Graduation plan

Personal information

Name
Daisy Koppendraaier

Student number
1502956

Studio

Theme
Complex Projects

Teachers
Olindo Caso (design mentor), Hubert van der Meel (building technology)

Argumentation of Choice of the studio
The aim of the research appeals to me, as analytical and critical thinking skills next to the conventional (traditional) design are crucial to deal with the issues of a Complex Project. This approach is different than my previous projects. Besides, based on the relatively long research – and fascinations - one can define their own project and program. The studio seems challenging to me.

Title

Title of the graduation project
Voïds and spaces; the spatial qualities and a specific encountering at Chicago’s waterfront

Product

Problem statement

South Works Steel manufacturing plant moved to the South Chicago lakefront of Lake Michigan, as it was strategically positioned for transporting raw materials. It is built on a landfill in 1882. The steel factory provided 20,000 jobs and most of the employees where living in the neighbourhood adjacent to the site. In 1970, due to the shifting market for steel, the South Works began downsizing to 10,000 jobs. Eventually the steel industry in Chicago South Works closed in 1992; it left a big piece of land and a neighbourhood without jobs. Still former employees of the manufacturing are living in the neighbourhood which is in decay due to the failure of South works. The decay in economy resulted in a negative loop of poor quality in education, difficulty to find a job and the easiness of being attracted by criminal activities. The neighbourhood is mainly residential and characterized by vacancy and a lack of vitality. There are limited opportunities for groups or individuals to achieve the goal of the American dream. Finally there are no investors for the site, as there is no reason enough to invest money in a place of decay.
While the South Works site is vacant it has a lot of potential. The size of the empty plot and the range of possibilities makes the project a complex project. The difficulty lays in designing in a certain degree of tabula rasa (no buildings and little built environment), especially when the urban fragment chosen lay relatively far from the existing neighbourhood and has merely spatial qualities to hold on to. The urban fragment is the intersection of the extended existing street of the neighbourhood - North of the canal - and the waterfront. The problem statement for the design question is therefore more spatially grounded and

**Research Question:** how can a project give accessibility (to) and possibilities for a better human condition (considering health, recreation, and vitality) for a neighbourhood that is in decay and Chicago in bigger scale within the possibilities and qualities of the South Works site?

**Goal**

Social problems are hard, probably not to solve by architecture. Focus will be on the lack of vitality and public amenities in the area by the homogeneity of the residential functions in South Chicago. Attacking the inactivity, as potential cause of the negative loop. Giving people accessibility to the qualities of the South Works site and trigger a space where people can come together.

Morphologically the site has potentiality with the water, while this is the only vacant piece of waterfront in Chicago. Utilizing this quality means that the building is near or on the water. The use of the qualities is in coherence with the program and vice versa.

The goal of the graduation project is to revitalize South Works and recognize the qualities and the possibilities the site has and touch upon the (social) problems and the problem of recognition en negligence on bigger scale.

The goal consists of three possibilities;

- Meeting place for people, create a (public) space of vitality and activity. Not for only the local residents, but for visitors (Chicago) as well. Attracting people by activity.

- Therapy, consulting/support, treatment and care to tackle the bad accessibility for better vitality (body) and health and mental counselling

- Relaxing and leisure. As there is little or no specific leisure activities near. The same argument for the lack of vitality can be assessed here.

All three have a certain affinity with each other. Focussing on the social problems of the poverty in the neighbourhood is not enough to trigger activity and vitality. A combination of three can possibly endorse the change over time.

**Program**

- Public swimming/bathing area outside (summer)
- Restaurant or café (public)
- Bathing area inside (semi-public)
Thermen (semi-public)

Physical therapy, consultancy and treatment, related to bathing area, rehabilitation (private)

Consultancy and support mental and social issues (private)

Process

Method description

The overall line throughout Complex Projects is based on research and analytic mapping. Firstly the research of Chicago and the site on themes of (lack of) identity, ecologic potential and shrinking problem. A Manifesto is an interpretation of the researched problems and a first step towards a clear strategy for the intervention. The design process is a reciprocity or interaction between different scales of intervention, namely the Masterplan - or better strategy – as the largest scale and first attempt for an intervention on the site, the urban fragment – specific urban fragment within the Masterplan – and the building as a fraction of the urban fragment.

The following process within the three scales consist of two parts (simultaneously). One will be more an analytic mapping and site research specifically the urban fragment and building, recognizing the spatial values; how can the building and the people utilize the qualities of the site – view, sun orientation, circulation, experience etc. -? As this is the only graspable elements on the site. The method is adjacent to the method used for the urban fragment and my personal fascinations of the void and the atmospheres and experience of the voids.

The other part, which is actually in line with the more analytic research, is about experience of people and their perception of space. This is linked to a theoretical framework based on my own position paper as architecture is too complex to be dealt with in solely a conceptional or rational matter.

Case studies of both methods can help defining the plan.

Literature

Journalistic research; Complex Projects research books, 2014, TUDelft; Identity, Ecology, Shrinking


Reflection

Relevance

The relevance of the project will lay in the strategy in order to design in a space with little context (no buildings near and merely spatial qualities); developing a new area which deals with certain complexities (spatially and socially) and how to connect to the existing (urban tissue).

The relevance in the discipline of architecture is based on the question how to give meaning and value to certain spaces. Experience of spaces, of voids and built environment in the context of the site specifically the qualities of the site.

