PackCity

How much we can pack?

Reflection P4

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'TM4, Tailor-Made Over Time' Graduation Studio
The Why Factory
2015-2016
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Relationship between the theme of the Graduation lab and the subject case study
Ways of Tailor-made over Time

What can we achieve by TM⁴ and how can we do that?

Tailor-made Over time, together with 6 students, we are questioning the architecture as a “frozen moment” in time. Changing demands in different time scale of our urban life require something else than fixation, can there be a perfect fit for everyone at any time?

Based on the shared fascination of Tailor-made over time, the studio started with a collective research which build up the greater framework for the six different individual focus of TM⁴. It links to the bottom-up fashion, how is design defined by individual desire and what are the parameters form bottom-up architecture? What we say here is we cannot define tailor-made or bottom-up by just one slider of yes/no, but there are different ways to defined tailor-madenss in different parameters impacts, it means different parameters forms different ways of tailor-made.

Each individual project contains also our individual subjective fascination, which develop into different ways of defining “why” and “how” tailor-made over time in each project that can add values to architecture for the users. My personal focus will be on 24 hours base space change, by pack the unused space and components to test the maximum density in space over time.

The shared theoretical site of Berlin block with 246 residence is developed which sharing the same “where” and “who” to make the six project are comparable at the end and six different time-scale of each project links each individual project back together that can contribute to each other on the research of TM⁴.
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Relationship between the methodological line of approach of the Graduation lab and the project
Throughout the studio process, the question of “when” does architecture change over time always comes together with “why” and “how”. TM⁴ defines six projects into six different time scales, from instant changes to century changes. Each time scale links to different individual definition of “What” we can be tailor-made in certain time-scale. What are the demand change in one second, one minute, one day or one year, etc?

My individual project “PackCity” is focus on 24 hours daily activities change, with the fascination of tailor-made activities space over time to achieve the more efficient use of space. Here in the project, 24 hours time scale becomes the main calculation of the project. Activities time-line is used to mark out and measure all activities the user does in one day, how long each activity lasts and what kind of space it asks for, which also uses to calculate the volume, privacy & sunlight requirement change over 24 hours. 10 basic time-lines is generated together with the data of Berlin that are shared in the collective research chapter. Each individual project defines their own detailed time-line from the 10 basic time-lines base on the project time focus.
Calculation of Time and Space

How to measure the change over time?

Together with the time-line, we can use it to calculate space change over time for the research part and design part. In 24 hours, activities change is related to the requested volume, amount of furniture, level of privacy and sunlight, which we are able to visualize the change of parameters over 24 hours with the time-line.

Different scale of time will have special way to calculate the relationship between time and space, which also decided by the changing aspects in specify time scale. Since the six projects are sharing the same site and 246 inhabitants basic data, that makes the six projects can join together with different lenses and focus of TM4, but also comparable aspects.

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<table>
<thead>
<tr>
<th>%</th>
<th>Volume of activities need change over 24 hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>100</td>
<td>Percentage calculation compares to standard housing volume</td>
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</tbody>
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Relationship between Research and Design
From Fascination to Approach

How to challenge my own fascination?

The project started with the fascination of pop-up activities with space “PACK and PICK”. With this individual fascination, there are questions keep challenging my own fascination through out the process of the project.

First of all, there is the main research question of the inefficient use over time in one day in the “FIXED” architecture, can we live more dense and free with the method of pack and pick? The research part of personal experiment of packing my own apartment. Activities time-line is introduced to estimate the usage of one day and the studies is focused on how much volume we can save by packing the unused space. The result we have is 80% volume saved by fully pack the space, and 61% for picking space according to activities time-line in one day.

Applying the same method of calculation from the research chapter, we got the average volume use of one dwelling floor in the block over one day is 18.9%. Taking the advantage of “PACK and PICK”, is that means we can put 3 times more people in the floor because of “PACK and PICK”? As result, there are conflicts between neigbourhood once the density glowed, in term of volume, privacy, view & light, the limited condition on the floor.

The PackCity is now an attempt to introduce as less mono-function stable elements in the block, by redefining the function of packs and elements and sharing condition in the block, to achieve the mimimum volume of packs and maxmium the freedom on the formation of activities with the right value of space condition. From the principle of space performance to the technical built environment transformation, the relationship between each elements in the block became the important focus to achieve the goal of maximum density and new space possibilities.
Packing with Condition

*Toward to minimum pack, maximum capacity?*

The PackCity is now an attempt to introduce as less mono-function stable elements in the block, by redefining the function of packs and elements and sharing condition in the block, to achieve the minimum volume of packs and maximum the freedom on the formation of activities with the right value of space condition.

Pick and Pack here is no-longer only packing the furniture by also the space condition with all other building elements, and pack is not only the storage of elements, but performing other usage such as structure when it is packed. From the principle of space performance to the technical built environment transformation, the relationship between each elements in the block became the important focus to achieve the goal of maximum density and new space possibilities.
Relationship between the project and the wider social context
Components of TM⁴ city

How can we live in a city that is always tailor-made for us?

The “PackCity” is a fascination on tailor-made life style that space can be prefect fitted to our daily demands change. The development of the project is more about finding the attitude and methods than one single site specify design. Althought the project sit on one urban block, but when it combine with other five projects in the TM⁴, we are imagining the live in TM⁴ city, a city that is always prefect fit to inhabitants, and the impacts to the physical urban formation and social logistic. Each individual project is testing one specify component of tailor-made and time scale, tackling with different demand changes in the urban life.

Nowadays, personal living quality is deeply related to the urban density. How much volume one can own? But at the same time, how much volume one is actually using over 24 hours? “PackCity” is imagining a non-fixed territory and condition of living, and attempting to the fascination of maximum density with maximum quality. The project is focusing from packing of one person’s daily activities to densify on a dwelling floor to the affect of composition in a block, by then, as a component in a urban context, we might able to future imagine how can “Pack and Pick” impact to the urban density and living quality? To be more precise, how can we live in the way that everything is fitting to every individual? PackCity is trying to find out the solution of the conflicts in high density by flexible tailor-made building system, and looking for the adding value to personal living quality.