

P4 Reflection

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Name of studio: Graduation studio for Complex Projects

Relationship between theme of the studio and my project:

The theme of the studio is to explore the lakeside field as the site with an ambition to help Chicago achieve its global ambitions. The chosen site is nearly 2.8 sq. kilometres and is surrounded by 79th Street on the north and the Calumet River of the south (Fig. 1). It extends to Burley Street and Green Bay Avenue on the west and Lake Michigan on the east. It is located 15 miles south of the Loop and 10 from west from the Midway International Airport. It used to be the south works site of US Steel which was symbolized as the anchor and heart of the district (Fig. 2). However, the South Chicago neighbourhood declined from the end of the last century with the close of US Steel. The district lost its economic anchor and a series of social problems appeared such as unemployment, street violence, shortage of qualified education and public health crisis. No investor is willing to cultivate this field because of its bad conditions, so the residents live in a worse and worse environment.

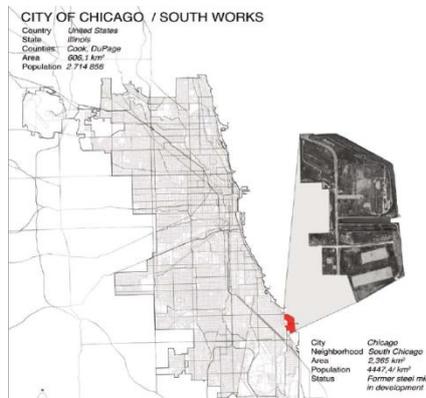


Fig.1 the location of the site



Fig. 2 the history of the site

Under such a circumstance, our group propose a health city as the new anchor for the South Chicago. In the research process, we found there is a public health agenda in Chicago unveiled in 2011 (Fig. 3). There are 16 health outcome targets, 12 priority areas and 193 supporting strategies in the agenda. It is a continuous project with stable investment, and the government's support make the healthcare development available. As I mentioned above, South Chicago neighbourhood is a district threatened by the public health crisis, and especially bad in HIV and obesity prevention. Fortunately, these problems will be overcome by the 12 priority areas of the public health agenda which dedicates to improve the public health in policies, services, education and public awareness. And when the health city project is constructed, visitors and investors in other areas of Chicago will be attracted and a huge number of job opportunities could be generated to the adjacent residents which could help them to improve their neighbourhood. Finally it will replace the US Steel to be the new strong identity and anchor for South Chicago.



Fig.3 public health agenda unveiled by the mayor



Fig. 4 the definition of health city

There are 10 aspects in our definition of health city (Fig. 4). We divide them to two main categories: health science related and health life style related. In our phasing planning, a health science campus will be proposed at the centre of the site along the west to east axis firstly(Fig. 5). The campus will develop in a mixed use principle. The education zone, research zone, patient care zone and business zone are interconnected to create a integrated health science campus. Then several healthy life style communities will be constructed in each side of the core campus along the north to south axis. Different groups of health related people, such as health related professors, students, researchers, businessmen and residents, will be gathered in the interactive platform. The interaction between the professional will help to generate new and better ideas of health science, and the interaction between the professional and public will make the education resource more flexible and effective to enhance the awareness of the public health.

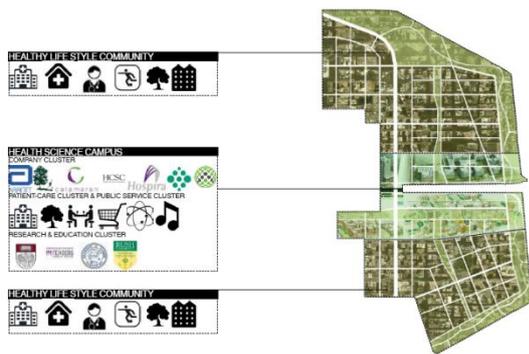


Fig.5 spatial proposal for the health city

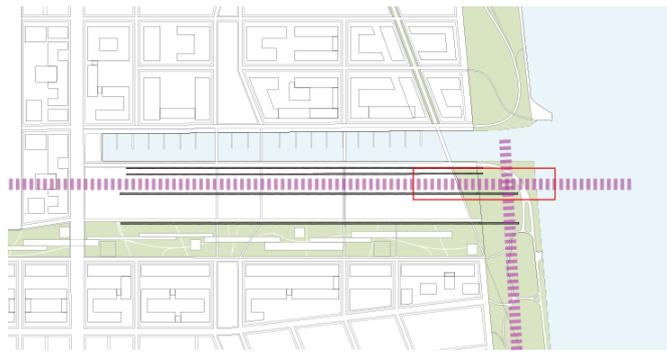


Fig. 6 the location of individual design

In my individual design, I choose the public health education centre to make further development. The theme of my individual design is interaction. This interactive platform which accommodates learning space, exhibition space and food service space will be shared by all the health related people. Different groups of people could organize their own workshop and exhibition here according to different demands. For example, people in research zone could held a lecture here to show their latest research findings to other professional or public visitors according to certain subjects. On the other hand, the health related businessmen could organise a exhibition to the public to improve the market potential of their products. And for patients, they could find better place to talk with their counterparts than in hospitals. Students also could obtain valuable experience during the different workshop, seminars and exhibitions.