Time Planning

<table>
<thead>
<tr>
<th>Week</th>
<th>Dates</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>26</td>
<td>26/6/2014</td>
<td>P2 presentation; Masterplan (group), urban fragment and building 1:500 (individual)</td>
</tr>
<tr>
<td>27</td>
<td>5/7/2014</td>
<td>Summer break</td>
</tr>
<tr>
<td>28</td>
<td></td>
<td>Reflection presentation. Design 1:500, strategy, program, plans</td>
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<tr>
<td>29</td>
<td></td>
<td>1:500. Construction, materialization concepts. Case studies</td>
</tr>
<tr>
<td>30</td>
<td></td>
<td>1:500/1:200. Case studies</td>
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<tr>
<td>31</td>
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<tr>
<td>32</td>
<td></td>
<td>1:200. Fixing program and construction schemes</td>
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<tr>
<td>33</td>
<td></td>
<td>1:200.</td>
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<tr>
<td>34</td>
<td></td>
<td>Plans, 1:100, 1:20. Detail schemes, facades</td>
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<tr>
<td>35</td>
<td></td>
<td>Completing proposal design strategy for presentation</td>
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<tr>
<td>36</td>
<td>9/1 – 9/5/2014</td>
<td>P3 presentation; presenting design strategy, plans, sections</td>
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<tr>
<td>37</td>
<td></td>
<td>Reflecting on presentation</td>
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<tr>
<td>38</td>
<td></td>
<td>1:100, development of plan, urban fragment</td>
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<tr>
<td>39</td>
<td></td>
<td>1:100, 1:50 plan and materialization (facades)</td>
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<td>40</td>
<td></td>
<td>1:100, 1:20, plans, sections, axonometric views</td>
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<tr>
<td>41-44</td>
<td></td>
<td>1:100, 1:10/1:5 detailing</td>
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<tr>
<td>45</td>
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<td>Preparation presentation, physical models and drawings</td>
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<td>46</td>
<td>10/11 – 14/11/2014</td>
<td>P4 presentation</td>
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<td>47</td>
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<td>Reflection and adjustments of p4 presentation</td>
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<td>48-50</td>
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<td>Finalizing materials and presentation for p5</td>
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<td>51</td>
<td>15/12 – 19/12/2014</td>
<td>P5 presentation, graduation</td>
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Note: I will continue during the summer break in order to graduate in December 2014. The design mentor will be available only in the first weeks of July of the summer break. The building technology mentor will be available most weeks of the summer breaks.
Attention

Taken into account should be the problem of building in or near the water when it comes to building technology. The foundation, the construction and the materialization of the building are essential for a valid design proposal. It is therefore important that the tutor is involved from the beginning. Besides, the water had potentials for ecology and sustainable systems.
Reflection p4

Daisy Koppendraaijer
Complex Projects - Chicago

The assignment of the graduation studio of Complex Projects is the rehabilitation and redesign or strategy of the now empty South Chicago (Illinois, USA) South Works site. The U.S. Steel’s South Works which was located there used to provide for work in the area, but after closure in 1992, the area started to decay. The lack of programmatic and spatial diversity led to a poor and inactive area, especially in the adjacent neighborhood where most workers from the factory lived. The South Works site is empty since and awaiting for development and (social and economic) improvement in the area. Skidmore, Owings & Merril (SOM) did a proposal for the development. Our task is to do a proposal as well. As we are critical about SOM’s Masterplan, we have a different – less traditional - approach.

The Graduation Studio is divided in two semesters, where in the first we are assigned to research and design in big scale where in the second semester we focus on the smaller scale and our individual project. Yet the aim of the studio is to target all scales, so when designing in small scale we reflect on bigger scales as well. The ultimate goal of the studio is to generate analytical and critical thinking aside the conventional design process.

The first semester’s research – which is groupwork – consist of a collection of hard and soft data based on previous analysis of Illinois (L), Chicago (M) and South Chicago neighborhood ($) We divided the research in Ecological, Shrinking and Identity to learn more the specific characteristics of the South Works area as fundamental for the Manifesto and Masterplan. The trip to Chicago let us actually see and experience what we researched. The extended trip to Detroit showed an even more critical issue of a place in decay, but showed us the potential of improvement and the involvement of the people for an improved situation. According to these researches we founded the Manifesto, a theory or vision to get a grip on the issues and to set a base for our Masterplan. The Masterplan would aim at social empowerment, spatial diversity and existing spatial qualities. A spine divides the site in two, where one – adjacent to the neighborhood - is more an interpretation and modification of the existing (social context) whereas the right side – bordered by Lake Michigan - of the spine is focused on the spatial qualities and leads to a more phenomenological approach¹.

To develop the Masterplan, we worked on fragments – the specific parts of the Masterplan- , which let in our case to our own individual assignment. Msc4 is about developing the research, or even more, filter your affinity with certain aspects of the research and complement it in the design. All scales apply. The reflection and the design is a parallel strategy. We worked till the last phase on the Masterplan, we defined it more and changed prior to our new (individual) research.

My affinity with the subject phenomenology led to a different research approach than earlier researches. Even though the research I did in Msc3 had a more to do with soft data (not the numbers

¹ Phenomenological is a field of academic research in contemporary architecture (but also philosophy) based on the experience and sensory aspects of a space, building or environment.
and the facts, but more the experience and identity of Chicago) and a poetic approach in the Manifesto. So there is a logical line throughout the research process.

In Msc4 I am more focused on the theoretical and methodological aspects. I wrote a position paper about experiences of sensory spaces (phenomenology) and did research of the design of these spaces with models and diagrammatic drawings (methodology).
As the building is part of the first phase of the Masterplan, it has a catalyst function. For the program I researched ancient Roman Public Baths where I founded the program and its function in the context. Case studies of more contemporary situations and buildings where part of defining and developing the building. The research was more concrete and asks for a different approach, but I tried to keep in mind our visions and strategy of the Manifesto and Masterplan.

If I reflect on the storyline throughout the research and design process I found the research complete. The different approach led to a great sometimes frustrating complexity. I believe this design strategy of working parallel between different scales has developed the project and also the way of thinking and doing architecture.