Student: Wenhuan Guo
Student no.: 4020014
Graduation Studio: Complex Projects – Chicago
Tutors: Olindo Caso, Hubert van der Meel
External examiner: Peter Barendse
The relationship between the theme of the graduation lab and the chosen subject/case study

The main goal of our Complex Projects graduation studio is to research and investigate the manufacturing and industrial condition of Chicago’s industrial corridor/neighborhood of Pilsen. As mentioned in the syllabus of Complex Project spring semester 2015, the Chicago urban area has been the place for a great industrial development and left it traces deep in the city in different aspects. While the industry and manufacturing are starting to regain momentum in the developed part of the world, the question could be ask is whether Chicago is able to meet the new challenges in the future. Of course we need to look at much broader than just Chicago and Pilsen alone. In the first semester, we have to do group researches in forms of study excursion to gain the physical and psychological ‘feelings’ of our plan site Pilsen (Chicago), produce three research books that are related to the manufacturing and industry of Chicago and finally, compose an atlas to mapping out physical aspects such as infrastructure, zoning and function of Pilsen.

From the researches we can concluded that there are tensions and frictions between the industry and the living neighborhood of Pilsen, but there are also a lot of potentials and necessity for the industry in the area. Nowadays, industry doesn’t make positive gesture towards the neighborhood, it isolated itself from the neighborhood completely inside the corridor. We should establish better relations between these two parties, so that in the future the area could better position itself for the new challenges. There is a duality in Pilsen: industry and neighborhood reciprocally establish relationship with each other. The industry is the cultural tradition of Pilsen and it evolves during the time along with its residents; it makes Pilsen what is now.

The Urban Strategy Group of three students proposed a new way how the industry and the neighborhood could benefits for each other. The design proposes a mediating zone to be layed between the industrial corridor and the surrounding neighborhoods; it serves a double purpose to zoning/separate the distinct area, so their respective needs do not get in each other’s way and neutral space which neighborhood and industry connect to each other. This approach, give the possibility for the area to grow and ‘de-isolate’ or make the industry ‘open’ to the neighborhood.

Visual concept: The Pilsen Mediating Realm
After the urban strategy design, we work individually and propose new architectural building articulations to fulfill the goal how industry and neighborhood could benefit from each other.

**The relationship between research and design**

The complex projects is being defined as a research studio. From day one, we were confronted with several research tasks from general industry related topics such as “The link between education and manufacturing”. From the first moment, we were trying to grasp or gather information's that are important for the urban strategy and personal design. Also, the excursion to Pilsen, interview with the locals and mapping out the physical elements of the area are important parts of the whole research process. During the process, the scale of the researches changes from more general, more broad (urban strategy) to more narrow (individual design); it was a multi-level approach. Through the process of research, we can define what or problem statement, what kind of (architectural) solutions that can solve or ease the problems for the area, what are the needs of the people and the industry.

The second semester were mostly focused on the design instead of research. Of course, not all information and details are necessary to lead to design. I digest the findings and elements from the research of first semester to position myself better for my own architectural solutions for the area. It was mostly what kind of solution, potentials and needs are important for the area. Furthermore, the research continues to lead the design, but then much more in a detailed level related to the theme of personal building design. Through research of case studies, references, technical information’s, the individual design could fine-tuned in steps during the design process.

**The relationship between the methodical line of approach of the graduation lab and the method chosen by the student in this framework**

The studio of Complex Projects is a research studio that investigate multiple aspects comprehending social, physical, political and economical aspects. This studio gives our ‘tools’ to understand the complex reality of intertwined relationships which nowadays architectural design is positioned. Using methodical line of approach of multiple level of scales helped me to get deeper in the development of masterplan and architecture. This finally led for myself what kind of theme my building would have or better to say, what kind of architectural articulation my building would be. For example, from the research of urban conditions and architectural conditions, the shape of my building is formed. By dealing with multiple level of scales of approaches and looking into wider context, I can constantly reflect and find reasons for my design decisions.

**The relationship between the project and the wider social context**

In general, manufacturing and industries have unglamorous reputations for the neighbourhood nearby. While they are essential for the employment and tax revenue for the city, they also often create problems such as pollution, environmental problems and health risk to the people. Nowadays these industries are gradually leaving neighbourhoods in the USA, but they often left traces and impact behind in the physical aspects and socio-economic aspects. It not only creates problems such as vacancy, decay of surrounding facilities and environments, but also the community will experience the impact such as job losses along with rising crime and decaying public spaces.
As mentioned before, the industry and manufacturing are starting to regain momentum in the developed part of the world, Chicago and other industrial cities will have to meet the new challenge in the future. This project deals with wider social context of new future perspective of industry and manufacturing, and set a new mindset for the industry in peoples mind. The future trend of this new type incorporates new technology and to revolutionize the manufacturing in the future. Therefore, a new architectural articulation is need to cater this development. By doing this, the ordinary people learn about new type of manufacturing, but also trigger them to be more creative. The young people and talents with much potential have thus a better learning and supporting platform for their developments. Also from the side of industry, they can discover new talents and gain new ideas to support their continuity. In order to succeed these, effort from the industries, but also from the people are needed.

President Obama praise the new industry and the ambitions.

Another important stakeholder are the government of America which they have the ambition to bring different parties together such as university and industry and to invest in emerging new technologies that will create new manufacturing jobs and enhance the global competiveness in the future. I also believe, in order to succeed the above, the new industries of manufacturing should not be like the current one that are completely separated and isolated from the people.
That’s why, as mentioned before, we create a masterplan that mediates between the industry and nearby people’s neighbourhood. My design is located at the mediating zone that’s currently a strict border between the neighborhood and the heavy industry. The building is a digital design and manufacturing center that brings both parties (people and industry) together.

The building contains 3 main themes:

1. Creativity and Knowledge: Design, Work, Education: processing new information and knowledge
2. Make: Prototyping, Manufacturing: knowledge translated to physical products
3. Showcase: Retail, Exhibition, Leisure: It shows more the public side of the proposal: restaurant, bars, but also selling the products they manufacture

These theme results in a new design that address the needs of new high tech industry/manufacturing in the future, but also to educate, to support and to cater the creative talents from the neighborhood. In another way, the building should create understandings and new relationship between the people and the industry, and let people in touch with new way of designing and manufacturing.