic buildings or building/ structures with moving components and building parts in it. The research would help categorize different buildings/building structures.