Reflection paper

Complex Project

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Start from fact

Today's architects are often asked to make a project in an 'alien' situation. Different cultural background, different users, different economical developing level, different climate, etc. All these differences make our work more complex.

When we face to a complex project, architects are asked to be a planner, organizer, politician, economist, philosopher, strategist, humanitarian, and visionary. We have different tools to measure the shape of the project. All these tools can be found out through reading, mapping, field trip and data analysis, etc. When we put these tools as different layers together, we can find an answer for the completed situation in a more rational and clearer way. Basing on fact and creating a space which can really make sense and work harmony with its users can make a project work on track. The research in this phase is more about information collection, field trip and data analysis. All these work can help you build a true perception of the 'alien' site and they may hide in your deep mind. When the design start, you can easily pick up what you need from this library. Also, not only in your mind, collect all these information and make a book is a helpful way of working. This book can be a dictionary for you in your whole design process.

When fact become all the building material, the next step is designing the main structure.
Project research- Alamar problem

Alamar located in the east of Havana city. It is a socialistic experiment for the new man by Fidel Castro. In 1970s, a Soviet-style urban development project was planned to construct there. Alamar began with a rush of workers who arrived with the microbrigade movement and set it up as a model residential area—the only one of its kind in the country. But with the embargo of America and collapse of Soviet-Union, Alamar people -same as other people in Cuba- faced a period of tough time during 1980-2000. They upcycled waste to create tools in an ‘invendo’ ways and feed themselves by urban farming. Alamar people survived by their own way which leave them a tradition of craftsmanship. Also because of the special period, most public building in Alamar is unfinished or abandoned and many planned land in the city center became green area. This makes Alamar more like a bedroom community now. If we make a simple calculating, 93330 people live in Alamar, 45% of them are labor force (from the age structure of Cuba), a plenty of jobs is required. But it is hard to find a job in Alamar because of the lacking of local industry.

With the opening of Cuba, investment and tourists will come more to Havana. What is the role of Alamar in a high-speed changing future? Improving local handicraft industry through craftsmanship tradition can create many opportunities for local people while develop relevant industry. Also it can help Alamar redefine its identity to give this satellite city a right position in an opening Havana.

Mental structure of a complex building
Social value

Can we reach objectivity after these facts of site? True objectivity will never be there in a real building for me. Because building is a dialog tools between architects and society. When people can copy a module building quickly what is the task of architects? I believe that we are asked to do more than build-up. A good design always show some new idea and tell people a good story. Though we build it base on many facts, but it is still a utopia idea. Building is not only a functional machine but also a beautiful story or a cool icon which can bring us more social value. Different form space quality or climate control, social value is something really hard to be constructed only by building elements. It is about how the building reflect to the surrounding and how can public touch it.

* Cuba is a perfect sample in this globalization world nowadays. When everything is connected all over the world, production and industrial become a cooperating work between two places 10000 km away from each other. This lead to higher efficient, better allocation of resources but also sweatshops, alienation of workers and industrial pollution. Cuba is a ‘freezing’ country which disconnected to the world for over 40 years. Now it will open its gate. What will Cuba bring to us? Can Cuba have its own way of industrial development? Cuba’s disconnection to the world makes people there develop their way to survive by hands which can be improved to more high-value industry. In the future, Cuba may also give the world an example of region development in a more isolation way.*
In Cuba, handicrafts is a very important part in the whole economy chain because of its low industrial and high tourism development. Craftsmanship means more than economy for a country. As we all know, Japanese appreciate its craftsmanship spirit a lot which makes the country its own identity. In the age of machines production, many stuffs in our daily life lose its ‘aura’ and become one-time consumer. The renaissance of craftsmanship become more and more popular now. People try to find back the joy in using, making and creating handicrafts. Which can be understood as a way to against the alienation of everyday life.

Theoretical foundation

How we make a choice when we face some design question? Let people go this way or that way; set the entrance at here or there; let the façade transparent or closed? All these choice should be not only made by ‘interesting’ or ‘look nice’. There should be a principal we follow from start to detail. We usually call this principal as ‘concept’, and I believe it really need base on some strong theoretical foundation.

The critic to everyday life can be look back to Benjamin Walter and his book The Work of Art in the Age of Its Technological Reproducibility. And then Marx talk about alienation in capitalistic and Lefebvre write Critique of Everyday Life. In the late 1960s, many architects such as Denise Scott Brown, Robert Venturi, Alison Smithson & Peter Smithson, J. Jacobs, Situationism, Independent Group all researched and argued everyday life in
varying degrees. Some of them even use everyday life as a fundamental strategy for their design.

In my opinion, everyday life really needs to find back its aura. People should be subject but never be an object. Not only simply start from everyday life research, the whole construction process should be deeply connected to users which will lead to a growing and lively building. People’s everyday life will not only be a drama happened in the building but something which will deeply impact the building and give it aura. And an industrial building can be a good example for this idea.

After industrial revolution, international style replace many style and create many modern city looks the same. Cuba as a freezing country for over 40 years. People still have a life disconnect to the ‘modern’ world. How can a new project of production space be in Cuba? I want to find a new typology which allow producing, creating, living, selling happen together in a more organic way.

**Physical structure of a complex building**

**Typology**

Name the building is always a hard job for a complex project because nowadays multi-functional building become a main task for architects. Which means a factory is not only a factory but also a learning center. Which typology can we choose and how to combine them is a big question. Create a new typology became a ‘popular’ way now. But this is not simply mix a few space together. To understand how different
typology works and how to develop them to one project, we need do research about reference and get our own conclusion.

The main design will focus on finding a new typology of working/production space in the future. What should a textile craftsmanship center be in Alamar? It’s an industrial building which can produce profit while it can be a school for local people. The project will include a master plan which can give Alamar a new identity and opportunities for local people in the future 20 years. A building will play the main role in this project. The building will located in the center of Alamar which can provide local people a space to create, produce and sell with working spaces in new typology. Also, the building can provide defined public space for the community and tourists. The building will become a production center of the city and a business card of Alamar with a characteristic form.

Hierarchy

When we face a complete task, making a plan and finish the task step by step is a wise way. It is the same when we start design a complex project. We should give the building a clear hierarchy as a principle to follow. We should answer the main question first and then the second. This hierarchy should also be found in the construction and detail. All these will give more sense to the concept and clarify the completed building.
The factory is also a learning center. Workers and local people share the knowledge and producing material. So there is a main spine as a center belt which connect the housing tower, workshop, logistic and storage. Events and communication happens there. This keeps the highest level of the building which is designed for human. And the logistic space and factory space which designed for machine surround it.

Build-up

Make a building realistic is the final thing but the hardest thing. When you try to put everything together and still want to keep them clear is a big challenge. The building should be built up in a clever way. The construction, assembling, and detail should also tell the same story just like before. Hierarchy can help us again, always know what is the most important thing you want can keep your mind clear and concentrate.

Material and detail tell the quality of a building.

On construction level, the central spine will be the main stable structure which made by concrete. It is the stability core of other factory space which build by steel frame. The space will be more like a long live massive space which is different from the light and flexibility factory space in two sides. The sharing space in the spine will be constructed by wooden structure which is friendlier for people. And the factory space is built by steel and glass in a prefabricated way which make it efficient and flexible.