## Graduation Plan: Architecture

### Personal information

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<thead>
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<th>Tan Guang Ruey</th>
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### Studio

<table>
<thead>
<tr>
<th>Theme</th>
<th>Complex project</th>
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<tbody>
<tr>
<td>Teachers</td>
<td>Tanner Merkeley</td>
</tr>
<tr>
<td>Argumentation of choice of the studio</td>
<td>To develop an architecture project within the complexity of broader social, cultural, political and economic context.</td>
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### Title

| Title of the graduation project | South Chicago Civic Realm |

### Product

#### Problem Statement

The context of this project is based on the former 'U.S. Steel's South Works' site located along Lake Michigan on the Southeast Side of Chicago, Illinois. South Chicago, which used to be a vibrant neighborhood before the closure of South Works steel mill, is facing severe decline and is now suffering from violence, crime and bad perception. In 2010, SOM developed a master plan for the site but it remains stagnant due to the economic crisis. The key research / design question of project focus on: How to create a crowdsourcing urban and architecture solution that shares the power among different stakeholders to build a better neighborhood?

### Goal

The intention of the project is not to propose ideal models for society but to devise spatial equipment that the citizens themselves can operate and participate.
**Process**

### Method description

The methodology of the approach consists of: 1. Project Statement - defines the key design issue to deal with in the graduation project. 2. Project Analysis – defines the program of the building through case studies. 3. Project Formulation – translate program into masses, locate them into the context of site and organize the relationships of these basic components to generate architecture space and form. 4. Project optimization – optimize the architecture based on the built context, wind, sun, seasons, circulation, etc.

### Literature and general practical preference


**Reflection**

### Relevance

Adaptable, flexible and modular construction (i.e. the use of container as building material) is a trend of sustainable architecture. The project will explore the idea of combining adaptable construction and community participatory model in the design of public building.

**Time planning**

Weeks 1–5, Research & Analysis: Research the context from city to the site.
Weeks 6-9, Define Argument: Define strategies / ambitions for the entire site & neighborhood.
Week 10-20, Urban Design and Building: Develop urban strategy and develop proposal for architecture project.

**Week 19, P2 presentation: 24 January Friday**
Week 21-28, Design proposal: Develop architecture proposal.

**Week 29, P3 presentation: Proposed date 11 April 2014 Friday**
Week 30-33: Design detail development: Develop details.

**Week 34, P4 presentation: Proposed date 16 May 2014 Friday**
Week 35-39: Final Production

**Week 40: P5 presentation: Proposed date: 27 June 2014 Friday**

**Attention**

No pending credits / examinations.
Please see appendix for more detail syllabus.
STUDIO BRIEF

The background of this studio is based on the former ‘U.S. Steel's South Works’ site, which is located along Lake Michigan on the Southeast Side of Chicago, Illinois. First opened in 1882, the South Works mill was the largest steelmaking operation in Chicago but shut down in 1992 due to the declining steel industry. With the closure of the South Works mill, the neighborhood – South Chicago had become economically depressed and the decay has yet to be reserved. Until today, this large vacant parcel of nearly 600 acres land remains inactive. In 2010, the real estate company McCaffery Interests cooperated with Skidmore, Owings and Merrill LLP (SOM) and Sasaki Associates, Inc., to develop a master plan that includes approximately 13,575 residential units, 17.5 million sq. feet (1.6 million sq. meters) of retail, restaurants, commercial, institutional and research and development facilities and 125 acres of parks (will be abbreviated as SOM-Plan in later discussion). This master plan remains stagnant as it was designed based on the financial model that is not valid anymore due to the crisis. The Complex Project studio focuses on this Chicago lakeside site, taking the SOM-Plan as a reference to explore new possibilities and develop urban strategies.
My conclusion of studying SOM-Plan is that it is more of a complete, well-designed and self-contained unit of human settlement with identifiable centers and edges. As a result, the perception of local and prospect residents (upper income residents) is polarized: The local residents see it as an urban intrusion where they don’t feel welcome nor included in this new and shiny development while the prospect residents see it as an urban enclave where this 10-miles-away-from-downtown area is surrounded by low income neighborhood of high crime and violence. Taking into account of this specific context of polarization between South Works site proposal and neighboring community, I take my position that a sustainable urban landscape does not function independently as the feasibility of an exclusive or island-thinking development will be significantly reduced especially within the context of declining, low income and high crime neighborhood. The high violence and crime of the neighboring area will diminish the use of public space, debilitate the social fabric, lower the value and eventually jeopardized the new development. The urgency and priority in South Works project is to develop a holistic urban approach. This holistic urban approach should address reciprocity and mutual benefit of both the neighborhood and the developer by taking the development on South Works site as an opportunity to improve the integral quality of the neighborhood.