Additionally, the interaction is not only between different target groups, but also between the historical heritage and the existing natural environment. I choose my individual site between the ore walls and the building will extend to the lakeside park (Fig. 6). For one thing, these two assets are the most attractive elements for visitors and make the site unique from other areas in Chicago. For another, the abandoned ore walls in the site need a new identity to prevent themselves from being demolished. So I proposed a landscape architecture to create an interactive route between the historical atmosphere and the natural environment. People could experience both of the different space qualities when they walking along my building.

Last but not least, there is an interaction between the material chosen, climate design and my architecture concept. Firstly, the main factor of my landscape architecture is the walkable green roof which is also an important climate design approach in my building. There are a series of advantages for us to adopt the green roof such as preventing overheating, evaporative cooling and heat preservation. Secondly, surface water heat pump is available for my floor heating & cooling system because the site is near the harbour and lake. Thirdly, I design the double facade in south elevation to obtain as wide as enough view to enjoy the adjacent healthy natural environment. I take advantage of the wooden floor and ceiling and the sustainable glass curtain wall to break the boundary between interior and exterior space. When people walking inside my building, they could feel the extension of the healthy natural environment.

Relationship between research and design:

In the background research, we found the South Chicago has its own golden age. In 1901, U.S. Steel opened, which became one of the world's largest steel factories. It attracted many workers, who immigrated here. Later, due to the shifting market of steel, the factory closed in 1992. In 1994, all property are demolished and sold. The site became empty. Workers lost their jobs. The South Chicago declined. So we conclude that the main reason for all the problems in South Chicago is the absent of the economic anchor. And that's why we decide to introduce a new strong anchor with continuous and stable investment to it.

We also found the support from the government is not the only advantage for Health City. Chicago is a city with solid foundation of health science resource. For example, there are 4 top 100 medical school in Chicago, and 7 of Chicago's fastest growing companies, 8 of largest companies in Chicago MSA are health-related. However, the applied technology in companies and the academic resource in universities are separated with each other because there is no land available to develop a union base in the downtown. So it is a good choice to develop the south works site, where could provide vast land and healthy natural environment and need new economic anchor urgently, as the Health City project.

In the visit of De-Paul University, I found that an university is almost a guarantee to have a mixed race without any significant social problems since it attracts multiple people. The neighbourhood where De-Paul University is was 30 years ago a poor, gang-invested, high crime ghetto area and now it is one of the best neighbourhoods in Chicago. De-Paul anchors a lot for that development, the university as a model is one of the best examples here. That conclusion reinforced our decision to make a union campus at the first step of our Heath City.

I also found a successful case of Otto Bock in Berlin. The first three floor levels serve as exhibition space with interactive and realistic presentations and simulations of the technically most advanced

orthopaedic products. The other floors provide seminar and conference rooms as well as space for consultations between patients, doctors, therapists and technicians. The interaction modes and cooperation with public facilities are good examples for my public health education centre.

Relationship between methodical line of approach of the studio and the method chosen by me:

The methodical line of approach of the studio consists of 5 steps: Firstly, do research & analysis in L, M, S scales, which is from the country to the city and then to the site. Secondly, study the SOM's master plan on the same site. Thirdly, define strategies/ ambitions for the entire site & neighbourhood. Fourthly, make urban design and master plan in groups. Finally, design a specific building individually.

I followed the studio structure illustrated above. Firstly, I went to Chicago with the studio and make a solid research and analysis on different aspects. We search lots of information from literature and on the internet. The main work done by me is on the M research booklet. Secondly, our 4 people group try to make a strategy to solve the problems in South Chicago. We chose to build a healthy city here. The strategy design is complex. It is more related to policies, social needs, and financial support than just a urban design. We also make case studies to help us. For example, the Medellin case is a good example to build best things in poorest area, which gives us inspirations. Thirdly, we made urban design depend on our strategies. We analyzed several medical colleges in US and Europe and tried to find some useful reference. Finally, I designed a public health education centre, the first interactive platform in our union campus master plan. And with the guidance of the three mentors, I developed it through architecture program, form, structure, route, and climate aspects. The building focus on the concept of interaction and will respond to our group strategy of Health City in different levels such as the relation with the healthy environment, healthy program and healthy building technology.

Relationship between the project and wider social context:

The project is not only a architecture proposal, but also a social proposal for the future of the South Chicago neighbourhood. It reveals the complexity and difficulty of making a design when the architect is not the only leading character in the process.

I am happy with my individual project as the beginning of the new interaction in different hierarchies. It is not only a building on the site, but a symbol of respecting the past memory, breaking the limitation of the heritages, integrating different valuable assets. The relationship between the building, the ore walls and the existing landscape make this design unique for the South Chicago. South Chicago will finally reach its new flourish time with the memory of its past along the route we design for it.