Reflection paper
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Comp-Arch program
Spring 2012-2013

The reason that, I’ve chosen to join this program was to get more familiar with computational approach and the use of todays’ cutting-edge fabrication tools in the realm of design. My main research interest was understanding how computational approach can help us to reach a better design by taking into consideration the climatic and environmental aspects within the context of the build-form.

The graduation project given to us was an art center museum in The Hague. The scale of the project and computational methods were not appropriate according to my experience of this studio in terms of focusing on my prior research intentions. Consequently, I had to shift my research focus toward spatial organization and visual perception which was demanded according to the project.

As we know for the graduation project we are required to fulfill all the architectural requirements, which means that by the P4 level the design of the project must be finished up to 1:5 details. In this sense, the major time and effort was given to architectural aspects of the project, rather than computational aspects and fabrication of it.

If we look back at the four quarters that we were into till now (till P4 level), I can explain the summary of my activities in this period as following:

1st Quarter (preparation for P1): Working as a group in analyzing the site in the urban scale, while we were having some lectures on computational approaches mainly on visual perception.

2nd Quarter (preparation for P2): Working individually on the project and using the methods taught in the 1st quarter.

3rd Quarter (preparation for P3): Working on the spatial organization within the building (plans, sections, elevations...) with conventional methods (no computational approach).

4th Quarter (preparation for P4): Working on the details of the building (no computational approach)
In the 1st quarter we had some theoretical lectures on computational methods and applications which are aimed to deal with complexity issues in architectural design process, such as: *probabilistic perception, Fuzzy Neural Tree and Pareto based evolutionary computation*.

In the 2nd quarter, at the very early stage of the project I started using "Perception analysis" and “Fuzzy Neural Tree” methods to cope with the complexities of my project. The expectation behind using these methods was finding the best “*Spatial Organization*” for art museum on the scale level of the building body. In other words, organization of the two boxes according to each other and the context which is shown in the image.

However, the architectural requirements like efficient height of the escalator, required surface amounts for interior spaces, etc. had a great influence on the proportions of the built-form; hence the previously satisfying result from “Fuzzy Neural Tree” method for evaluation was now looking irrelevant.

![Extreme possible spatial organization of the art museum in my project](image)

**Realization**

The computational approach seems to be working during conceptual phase of the design since the complexity is defined through abstraction; however, as the design develops it appears to not support such complexities.