ARCHITECTURE APPROACH

The urban strategy proposed a collection of seed programs that address the need and demography of the neighborhood. By investing in these diversified community projects, a gradual improvement and salvage of existing neighborhood that synchronize with different phasing of new development can be achieved, providing a powerful backbone that boost the feasibility of the new development.

Developing from this urban strategy, the architecture will explore the idea of community involvement in the formation of public building. The key research / design question of project focus on: How to create a crowdsourcing architecture solution that shares the power among different stakeholders to build a better neighborhood?
STUDIO STRUCTURE

Semester 1
Weeks 1–5, Research & Analysis: Research the context from city to the site.
Weeks 6–9, Define Argument: Define strategies / ambitions for the entire site & neighborhood.
Week 10–20, Urban Design and Building: Develop urban strategy and develop proposal for architecture project.
Week 19, P2 presentation: 24 January Friday

Semester 2
Week 21–28, Design proposal: Develop architecture proposal.
Week 29, P3 presentation: Proposed date 11 April 2014 Friday
Week 30–33: Design detail development: Develop details.
Week 34, P4 presentation: Proposed date 16 May 2014 Friday
Week 35–39: Final Production
Week 40: P5 presentation: Proposed date: 27 June 2014 Friday

READING LIST


CASE STUDIES

Plug-in City
Archigram, Peter Cook, 1965

Nomadic Museum, New York / California / Tokyo / Mexico City

Papertainer Museum, Seoul
Shigeru Ban + Kaci International Inc, 2006

Cruise Center, Hamburg
Renner Hainke Wirth Architekten, 2009

Bohen Foundation, New York
Lot-EK, 2002
P4 Reflection

Name: Guang Ruey TAN
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Tutor: Tanner Merkeley

Aspect 1: the relationship between research and design
During the research phase, we discovered some major issues that are faced by South Chicago, such as low quality living environment, high unemployment, high crime rate, high vacancy and isolated and segregated neighborhood. What we also discovered is that although these issues are true, the bigger problem faced by the neighborhood is the bad perception most people have about the neighborhood, which led to serious decline of the community. Further study revealed that there are some positive task forces within the neighborhood that have strong desire to upgrade the neighborhood and these wishes are growing. Therefore, for the design we decided to focus on these positive forces within the neighborhood and propose interventions that will help the neighborhood revitalize themselves on both the urban and architecture scale.

Figure1: The first phase proposal by SOM (left) and our proposal (right).

Aspect 2: the relationship between the theme of the studio and the subject/case study chosen by the student within this framework (location/object)
The theme of the studio is to deal with the complexity of the site. Within this framework, I developed an architecture project that is consistent from the scale of urban planning to architecture. As for the urban planning, we proposed a bottom-up interventions that are mainly initiated by the local people, and by placing urban catalyst at critical location within the neighborhood according to its characteristic, these urban activator will try to provide opportunities to ease the problems faced by the community and at the same time create identity and positive image for the neighborhood. As for the architecture, I created a catalyst center for South Chicago, which is a place where local people can share their ideas, access to municipal information on the vacant lands and buildings, seek assistance from local task forces, architects and institutions, advocate funding from private foundation for bottom-up interventions, upgrade the neighborhood by reusing local waste, involve local people in the process of building and share the power between developers and locals to achieve a better design that fits the demand of the neighborhood.

Figure 2: The key idea of the architecture.

Aspect 3: the relationship between the methodical line of approach of the studio and the method chosen by the student in this framework
As mentioned before, the methodology of the studio is based on the complexity of different scale. In my design, my methodology started with the urban planning by defining critical locations within the neighborhood and a master plan was created to indicate these interventions. After that, the site was chosen according to the potential of reusing empty plots and attracting
critical mass after studying different parts of the neighborhood. The project is further developed to the scale of architectural space and building technology aspect to create the best solution for the architectural intervention.

Aspect 4: the relationship between the project and the wider social context

The idea of bottom-up urbanism is becoming a topic that is widely discussed and this project can be seen as an approach to contribute to this discussion by transforming the intangible idea of local initiated spontaneous interventions into tangible design of specific architectural space.

Figure 3: The methodical line of approach of the studio.

Figure 4: Urban catalyst to revitalize the neighborhood and create identity.