Reflection

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Studio
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Method and Argumentation
My technical fascination of complex geometries led me to pick an intricate circumstance for my thesis project. Right followed the problem statement, my overall design question was set as How can I design a cultural complex in extension of Westergasfabriek Culture Park by digital design and workflow? To explore the possibilities and feasibility of digital design, a hypothetical design was in plan, testing the technical aspect of my final design.

Research and Design
The research was initially conducted relatively independently, acting as a toolbox for design, later it come out that the design benefit from the research rather than merely a toolbox. On one hand, basic knowledge of complex geometries as well as its application in architectural history was studied, pooling the essential possibilities and corresponding fabrication approaches. On the other hand, the complexity in design refers more to the context that so many target groups are involved and diverse activities are to be held within the new park and new building. The complexity of geometry are presented in varying scales in the building, from a small corner, to the freeform ramps in the hall, and finally up to the whole building shapes, without capacity of handling with complex geometries, none of them would be realized. The exterior cladding, which is mostly related to the research content, was carried out through a rationalization process and fabrication strategy, making it another big step closer to the reality.
The theme of AE and my thesis project
I think being specific is how does AE studio make a difference among others, challenging its students to be specialists at certain fields. The comfort in terms of sustainability and smartness of structure and construction are highlighted by the studio, ambition of individuals are encouraged though. As to my project, integrated design was implemented going through all aspects of the building, complex geometries were transferred to architectural substances in a coherent environment, from constructing to image conveying.

The approach of AE and my method
Thanks to AE studio for giving us a well organised guideline which really works, I’ve learned what is beyond my expectation, especially after certain frustrating trials. Firstly, during the research phase, a professional paper was asked for so that I dived in to relating literature and cases studies. I learned computational scripting to be more skilled and less restricted in the workflow of digital design. Then, I applied my newly mastered skills to my project in the design phase, but soon I encounter on problematic situations, I had given too much credits of design to computer. Finally I always kept myself in the check and balance process, combing and coordinating the ideas of bottom-up from computational design and top- down from the mind of an architect.

The project in wider social context
The whole year period of design gives me a good chance to think of architectural design in a remarkably comprehensive context, both of technology and theory. Computational design in architectural practice is still young, experience almost in every node is worthy of sharing, besides that, fruitful customized toolkit translating knowledge of complex geometries to digital programs could help in other similar conditions.